



January 30, 2024

K2 Systems
2835 La Mirada Dr., Ste. A
Vista, CA 92081
TEL: (760) 301-5300

Attn.: K2 Systems - Engineering Department

Re: Report # 2020-02753MS.51.0 Engineering Certification for the K2 Systems CrossRail - Dual Rail System for Mono-Slope roofs.

PZSE, Inc. - Structural Engineers have reviewed K2 Systems Dual Rail. All information, data, and analysis contained within the K2 Systems Dual Rail span tables are based on, and comply with the following codes:

1. Minimum Design Loads for Buildings and Other Structures, ASCE/SEI 7-22
2. 2021 International Building Code, by the International Code Council, Inc.
3. 2021 International Residential Code, by the International Code Council, Inc.
4. AC428, Acceptance Criteria for Modular Framing Systems Used to Support Photovoltaic (PV) Panels, November 1, 2012, by ICC-ES
5. Aluminum Design Manual 2020, by The Aluminum Association, Inc.
6. ANSI/AWC NDS-2018, National Design Specification for Wood Construction, by the American Wood Council

Following are typical specifications to meet the above code requirements:

Design Criteria:

Ground Snow Load = 0 - 100 (psf)
Basic Wind Speed = 95 - 200 (mph)
Roof Mean Height = 0 - 60 (ft)
Enclosed and Partially Enclosed Mono Roof Pitch = 0° - 30° (degrees)
Open Mono Roof Pitch = 0° - 45° (degrees)
Exposure Category = B, C & D
Seismic Design Category = A-E

K2 Rail:

K2 Systems 44-X made with an aluminum alloy, 6000 series, with a minimum yield strength of 34.8 ksi.

Cantilever:

Maximum cantilever length is L/3, where "L" is the span noted in the Span Tables, provided there is at least 1 module length between maximum cantilevers.

- Clearance:** 2" to 10" clear from the top of the roof to top of PV panel.
- Attachment Devices:** Attachment not considered for K2 Systems Dual Rail System span table.
- Tolerance(s):** 1.0" tolerance for any specified dimension in this report is allowed for installation.
- Installation Orientation:** Landscape (L) - PV Panel long dimension is parallel to the ridge/eave line of roof, and the PV panel is mounted on the long side.
- Portrait (P) - PV Panel short dimension is parallel to the ridge/eave line of roof, and the PV panel is mounted on the short side.
- Dual Rail Span Module sizes: 70"x41", 74"x41.2", 83"x41.5", 92.5"x45.9".

Components and Cladding Roof Zones:

Roof Zones - Enclosed and Partially Enclosed Mono Slope Roofs, $\theta \leq 3^\circ$:

- The zones shall be determined using figure 30.3-2A per note 5 of ASCE 7-22 figure 30.3-5A. See Figure 1.

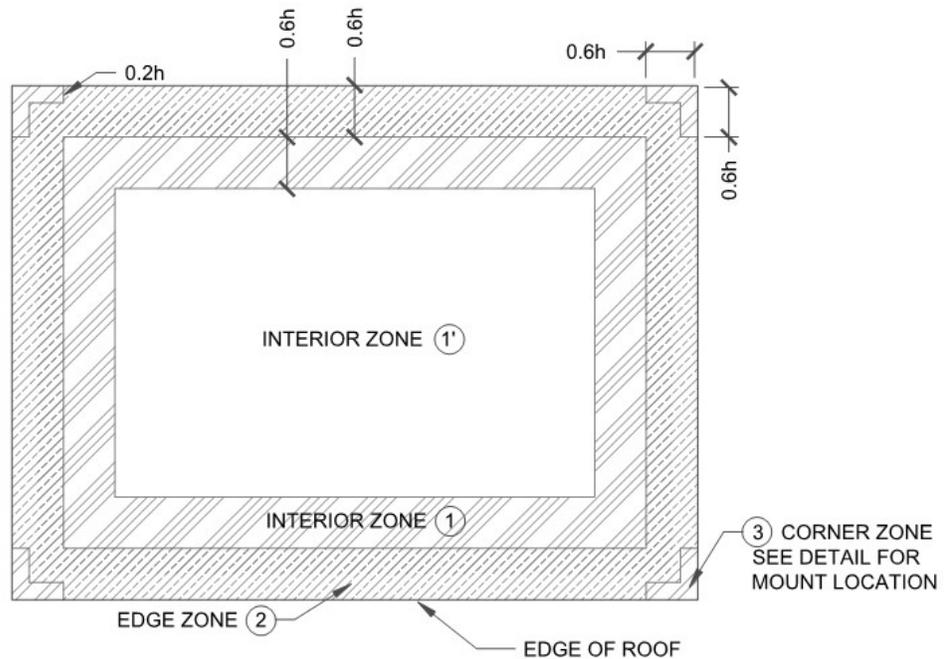


Figure 1: Roof Edge and Corner Zones, Mono Slope, $\theta \leq 3^\circ$

Roof Zones - Enclosed and Partially Enclosed Mono Slope Roofs, $3^\circ < \theta \leq 10^\circ$:

1. The Edge Zone, "a," shall be determined using figure 30.3-5A of ASCE 7-22. See Figure 2.

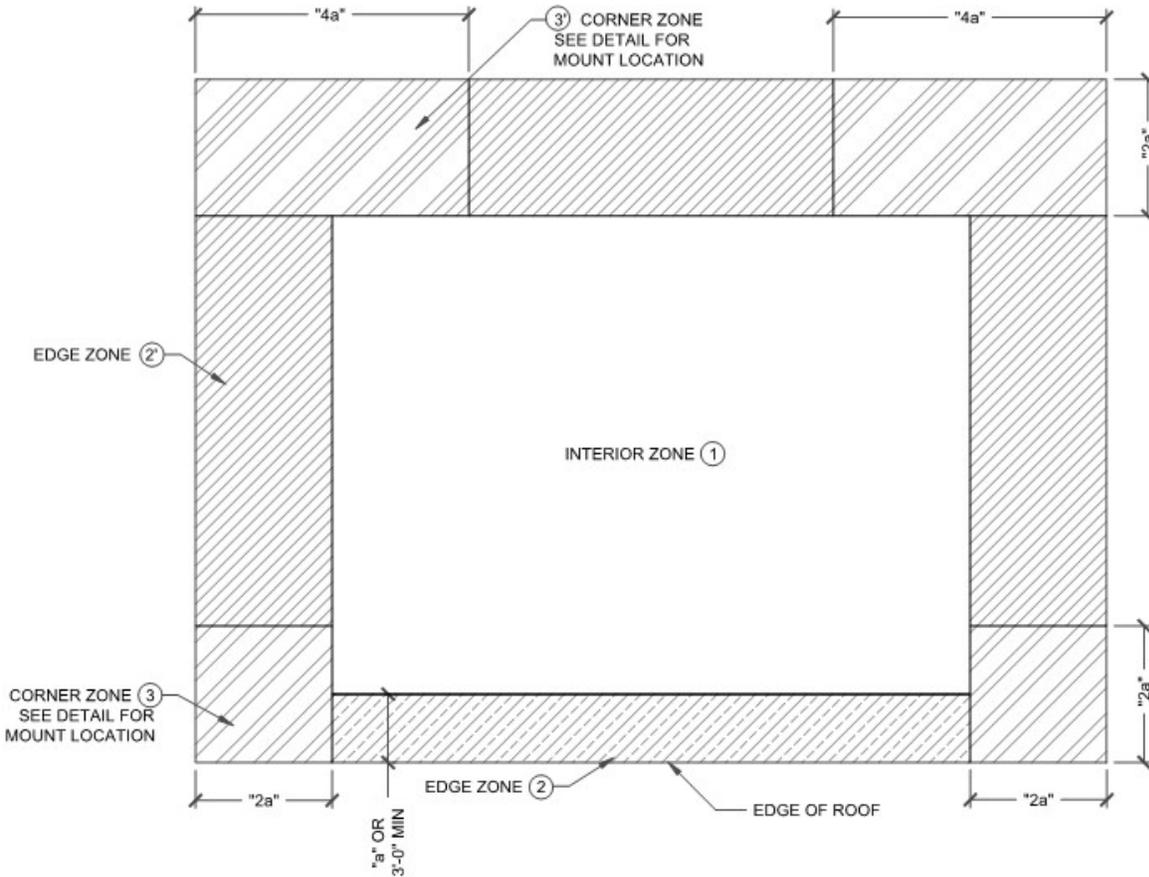


Figure 2: Roof Zones, Mono Slope, $3^\circ < \theta \leq 10^\circ$

Roof Zones - Enclosed and Partially Enclosed Mono Slope Roofs, $10^\circ < \theta \leq 30^\circ$:

1. The Edge Zone, "a," shall be determined using figure 30.3-5B of ASCE 7-22. See Figure 3.

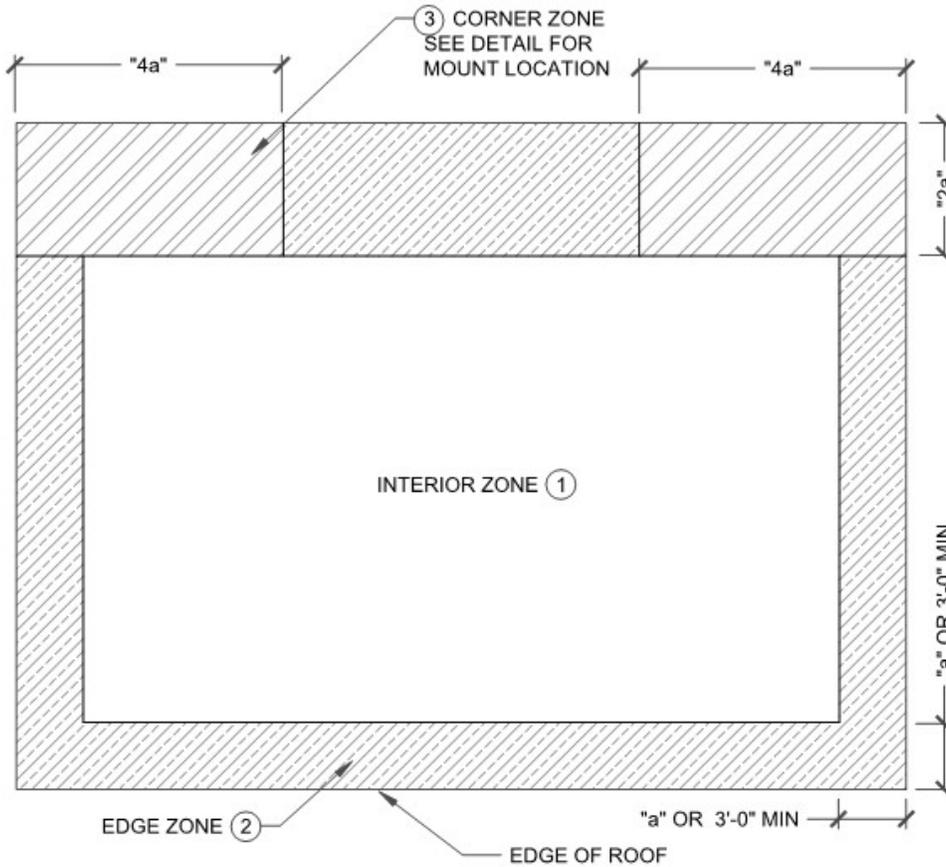


Figure 3: Roof Zones, Mono Slope, $10^\circ < \theta \leq 30^\circ$

Roof Zones – Open Mono Slope Roofs, $0^\circ < \theta \leq 45^\circ$:

1. The Edge Zone, "a," shall be determined using figure 30.5-1 of ASCE 7-22. See Figure 4.

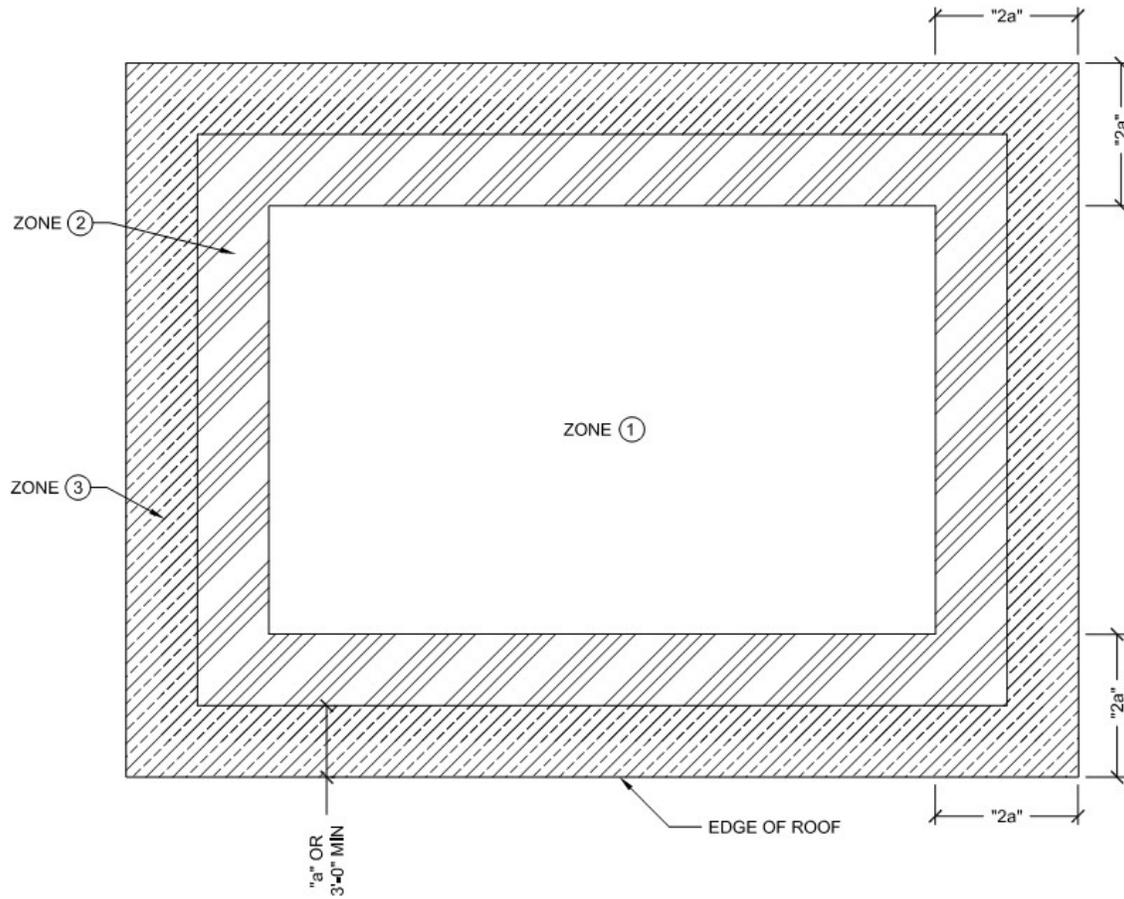


Figure 4: Roof Zones, Mono Slope, $0^\circ < \theta \leq 45^\circ$

Panel Array Edge:

Panels exposed at array edge shall use figure 29.4-7 of ASCE 7-22 to determine “ d_1 ” and “ d_2 ” to apply “Array Edge” spans that apply to an array layout. See figure 5.

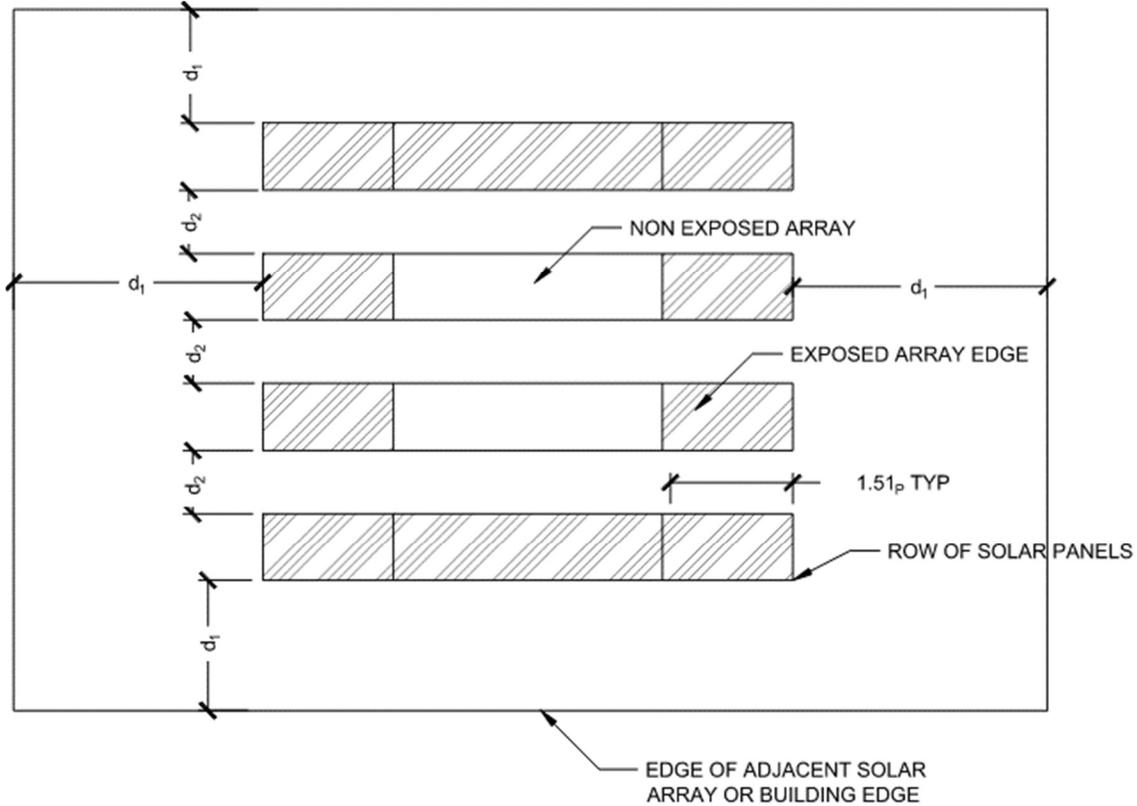


Figure 5: Array Edge

Panel with Support Mounts in Multiple Roof Zones:

Edge and Corner Zone spacings (Zone 2 & 3, respectively) apply only to mounts located in those Zones, not to all the mounts supporting the module.

Notes:

- 1) Tables are determined for Dual Rail only and do not include roof capacity check.
- 2) Risk Category II per ASCE 7-22.
- 3) Topographic factor, k_{zt} is 1.0.
- 4) Average parapet height is 0.0 ft.
- 5) Wind speeds are LRFD values.
- 6) Snow loads consider a Thermal Factor (C_t) of 1.2.
- 7) Attachment spacing(s) apply to a seismic design category E or less.



Design Responsibility:

These tables are intended to be used under the responsible charge of a registered design professional where required by the authority having jurisdiction. In all cases, these tables should be used under the direction of a design professional with sufficient structural engineering knowledge and experience to be able to:

- Evaluate whether these tables apply to the project, and
- Understand and determine the appropriate values for all input parameters of these tables.

This letter certifies that the K2 Systems Dual Rail System, when installed according to the limitations of this letter and the attached span tables, complies with the above codes and loading criteria. This certification excludes evaluation of the building structure to support the loads imposed on the building by the array; including, but not limited to strength and deflection of structural framing members, fastening and/or strength of roofing materials, and/or the effects of snow accumulation on the roof. Structures will require additional knowledge of the building and are outside the scope of the certification of this racking system.

If you have any questions on the above, do not hesitate to call.

Prepared by:
PZSE, Inc. – Structural Engineers
Roseville, CA



Table of Contents

Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows:

72" and Greater	Green
64" to 71"	Blue
48" to 63"	Yellow
47" and Less	White Gray

K2 Systems Dual Rail Flush-Mount System

Enclosed Mono Slope Span Tables for 44-X Flush-Mount Dual Rail

0-30 Foot Roof, 70in x 41in Modules.....	10
30-60 Foot Roof, 70in x 41in Modules.....	46
0-30 Foot Roof, 74in x 41.2in Modules.....	82
30-60 Foot Roof, 74in x 41.2in Modules.....	118
0-30 Foot Roof, 83in x 41.5in Modules.....	154
30-60 Foot Roof, 83in x 41.5in Modules.....	190
0-30 Foot Roof, 92.5in x 45.9in Modules.....	226
30-60 Foot Roof, 92.5in x 45.9in Modules.....	262

Open Mono Slope Span Tables for 44-X Flush-Mount Dual Rail

0-30 Foot Roof, 70in x 41in Modules.....	298
30-60 Foot Roof, 70in x 41in Modules.....	334
0-30 Foot Roof, 74in x 41.2in Modules.....	370
30-60 Foot Roof, 74in x 41.2in Modules.....	406
0-30 Foot Roof, 83in x 41.5in Modules.....	442
30-60 Foot Roof, 83in x 41.5in Modules.....	478
0-30 Foot Roof, 92.5in x 45.9in Modules.....	514
30-60 Foot Roof, 92.5in x 45.9in Modules.....	550

Enclosed Mono Slope Reaction Tables for 44-X Flush-Mount Dual Rail

0-30 Foot Roof, 70in x 41in Modules.....	586
30-60 Foot Roof, 70in x 41in Modules.....	622
0-30 Foot Roof, 74in x 41.2in Modules.....	658
30-60 Foot Roof, 74in x 41.2in Modules.....	694
0-30 Foot Roof, 83in x 41.5in Modules.....	730
30-60 Foot Roof, 83in x 41.5in Modules.....	766
0-30 Foot Roof, 92.5in x 45.9in Modules.....	802
30-60 Foot Roof, 92.5in x 45.9in Modules.....	838

Open Mono Slope Reaction Tables for 44-X Flush-Mount Dual Rail

0-30 Foot Roof, 70in x 41in Modules.....	874
30-60 Foot Roof, 70in x 41in Modules.....	910
0-30 Foot Roof, 74in x 41.2in Modules.....	946

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Open Mono Slope Reaction Tables for 44-X Flush-Mount Dual Rail (Continued)

30-60 Foot Roof, 74in x 41.2in Modules.....	982
0-30 Foot Roof, 83in x 41.5in Modules.....	1018
30-60 Foot Roof, 83in x 41.5in Modules.....	1054
0-30 Foot Roof, 92.5in x 45.9in Modules.....	1090
30-60 Foot Roof, 92.5in x 45.9in Modules.....	1126
 Appendix A: K2 Systems CrossRail Cut Sheets	 1162

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	83	73	83	83	84	81	83	71	83	83	84	78	80	69	83	81	84
2		76	64	83	75	84	75	74	61	83	73	84	72	71	58	82	70	81	70
3		67	54	73	60	70	56	63	51	70	57	67	54	61	49	68	55	64	51
5	1	82	73	82	82	84	81	82	71	82	82	84	78	80	69	82	81	84	76
	2	76	64	82	75	84	75	74	61	82	73	84	72	71	58	82	70	81	70
	3	67	54	73	60	70	56	63	51	70	57	67	54	61	49	68	55	64	51
10	1	77	73	77	77	82	81	77	71	77	77	82	78	77	69	77	77	82	76
	2	76	64	77	75	82	75	74	61	77	73	82	72	71	58	77	70	81	70
	3	67	54	73	60	70	56	63	51	70	57	67	54	61	49	68	55	64	51
Wind Speed [mph]		110						115											
0	1	78	66	83	78	84	73	75	63	83	76	83	71						
	2	69	56	79	68	79	67	66	53	77	65	77	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
5	1	78	66	82	78	84	73	75	63	82	76	83	71						
	2	69	56	79	68	79	67	66	53	77	65	77	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
10	1	77	66	77	77	82	73	75	63	77	76	82	71						
	2	69	56	77	68	79	67	66	53	77	65	77	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
Wind Speed [mph]		120						130											
0	1	73	60	83	74	81	69	75	63	83	76	83	71						
	2	64	51	75	62	75	62	66	53	77	65	77	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
5	1	73	60	82	74	81	69	75	63	82	76	83	71						
	2	64	51	75	62	75	62	66	53	77	65	77	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
10	1	73	60	77	74	81	69	75	63	77	76	82	71						
	2	64	51	75	62	75	62	66	53	77	65	77	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	71	58	83	72	78	67	67	54	80	68	74	62	63	50	76	64	71
2		61	49	73	60	73	60	57	46	69	56	69	55	53	43	65	52	64	52
3		51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
5	1	71	58	82	72	78	67	67	54	80	68	74	62	63	50	76	64	71	58
	2	61	49	73	60	73	60	57	46	69	56	69	55	53	43	65	52	64	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
10	1	71	58	77	72	78	67	67	54	77	68	74	62	63	50	76	64	71	58
	2	61	49	73	60	73	60	57	46	69	56	69	55	53	43	65	52	64	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
0	1	59	47	73	59	67	54	55	45	70	56	63	51	55	45	70	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
5	1	59	47	73	59	67	54	55	45	70	56	63	51	55	45	70	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
10	1	59	47	73	59	67	54	55	45	70	56	63	51	55	45	70	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
0	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
5	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
10	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	73	73	74	74	79	79	73	71	74	74	79	78	73	69	74	74	79
2		73	64	74	74	79	75	73	61	74	73	79	72	71	58	74	70	79	70
3		67	54	73	60	70	56	63	51	70	57	67	54	61	49	68	55	64	51
20	1	70	70	70	70	77	77	70	70	70	70	77	77	70	69	70	70	77	76
	2	70	64	70	70	77	75	70	61	70	70	77	72	70	58	70	70	77	70
	3	67	54	70	60	70	56	63	51	70	57	67	54	61	49	68	55	64	51
25	1	70	70	70	70	74	74	70	70	70	70	74	74	70	69	70	70	74	74
	2	70	64	70	70	74	74	70	61	70	70	74	72	70	58	70	70	74	70
	3	67	54	70	60	70	56	63	51	70	57	67	54	61	49	68	55	64	51
Wind Speed [mph]		110						115											
15	1	73	66	74	74	79	73	73	63	74	74	79	71						
	2	69	56	74	68	79	67	66	53	74	65	77	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
20	1	70	66	70	70	77	73	70	63	70	70	77	71						
	2	69	56	70	68	77	67	66	53	70	65	77	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
25	1	70	66	70	70	74	73	70	63	70	70	74	71						
	2	69	56	70	68	74	67	66	53	70	65	74	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
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15	1	73	60	74	74	79	69	73	63	74	74	79	71						
	2	64	51	74	62	75	62	66	53	74	65	77	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
20	1	70	60	70	70	77	69	70	63	70	70	77	71						
	2	64	51	70	62	75	62	66	53	70	65	77	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
25	1	70	60	70	70	74	69	70	63	70	70	74	71						
	2	64	51	70	62	74	62	66	53	70	65	74	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	71	58	74	72	78	67	67	54	74	68	74	62	63	50	74	64	71
2		61	49	73	60	73	60	57	46	69	56	69	55	53	43	65	52	64	52
3		51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
20	1	70	58	70	70	77	67	67	54	70	68	74	62	63	50	70	64	71	58
	2	61	49	70	60	73	60	57	46	69	56	69	55	53	43	65	52	64	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
25	1	70	58	70	70	74	67	67	54	70	68	74	62	63	50	70	64	71	58
	2	61	49	70	60	73	60	57	46	69	56	69	55	53	43	65	52	64	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
15	1	59	47	73	59	67	54	55	45	70	56	63	51	55	45	70	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
20	1	59	47	70	59	67	54	55	45	70	56	63	51	55	45	70	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
25	1	59	47	70	59	67	54	55	45	70	56	63	51	55	45	70	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
15	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
20	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
25	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	68	68	69	69	72	72	68	68	69	69	72	72	68	68	69	69	72
2		68	64	69	69	72	72	68	61	69	69	72	72	68	58	69	69	72	70
3		67	54	69	60	70	56	63	51	69	57	67	54	61	49	68	55	64	51
35	1	67	67	67	67	70	70	67	67	67	67	70	70	67	67	67	67	70	70
	2	67	64	67	67	70	70	67	61	67	67	70	70	67	58	67	67	70	70
	3	67	54	67	60	70	56	63	51	67	57	67	54	61	49	67	55	64	51
40	1	65	65	65	65	69	69	65	65	65	65	69	69	65	65	65	65	69	69
	2	65	64	65	65	69	69	65	61	65	65	69	69	65	58	65	65	69	69
	3	65	54	65	60	69	56	63	51	65	57	67	54	61	49	65	55	64	51
30	1	68	66	69	69	72	72	68	63	69	69	72	71						
	2	68	56	69	68	72	67	66	53	69	65	72	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
35	1	67	66	67	67	70	70	67	63	67	67	70	70						
	2	67	56	67	67	70	67	66	53	67	65	70	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
40	1	65	65	65	65	69	69	65	63	65	65	69	69						
	2	65	56	65	65	69	67	65	53	65	65	69	65						
	3	58	47	65	52	61	49	56	45	62	50	58	47						
30	1	68	60	69	69	72	69	68	63	69	69	72	71						
	2	64	51	69	62	72	62	66	53	69	65	72	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
35	1	67	60	67	67	70	69	67	63	67	67	70	70						
	2	64	51	67	62	70	62	66	53	67	65	70	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
40	1	65	60	65	65	69	69	65	63	65	65	69	69						
	2	64	51	65	62	69	62	65	53	65	65	69	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
30	1	68	60	69	69	72	69	68	63	69	69	72	71						
	2	64	51	69	62	72	62	66	53	69	65	72	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
35	1	67	60	67	67	70	69	67	63	67	67	70	70						
	2	64	51	67	62	70	62	66	53	67	65	70	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						
40	1	65	60	65	65	69	69	65	63	65	65	69	69						
	2	64	51	65	62	69	62	65	53	65	65	69	65						
	3	53	43	60	48	56	45	56	45	62	50	58	47						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	68	58	69	69	72	67	67	54	69	68	72	62	63	50	69	64	71
2		61	49	69	60	72	60	57	46	69	56	69	55	53	43	65	52	64	52
3		51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
35	1	67	58	67	67	70	67	67	54	67	67	70	62	63	50	67	64	70	58
	2	61	49	67	60	70	60	57	46	67	56	69	55	53	43	65	52	64	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
40	1	65	58	65	65	69	67	65	54	65	65	69	62	63	50	65	64	69	58
	2	61	49	65	60	69	60	57	46	65	56	69	55	53	43	65	52	64	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
30	1	59	47	69	59	67	54	55	45	69	56	63	51	55	45	69	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
35	1	59	47	67	59	67	54	55	45	67	56	63	51	55	45	67	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
40	1	59	47	65	59	67	54	55	45	65	56	63	51	55	45	65	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
30	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
35	1	52	42	66	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
40	1	52	42	65	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	63	63	64	64	67	67	63	63	64	64	67	67	63	63	64	64	67
2		63	63	64	64	67	67	63	61	64	64	67	67	63	58	64	64	67	67
3		63	54	64	60	67	56	63	51	64	57	67	54	61	49	64	55	64	51
50	1	62	62	62	62	66	66	62	62	62	62	66	66	62	62	62	62	66	66
	2	62	62	62	62	66	66	62	61	62	62	66	66	62	58	62	62	66	66
	3	62	54	62	60	66	56	62	51	62	57	66	54	61	49	62	55	64	51
60	1	57	57	58	58	63	63	57	57	58	58	63	63	57	57	58	58	63	63
	2	57	57	58	58	63	63	57	57	58	58	63	63	57	57	58	58	63	63
	3	57	54	58	58	63	56	57	51	58	57	63	54	57	49	58	55	63	51
Wind Speed [mph]		110						115											
45	1	63	63	64	64	67	67	63	63	64	64	67	67	63	63	64	64	67	67
	2	63	56	64	64	67	67	63	53	64	64	67	65	63	53	64	64	67	65
	3	58	47	64	52	61	49	56	45	62	50	58	47	56	45	62	50	58	47
50	1	62	62	62	62	66	66	62	62	62	62	66	66	62	62	62	62	66	66
	2	62	56	62	62	66	66	62	53	62	62	66	65	62	53	62	62	66	65
	3	58	47	62	52	61	49	56	45	62	50	58	47	56	45	62	50	58	47
60	1	57	57	58	58	63	63	57	57	58	58	63	63	57	57	58	58	63	63
	2	57	56	58	58	63	63	57	53	58	58	63	63	57	53	58	58	63	63
	3	57	47	58	52	61	49	56	45	58	50	58	47	56	45	58	50	58	47
Wind Speed [mph]		120						130											
45	1	63	60	64	64	67	67	63	63	64	64	67	67	63	63	64	64	67	67
	2	63	51	64	62	67	62	63	53	64	64	67	65	63	53	64	64	67	65
	3	53	43	60	48	56	45	56	45	62	50	58	47	56	45	62	50	58	47
50	1	62	60	62	62	66	66	62	62	62	62	66	66	62	62	62	62	66	66
	2	62	51	62	62	66	62	62	53	62	62	66	65	62	53	62	62	66	65
	3	53	43	60	48	56	45	56	45	62	50	58	47	56	45	62	50	58	47
60	1	57	57	58	58	63	63	57	57	58	58	63	63	57	57	58	58	63	63
	2	57	51	58	58	63	62	57	53	58	58	63	63	57	53	58	58	63	63
	3	53	43	58	48	56	45	56	45	58	50	58	47	56	45	58	50	58	47

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	63	58	64	64	67	67	63	54	64	64	67	62	63	50	64	64	67
2		61	49	64	60	67	60	57	46	64	56	67	55	53	43	64	52	64	52
3		51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
50	1	62	58	62	62	66	66	62	54	62	62	66	62	62	50	62	62	66	58
	2	61	49	62	60	66	60	57	46	62	56	66	55	53	43	62	52	64	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
60	1	57	57	58	58	63	63	57	54	58	58	63	62	57	50	58	58	63	58
	2	57	49	58	58	63	60	57	46	58	56	63	55	53	43	58	52	63	52
	3	51	42	57	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
Wind Speed [mph]		170						180											
45	1	59	47	64	59	67	54	55	45	64	56	63	51	55	45	64	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
50	1	59	47	62	59	66	54	55	45	62	56	63	51	55	45	62	56	63	51
	2	50	40	60	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
60	1	57	47	58	58	63	54	55	45	58	56	63	51	55	45	58	56	63	51
	2	50	40	58	49	60	49	47	38	57	46	57	46	47	38	57	46	57	46
	3	42	34	47	38	44	36	40	32	44	36	42	34	40	32	44	36	42	34
Wind Speed [mph]		190						200											
45	1	52	42	64	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
50	1	52	42	62	53	60	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30
60	1	52	42	58	53	60	48	49	40	58	50	57	46	49	40	58	50	57	46
	2	44	36	54	43	54	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	42	34	39	32	35	29	39	32	37	30	35	29	39	32	37	30

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61
2		53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
3		53	53	54	54	61	56	53	51	54	54	61	54	53	49	54	54	61	51
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	3	50	50	51	51	58	56	50	50	51	51	58	54	50	49	51	51	58	51
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	3	47	47	48	48	55	55	47	47	48	48	55	54	47	47	48	48	55	51
Wind Speed [mph]		110						115											
70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
	2	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
	3	53	47	54	52	61	49	53	45	54	50	58	47	53	45	54	50	58	47
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	3	50	47	51	51	58	49	50	45	51	50	58	47	50	45	51	50	58	47
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	3	47	47	48	48	55	49	47	45	48	48	55	47	47	45	48	48	55	47
Wind Speed [mph]		120						130											
70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
	2	53	51	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
	3	53	43	54	48	56	45	53	45	54	50	58	47	53	45	54	50	58	47
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	3	50	43	51	48	56	45	50	45	51	50	58	47	50	45	51	50	58	47
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	3	47	43	48	48	55	45	47	45	48	48	55	47	47	45	48	48	55	47

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	50	54	54	61
2		53	49	54	54	61	60	53	46	54	54	61	55	53	43	54	52	61	52
3		51	42	54	46	54	44	48	39	53	43	50	41	45	36	50	40	47	38
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	49	51	51	58	58	50	46	51	51	58	55	50	43	51	51	58	52
	3	50	42	51	46	54	44	48	39	51	43	50	41	45	36	50	40	47	38
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	46	48	48	55	55	47	43	48	48	55	52
	3	47	42	48	46	54	44	47	39	48	43	50	41	45	36	48	40	47	38
Wind Speed [mph]		170						180											
70	1	53	47	54	54	61	54	53	45	54	54	61	51						
	2	50	40	54	49	60	49	47	38	54	46	57	46						
	3	42	34	47	38	44	36	40	32	44	36	42	34						
80	1	50	47	51	51	58	54	50	45	51	51	58	51						
	2	50	40	51	49	58	49	47	38	51	46	57	46						
	3	42	34	47	38	44	36	40	32	44	36	42	34						
90	1	47	47	48	48	55	54	47	45	48	48	55	51						
	2	47	40	48	48	55	49	47	38	48	46	55	46						
	3	42	34	47	38	44	36	40	32	44	36	42	34						
Wind Speed [mph]		190						200											
70	1	52	42	54	53	60	48	49	40	54	50	57	46						
	2	44	36	54	43	54	43	42	34	51	41	51	41						
	3	37	30	42	34	39	32	35	29	39	32	37	30						
80	1	50	42	51	51	58	48	49	40	51	50	57	46						
	2	44	36	51	43	54	43	42	34	51	41	51	41						
	3	37	30	42	34	39	32	35	29	39	32	37	30						
90	1	47	42	48	48	55	48	47	40	48	48	55	46						
	2	44	36	48	43	54	43	42	34	48	41	51	41						
	3	37	30	42	34	39	32	35	29	39	32	37	30						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Span, inches															
Wind Speed [mph]		95						100						105							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																		
	100	1	45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52	52	
2		45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52	52		
3		45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52	51		
Wind Speed [mph]		110						115													
100	1	45	45	46	46	52	52	45	45	46	46	52	52								
	2	45	45	46	46	52	52	45	45	46	46	52	52								
	3	45	45	46	46	52	49	45	45	46	46	52	47								
Wind Speed [mph]		120						130													
100	1	45	45	46	46	52	52	45	45	46	46	52	52								
	2	45	45	46	46	52	52	45	45	46	46	52	52								
	3	45	43	46	46	52	45	45	45	46	46	52	47								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	75	63	83	76	83	71	73	60	83	74	80	69	71	57	83	71	78
2		66	53	77	65	77	65	63	51	74	62	74	62	60	49	72	59	72	59
3		56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
5	1	75	63	82	76	83	71	73	60	82	74	80	69	71	57	82	71	78	66
	2	66	53	77	65	77	65	63	51	74	62	74	62	60	49	72	59	72	59
	3	56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
10	1	75	63	77	76	82	71	73	60	77	74	80	69	71	57	77	71	78	66
	2	66	53	77	65	77	65	63	51	74	62	74	62	60	49	72	59	72	59
	3	56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
0	1	68	55	80	69	75	63	65	53	78	66	73	60	68	55	80	69	75	63
	2	58	47	70	57	70	56	55	45	67	54	67	54	58	47	70	57	70	56
	3	49	39	54	44	51	41	47	38	52	42	49	40	49	39	54	44	51	41
5	1	68	55	80	69	75	63	65	53	78	66	73	60	68	55	80	69	75	63
	2	58	47	70	57	70	56	55	45	67	54	67	54	58	47	70	57	70	56
	3	49	39	54	44	51	41	47	38	52	42	49	40	49	39	54	44	51	41
10	1	68	55	77	69	75	63	65	53	77	66	73	60	68	55	77	69	75	63
	2	58	47	70	57	70	56	55	45	67	54	67	54	58	47	70	57	70	56
	3	49	39	54	44	51	41	47	38	52	42	49	40	49	39	54	44	51	41
0	1	63	50	76	64	71	58	65	53	78	66	73	60	63	50	76	64	71	58
	2	53	43	65	52	64	52	55	45	67	54	67	54	53	43	65	52	64	52
	3	45	36	50	40	47	38	47	38	52	42	49	40	45	36	50	40	47	38
5	1	63	50	76	64	71	58	65	53	78	66	73	60	63	50	76	64	71	58
	2	53	43	65	52	64	52	55	45	67	54	67	54	53	43	65	52	64	52
	3	45	36	50	40	47	38	47	38	52	42	49	40	45	36	50	40	47	38
10	1	63	50	76	64	71	58	65	53	77	66	73	60	63	50	76	64	71	58
	2	53	43	65	52	64	52	55	45	67	54	67	54	53	43	65	52	64	52
	3	45	36	50	40	47	38	47	38	52	42	49	40	45	36	50	40	47	38

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	60	49	74	61	69	56	56	45	70	57	64	52	52	42	66	53	60
2		51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
3		43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
5	1	60	49	74	61	69	56	56	45	70	57	64	52	52	42	66	53	60	48
	2	51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
10	1	60	49	74	61	69	56	56	45	70	57	64	52	52	42	66	53	60	48
	2	51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
0	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
5	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
10	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
0	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
5	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
10	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	73	63	74	74	79	71	73	60	74	74	79	69	71	57	74	71	78
2		66	53	74	65	77	65	63	51	74	62	74	62	60	49	72	59	72	59
3		56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
20	1	70	63	70	70	77	71	70	60	70	70	77	69	70	57	70	70	77	66
	2	66	53	70	65	77	65	63	51	70	62	74	62	60	49	70	59	72	59
	3	56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
25	1	70	63	70	70	74	71	70	60	70	70	74	69	70	57	70	70	74	66
	2	66	53	70	65	74	65	63	51	70	62	74	62	60	49	70	59	72	59
	3	56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
15	1	68	55	74	69	75	63	65	53	74	66	73	60	65	45	67	54	67	54
	2	58	47	70	57	70	56	55	45	67	54	67	54	55	45	67	54	67	54
	3	49	39	54	44	51	41	47	38	52	42	49	40	47	38	52	42	49	40
20	1	68	55	70	69	75	63	65	53	70	66	73	60	65	45	67	54	67	54
	2	58	47	70	57	70	56	55	45	67	54	67	54	55	45	67	54	67	54
	3	49	39	54	44	51	41	47	38	52	42	49	40	47	38	52	42	49	40
25	1	68	55	70	69	74	63	65	53	70	66	73	60	65	45	67	54	67	54
	2	58	47	70	57	70	56	55	45	67	54	67	54	55	45	67	54	67	54
	3	49	39	54	44	51	41	47	38	52	42	49	40	47	38	52	42	49	40
15	1	63	50	74	64	71	58	65	53	74	66	73	60	65	45	67	54	67	54
	2	53	43	65	52	64	52	55	45	67	54	67	54	55	45	67	54	67	54
	3	45	36	50	40	47	38	47	38	52	42	49	40	47	38	52	42	49	40
20	1	63	50	70	64	71	58	65	53	70	66	73	60	65	45	67	54	67	54
	2	53	43	65	52	64	52	55	45	67	54	67	54	55	45	67	54	67	54
	3	45	36	50	40	47	38	47	38	52	42	49	40	47	38	52	42	49	40
25	1	63	50	70	64	71	58	65	53	70	66	73	60	65	45	67	54	67	54
	2	53	43	65	52	64	52	55	45	67	54	67	54	55	45	67	54	67	54
	3	45	36	50	40	47	38	47	38	52	42	49	40	47	38	52	42	49	40

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	60	49	74	61	69	56	56	45	70	57	64	52	52	42	66	53	60
2		51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
3		43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
20	1	60	49	70	61	69	56	56	45	70	57	64	52	52	42	66	53	60	48
	2	51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
25	1	60	49	70	61	69	56	56	45	70	57	64	52	52	42	66	53	60	48
	2	51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
Wind Speed [mph]		170						180											
15	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
20	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
25	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
Wind Speed [mph]		190						200											
15	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
20	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
25	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	68	63	69	69	72	71	68	60	69	69	72	69	68	57	69	69	72
2		66	53	69	65	72	65	63	51	69	62	72	62	60	49	69	59	72	59
3		56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
35	1	67	63	67	67	70	70	67	60	67	67	70	69	67	57	67	67	70	66
	2	66	53	67	65	70	65	63	51	67	62	70	62	60	49	67	59	70	59
	3	56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
40	1	65	63	65	65	69	69	65	60	65	65	69	69	65	57	65	65	69	66
	2	65	53	65	65	69	65	63	51	65	62	69	62	60	49	65	59	69	59
	3	56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
30	1	68	55	69	69	72	63	65	53	69	66	72	60	68	55	69	66	72	60
	2	58	47	69	57	70	56	55	45	67	54	67	54	58	47	69	57	70	56
	3	49	39	54	44	51	41	47	38	52	42	49	40	49	39	54	44	51	41
35	1	67	55	67	67	70	63	65	53	67	66	70	60	67	55	67	66	70	60
	2	58	47	67	57	70	56	55	45	67	54	67	54	58	47	67	57	70	56
	3	49	39	54	44	51	41	47	38	52	42	49	40	49	39	54	44	51	41
40	1	65	55	65	65	69	63	65	53	65	65	69	60	65	55	65	65	69	60
	2	58	47	65	57	69	56	55	45	65	54	67	54	58	47	65	57	69	56
	3	49	39	54	44	51	41	47	38	52	42	49	40	49	39	54	44	51	41
30	1	63	50	69	64	71	58	65	53	69	66	72	60	63	50	69	64	71	58
	2	53	43	65	52	64	52	55	45	67	54	67	54	53	43	65	52	64	52
	3	45	36	50	40	47	38	47	38	52	42	49	40	45	36	50	40	47	38
35	1	63	50	67	64	70	58	65	53	67	66	70	60	63	50	67	64	70	58
	2	53	43	65	52	64	52	55	45	67	54	67	54	53	43	65	52	64	52
	3	45	36	50	40	47	38	47	38	52	42	49	40	45	36	50	40	47	38
40	1	63	50	65	64	69	58	65	53	65	65	69	60	63	50	65	64	69	58
	2	53	43	65	52	64	52	55	45	65	54	67	54	53	43	65	52	64	52
	3	45	36	50	40	47	38	47	38	52	42	49	40	45	36	50	40	47	38

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	60	49	69	61	69	56	56	45	69	57	64	52	52	42	66	53	60
2		51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
3		43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
35	1	60	49	67	61	69	56	56	45	67	57	64	52	52	42	66	53	60	48
	2	51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
40	1	60	49	65	61	69	56	56	45	65	57	64	52	52	42	65	53	60	48
	2	51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
Wind Speed [mph]		170						180											
30	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
35	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
40	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
Wind Speed [mph]		190						200											
30	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
35	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
40	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	63	63	64	64	67	67	63	60	64	64	67	67	63	57	64	64	67
2		63	53	64	64	67	65	63	51	64	62	67	62	60	49	64	59	67	59
3		56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
50	1	62	62	62	62	66	66	62	60	62	62	66	66	62	57	62	62	66	66
	2	62	53	62	62	66	65	62	51	62	62	66	62	60	49	62	59	66	59
	3	56	45	62	50	58	47	53	43	59	48	56	45	51	41	57	46	53	43
60	1	57	57	58	58	63	63	57	57	58	58	63	63	57	57	58	58	63	63
	2	57	53	58	58	63	63	57	51	58	58	63	62	57	49	58	58	63	59
	3	56	45	58	50	58	47	53	43	58	48	56	45	51	41	57	46	53	43
Wind Speed [mph]		110						115											
45	1	63	55	64	64	67	63	63	53	64	64	67	60	63	53	64	64	67	60
	2	58	47	64	57	67	56	55	45	64	54	67	54	55	45	64	54	67	54
	3	49	39	54	44	51	41	47	38	52	42	49	40	47	38	52	42	49	40
50	1	62	55	62	62	66	63	62	53	62	62	66	60	62	53	62	62	66	60
	2	58	47	62	57	66	56	55	45	62	54	66	54	55	45	62	54	66	54
	3	49	39	54	44	51	41	47	38	52	42	49	40	47	38	52	42	49	40
60	1	57	55	58	58	63	63	57	53	58	58	63	60	57	53	58	58	63	60
	2	57	47	58	57	63	56	55	45	58	54	63	54	55	45	58	54	63	54
	3	49	39	54	44	51	41	47	38	52	42	49	40	47	38	52	42	49	40
Wind Speed [mph]		120						130											
45	1	63	50	64	64	67	58	63	53	64	64	67	60	63	53	64	64	67	60
	2	53	43	64	52	64	52	55	45	64	54	67	54	55	45	64	54	67	54
	3	45	36	50	40	47	38	47	38	52	42	49	40	47	38	52	42	49	40
50	1	62	50	62	62	66	58	62	53	62	62	66	60	62	53	62	62	66	60
	2	53	43	62	52	64	52	55	45	62	54	66	54	55	45	62	54	66	54
	3	45	36	50	40	47	38	47	38	52	42	49	40	47	38	52	42	49	40
60	1	57	50	58	58	63	58	57	53	58	58	63	60	57	53	58	58	63	60
	2	53	43	58	52	63	52	55	45	58	54	63	54	55	45	58	54	63	54
	3	45	36	50	40	47	38	47	38	52	42	49	40	47	38	52	42	49	40

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	60	49	64	61	67	56	56	45	64	57	64	52	52	42	64	53	60
2		51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
3		43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
50	1	60	49	62	61	66	56	56	45	62	57	64	52	52	42	62	53	60	48
	2	51	41	62	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
60	1	57	49	58	58	63	56	56	45	58	57	63	52	52	42	58	53	60	48
	2	51	41	58	50	62	50	48	39	58	47	58	47	45	36	54	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
45	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
50	1	49	40	62	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
60	1	49	40	58	50	56	45	46	37	58	47	53	43	46	37	58	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
45	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
50	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
60	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61
2		53	53	54	54	61	61	53	51	54	54	61	61	53	49	54	54	61	59
3		53	45	54	50	58	47	53	43	54	48	56	45	51	41	54	46	53	43
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	50	51	51	58	58	50	50	51	51	58	58	50	49	51	51	58	58
	3	50	45	51	50	58	47	50	43	51	48	56	45	50	41	51	46	53	43
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	3	47	45	48	48	55	47	47	43	48	48	55	45	47	41	48	46	53	43
Wind Speed [mph]		110						115											
70	1	53	53	54	54	61	61	53	53	54	54	61	60						
	2	53	47	54	54	61	56	53	45	54	54	61	54						
	3	49	39	54	44	51	41	47	38	52	42	49	40						
80	1	50	50	51	51	58	58	50	50	51	51	58	58						
	2	50	47	51	51	58	56	50	45	51	51	58	54						
	3	49	39	51	44	51	41	47	38	51	42	49	40						
90	1	47	47	48	48	55	55	47	47	48	48	55	55						
	2	47	47	48	48	55	55	47	45	48	48	55	54						
	3	47	39	48	44	51	41	47	38	48	42	49	40						
Wind Speed [mph]		120						130											
70	1	53	50	54	54	61	58	53	53	54	54	61	60						
	2	53	43	54	52	61	52	53	45	54	54	61	54						
	3	45	36	50	40	47	38	47	38	52	42	49	40						
80	1	50	50	51	51	58	58	50	50	51	51	58	58						
	2	50	43	51	51	58	52	50	45	51	51	58	54						
	3	45	36	50	40	47	38	47	38	51	42	49	40						
90	1	47	47	48	48	55	55	47	47	48	48	55	55						
	2	47	43	48	48	55	52	47	45	48	48	55	54						
	3	45	36	48	40	47	38	47	38	48	42	49	40						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	49	54	54	61	56	53	45	54	54	61	52	52	42	54	53	60
2		51	41	54	50	61	50	48	39	54	47	58	47	45	36	54	44	54	43
3		43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
80	1	50	49	51	51	58	56	50	45	51	51	58	52	50	42	51	51	58	48
	2	50	41	51	50	58	50	48	39	51	47	58	47	45	36	51	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
90	1	47	47	48	48	55	55	47	45	48	48	55	52	47	42	48	48	55	48
	2	47	41	48	48	55	50	47	39	48	47	55	47	45	36	48	44	54	43
	3	43	35	48	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
70	1	49	40	54	50	56	45	46	37	54	47	53	43	46	37	54	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
80	1	49	40	51	50	56	45	46	37	51	47	53	43	46	37	51	47	53	43
	2	42	34	51	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
90	1	47	40	48	48	55	45	46	37	48	47	53	43	46	37	48	47	53	43
	2	42	34	48	41	50	41	39	32	48	39	48	38	39	32	48	39	48	38
	3	35	29	39	32	37	30	33	27	37	30	35	28	33	27	37	30	35	28
70	1	44	35	54	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
80	1	44	35	51	44	50	41	41	33	51	42	47	38	41	33	51	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
90	1	44	35	48	44	50	41	41	33	48	42	47	38	41	33	48	42	47	38
	2	37	30	45	36	45	36	35	29	43	35	43	35	35	29	43	35	43	35
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52
2		45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52	52
3		45	45	46	46	52	47	45	43	46	46	52	45	45	41	46	46	52	43
Wind Speed [mph]		110						115											
100	1	45	45	46	46	52	52	45	45	46	46	52	52						
	2	45	45	46	46	52	52	45	45	46	46	52	52						
	3	45	39	46	44	51	41	45	38	46	42	49	40						
Wind Speed [mph]		120						130											
100	1	45	45	46	46	52	52	45	45	46	46	52	52						
	2	45	43	46	46	52	52	45	45	46	46	52	52						
	3	45	36	46	40	47	38	45	38	46	42	49	40						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	45	45	46	46	52	52	45	45	46	46	52	52	45	42	46	46	52
2		45	41	46	46	52	50	45	39	46	46	52	47	45	36	46	44	52	43
3		43	35	46	39	45	37	40	33	45	36	42	34	38	30	42	34	39	32
Wind Speed [mph]		170						180											
100	1	45	40	46	46	52	45	45	37	46	46	52	43						
	2	42	34	46	41	50	41	39	32	46	39	48	38						
	3	35	29	39	32	37	30	33	27	37	30	35	28						
Wind Speed [mph]		190						200											
100	1	44	35	46	44	50	41	41	33	46	42	47	38						
	2	37	30	45	36	45	36	35	29	43	35	43	35						
	3	31	25	35	28	33	27	30	24	33	27	31	25						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	71	57	83	71	78	66	68	55	80	69	75	63	65	52	78	66	73
2		61	49	72	59	72	59	58	47	70	56	70	56	55	45	67	54	67	54
3		51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
5	1	71	57	82	71	78	66	68	55	80	69	75	63	65	52	78	66	73	60
	2	61	49	72	59	72	59	58	47	70	56	70	56	55	45	67	54	67	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
10	1	71	57	77	71	78	66	68	55	77	69	75	63	65	52	77	66	73	60
	2	61	49	72	59	72	59	58	47	70	56	70	56	55	45	67	54	67	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
0	1	62	50	76	63	71	58	60	48	73	61	68	55	62	50	61	49		
	2	53	43	64	52	64	52	51	41	62	50	61	49						
	3	44	36	50	40	47	38	43	35	48	38	45	36						
5	1	62	50	76	63	71	58	60	48	73	61	68	55	62	50	61	49		
	2	53	43	64	52	64	52	51	41	62	50	61	49						
	3	44	36	50	40	47	38	43	35	48	38	45	36						
10	1	62	50	76	63	71	58	60	48	73	61	68	55	62	50	61	49		
	2	53	43	64	52	64	52	51	41	62	50	61	49						
	3	44	36	50	40	47	38	43	35	48	38	45	36						
0	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	62	50	61	49
	2	49	39	59	48	59	48	51	41	62	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
5	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	62	50	61	49
	2	49	39	59	48	59	48	51	41	62	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
10	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	62	50	61	49
	2	49	39	59	48	59	48	51	41	62	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
0	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	62	50	61	49
	2	49	39	59	48	59	48	51	41	62	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
5	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	62	50	61	49
	2	49	39	59	48	59	48	51	41	62	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
10	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	62	50	61	49
	2	49	39	59	48	59	48	51	41	62	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	55	44	70	56	63	51	51	41	65	52	59	47	48	39	60	49	55
2		47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
3		39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
5	1	55	44	70	56	63	51	51	41	65	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
10	1	55	44	70	56	63	51	51	41	65	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
0	1	45	36	56	46	51	42	42	34	53	43	48	39	45	36	56	46	51	42
	2	38	31	46	37	46	37	36	29	44	35	44	35	38	31	46	37	46	37
	3	32	26	36	29	34	28	30	25	34	27	32	26	32	26	36	29	34	28
5	1	45	36	56	46	51	42	42	34	53	43	48	39	45	36	56	46	51	42
	2	38	31	46	37	46	37	36	29	44	35	44	35	38	31	46	37	46	37
	3	32	26	36	29	34	28	30	25	34	27	32	26	32	26	36	29	34	28
10	1	45	36	56	46	51	42	42	34	53	43	48	39	45	36	56	46	51	42
	2	38	31	46	37	46	37	36	29	44	35	44	35	38	31	46	37	46	37
	3	32	26	36	29	34	28	30	25	34	27	32	26	32	26	36	29	34	28
0	1	40	32	50	41	46	37	38	31	48	38	43	35	40	32	50	41	46	37
	2	34	28	41	33	41	33	32	26	39	32	39	32	34	28	41	33	41	33
	3	29	23	32	26	30	25	27	22	30	25	29	23	29	23	32	26	30	25
5	1	40	32	50	41	46	37	38	31	48	38	43	35	40	32	50	41	46	37
	2	34	28	41	33	41	33	32	26	39	32	39	32	34	28	41	33	41	33
	3	29	23	32	26	30	25	27	22	30	25	29	23	29	23	32	26	30	25
10	1	40	32	50	41	46	37	38	31	48	38	43	35	40	32	50	41	46	37
	2	34	28	41	33	41	33	32	26	39	32	39	32	34	28	41	33	41	33
	3	29	23	32	26	30	25	27	22	30	25	29	23	29	23	32	26	30	25
0	1	40	32	50	41	46	37	38	31	48	38	43	35	40	32	50	41	46	37
	2	34	28	41	33	41	33	32	26	39	32	39	32	34	28	41	33	41	33
	3	29	23	32	26	30	25	27	22	30	25	29	23	29	23	32	26	30	25
5	1	40	32	50	41	46	37	38	31	48	38	43	35	40	32	50	41	46	37
	2	34	28	41	33	41	33	32	26	39	32	39	32	34	28	41	33	41	33
	3	29	23	32	26	30	25	27	22	30	25	29	23	29	23	32	26	30	25
10	1	40	32	50	41	46	37	38	31	48	38	43	35	40	32	50	41	46	37
	2	34	28	41	33	41	33	32	26	39	32	39	32	34	28	41	33	41	33
	3	29	23	32	26	30	25	27	22	30	25	29	23	29	23	32	26	30	25

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	71	57	74	71	78	66	68	55	74	69	75	63	65	52	74	66	73
2		61	49	72	59	72	59	58	47	70	56	70	56	55	45	67	54	67	54
3		51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
20	1	70	57	70	70	78	66	68	55	70	69	75	63	65	52	70	66	73	60
	2	61	49	70	59	72	59	58	47	70	56	70	56	55	45	67	54	67	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
25	1	70	57	70	70	76	66	68	55	70	69	75	63	65	52	70	66	73	60
	2	61	49	70	59	72	59	58	47	70	56	70	56	55	45	67	54	67	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
15	1	62	50	74	63	71	58	60	48	73	61	68	55	62	49	61	49	61	49
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
20	1	62	50	70	63	71	58	60	48	70	61	68	55	62	49	61	49	61	49
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
25	1	62	50	70	63	71	58	60	48	70	61	68	55	62	49	61	49	61	49
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
15	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	73	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
20	1	57	46	70	58	66	53	60	48	70	61	68	55	60	48	70	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
25	1	57	46	70	58	66	53	60	48	70	61	68	55	60	48	70	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
15	1	57	46	71	58	66	53	60	48	73	61	68	55	60	48	73	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
20	1	57	46	70	58	66	53	60	48	70	61	68	55	60	48	70	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
25	1	57	46	70	58	66	53	60	48	70	61	68	55	60	48	70	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	55	44	70	56	63	51	51	41	65	52	59	47	48	39	60	49	55
2		47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
3		39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
20	1	55	44	70	56	63	51	51	41	65	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
25	1	55	44	70	56	63	51	51	41	65	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
15	1	45	36	56	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
20	1	45	36	56	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
25	1	45	36	56	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
15	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	48	38	43	35
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
20	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	48	38	43	35
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
25	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	48	38	43	35
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	70	57	70	70	74	66	68	55	70	69	74	63	65	52	70	66	73
2		61	49	70	59	72	59	58	47	70	56	70	56	55	45	67	54	67	54
3		51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
35	1	68	57	68	68	72	66	68	55	68	68	72	63	65	52	68	66	72	60
	2	61	49	68	59	72	59	58	47	68	56	70	56	55	45	67	54	67	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
40	1	66	57	67	67	70	66	66	55	67	67	70	63	65	52	67	66	70	60
	2	61	49	67	59	70	59	58	47	67	56	70	56	55	45	67	54	67	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
30	1	62	50	70	63	71	58	60	48	70	61	68	55	60	48	70	61	68	55
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
35	1	62	50	68	63	71	58	60	48	68	61	68	55	60	48	68	61	68	55
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
40	1	62	50	67	63	70	58	60	48	67	61	68	55	60	48	67	61	68	55
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
30	1	57	46	70	58	66	53	60	48	70	61	68	55	60	48	70	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
35	1	57	46	68	58	66	53	60	48	68	61	68	55	60	48	68	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
40	1	57	46	67	58	66	53	60	48	67	61	68	55	60	48	67	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	55	44	70	56	63	51	51	41	65	52	59	47	48	39	60	49	55
2		47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
3		39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
35	1	55	44	68	56	63	51	51	41	65	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
40	1	55	44	67	56	63	51	51	41	65	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
Wind Speed [mph]		170						180											
30	1	45	36	56	46	51	42	42	34	53	43	48	39	36	29	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	30	25	34	27	32	26
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
35	1	45	36	56	46	51	42	42	34	53	43	48	39	36	29	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	30	25	34	27	32	26
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
40	1	45	36	56	46	51	42	42	34	53	43	48	39	36	29	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	30	25	34	27	32	26
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
Wind Speed [mph]		190						200											
30	1	40	32	50	41	46	37	38	31	48	38	43	35	32	26	39	32	39	32
	2	34	28	41	33	41	33	32	26	39	32	39	32	27	22	30	25	29	23
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
35	1	40	32	50	41	46	37	38	31	48	38	43	35	32	26	39	32	39	32
	2	34	28	41	33	41	33	32	26	39	32	39	32	27	22	30	25	29	23
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
40	1	40	32	50	41	46	37	38	31	48	38	43	35	32	26	39	32	39	32
	2	34	28	41	33	41	33	32	26	39	32	39	32	27	22	30	25	29	23
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	65	57	65	65	69	66	65	55	65	65	69	63	65	52	65	65	69
2		61	49	65	59	69	59	58	47	65	56	69	56	55	45	65	54	67	54
3		51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
50	1	63	57	64	64	67	66	63	55	64	64	67	63	63	52	64	64	67	60
	2	61	49	64	59	67	59	58	47	64	56	67	56	55	45	64	54	67	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
60	1	60	57	61	61	65	65	60	55	61	61	65	63	60	52	61	61	65	60
	2	60	49	61	59	65	59	58	47	61	56	65	56	55	45	61	54	65	54
	3	51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
Wind Speed [mph]		110						115											
45	1	62	50	65	63	69	58	60	48	65	61	68	55	60	48	65	61	68	55
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
50	1	62	50	64	63	67	58	60	48	64	61	67	55	60	48	64	61	67	55
	2	53	43	64	52	64	52	51	41	62	50	61	49	51	41	62	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
60	1	60	50	61	61	65	58	60	48	61	61	65	55	60	48	61	61	65	55
	2	53	43	61	52	64	52	51	41	61	50	61	49	51	41	61	50	61	49
	3	44	36	50	40	47	38	43	35	48	38	45	36	43	35	48	38	45	36
Wind Speed [mph]		120						130											
45	1	57	46	65	58	66	53	60	48	65	61	68	55	60	48	65	61	68	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
50	1	57	46	64	58	66	53	60	48	64	61	67	55	60	48	64	61	67	55
	2	49	39	59	48	59	48	51	41	62	50	61	49	51	41	62	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36
60	1	57	46	61	58	65	53	60	48	61	61	65	55	60	48	61	61	65	55
	2	49	39	59	48	59	48	51	41	61	50	61	49	51	41	61	50	61	49
	3	41	33	46	37	43	35	43	35	48	38	45	36	43	35	48	38	45	36

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	55	44	65	56	63	51	51	41	65	52	59	47	48	39	60	49	55
2		47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
3		39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
50	1	55	44	64	56	63	51	51	41	64	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
60	1	55	44	61	56	63	51	51	41	61	52	59	47	48	39	60	49	55	44
	2	47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
Wind Speed [mph]		170						180											
45	1	45	36	56	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
50	1	45	36	56	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
60	1	45	36	56	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
Wind Speed [mph]		190						200											
45	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	48	38	43	35
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
50	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	48	38	43	35
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
60	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	48	38	43	35
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	56	56	57	57	63	63	56	55	57	57	63	63	56	52	57	57	63
2		56	49	57	57	63	59	56	47	57	56	63	56	55	45	57	54	63	54
3		51	41	57	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
80	1	53	53	54	54	61	61	53	53	54	54	61	61	53	52	54	54	61	60
	2	53	49	54	54	61	59	53	47	54	54	61	56	53	45	54	54	61	54
	3	51	41	54	46	53	43	49	39	54	44	51	41	46	38	52	42	49	39
90	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	49	51	51	58	58	50	47	51	51	58	56	50	45	51	51	58	54
	3	50	41	51	46	53	43	49	39	51	44	51	41	46	38	51	42	49	39
Wind Speed [mph]		110						115											
70	1	56	50	57	57	63	58	56	48	57	57	63	55						
	2	53	43	57	52	63	52	51	41	57	50	61	49						
	3	44	36	50	40	47	38	43	35	48	38	45	36						
80	1	53	50	54	54	61	58	53	48	54	54	61	55						
	2	53	43	54	52	61	52	51	41	54	50	61	49						
	3	44	36	50	40	47	38	43	35	48	38	45	36						
90	1	50	50	51	51	58	58	50	48	51	51	58	55						
	2	50	43	51	51	58	52	50	41	51	50	58	49						
	3	44	36	50	40	47	38	43	35	48	38	45	36						
Wind Speed [mph]		120						130											
70	1	56	46	57	57	63	53	56	48	57	57	63	55						
	2	49	39	57	48	59	48	51	41	57	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
80	1	53	46	54	54	61	53	53	48	54	54	61	55						
	2	49	39	54	48	59	48	51	41	54	50	61	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
90	1	50	46	51	51	58	53	50	48	51	51	58	55						
	2	49	39	51	48	58	48	50	41	51	50	58	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	55	44	57	56	63	51	51	41	57	52	59	47	48	39	57	49	55
2		47	38	57	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
3		39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
80	1	53	44	54	54	61	51	51	41	54	52	59	47	48	39	54	49	55	44
	2	47	38	54	46	57	46	44	35	53	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
90	1	50	44	51	51	58	51	50	41	51	51	58	47	48	39	51	49	55	44
	2	47	38	51	46	57	46	44	35	51	43	53	43	41	33	49	40	49	40
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29
Wind Speed [mph]		170						180											
70	1	45	36	56	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
80	1	45	36	54	46	51	42	42	34	53	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
90	1	45	36	51	46	51	42	42	34	51	43	48	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	36	29	34	28	30	25	34	27	32	26	30	25	34	27	32	26
Wind Speed [mph]		190						200											
70	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	39	32	39	32
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
80	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	39	32	39	32
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23
90	1	40	32	50	41	46	37	38	31	48	38	43	35	38	31	39	32	39	32
	2	34	28	41	33	41	33	32	26	39	32	39	32	32	26	39	32	39	32
	3	29	23	32	26	30	25	27	22	30	25	29	23	27	22	30	25	29	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	48	48	48	48	55	55	48	48	48	48	55	55	48	48	48	48	55
2		48	48	48	48	55	55	48	47	48	48	55	55	48	45	48	48	55	54
3		48	41	48	46	53	43	48	39	48	44	51	41	46	38	48	42	49	39
Wind Speed [mph]		110						115											
100	1	48	48	48	48	55	55	48	48	48	48	55	55						
	2	48	43	48	48	55	52	48	41	48	48	55	49						
	3	44	36	48	40	47	38	43	35	48	38	45	36						
0	1																		
	2																		
	3																		
0	1																		
	2																		
	3																		
Wind Speed [mph]		120						130											
100	1	48	46	48	48	55	53	48	48	48	48	55	55						
	2	48	39	48	48	55	48	48	41	48	48	55	49						
	3	41	33	46	37	43	35	43	35	48	38	45	36						
Wind Speed [mph]																			
0	1																		
	2																		
	3																		

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Span, inches																				
Wind Speed [mph]		140				150				160																
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge																							
	100	1	48	44	48	48	55	51	48	41	48	48	55	47	48	39	48	48	55	44						
	2	47	38	48	46	55	46	44	35	48	43	53	43	41	33	48	40	49	40							
	3	39	32	44	36	41	34	37	30	41	33	39	31	34	28	38	31	36	29							
Wind Speed [mph]		170				180				190				200												
100	1	45	36	48	46	51	42	42	34	48	43	48	39	40	32	48	41	46	37	38	31	48	38	43	35	
	2	38	31	46	37	46	37	36	29	44	35	44	35	34	28	41	33	41	33	32	26	39	32	39	32	
	3	32	26	36	29	34	28	30	25	34	27	32	26	29	23	32	26	30	25	27	22	30	25	29	23	
	1	40	32	48	41	46	37	38	31	48	38	43	35	34	28	41	33	41	33	32	26	39	32	39	32	
100	2	34	28	41	33	41	33	32	26	39	32	39	32	29	23	32	26	30	25	27	22	30	25	29	23	
	3	29	23	32	26	30	25	27	22	30	25	29	23													

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																	
	0	1	79	68	83	80	84	75	77	65	83	78	84	73	74	62	83	75	82	70
2		71	58	81	70	81	70	68	55	79	67	78	66	65	53	76	64	76	63	
3		60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46	
5		1	79	68	82	80	84	75	77	65	82	78	84	73	74	62	82	75	82	70
		2	71	58	81	70	81	70	68	55	79	67	78	66	65	53	76	64	76	63
		3	60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
10		1	77	68	77	77	82	75	77	65	77	77	82	73	74	62	77	75	82	70
		2	71	58	77	70	81	70	68	55	77	67	78	66	65	53	76	64	76	63
		3	60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
0	1	72	59	83	73	79	68	70	57	82	71	77	65	70	57	82	71	77	65	
	2	62	50	74	61	73	61	60	48	72	58	71	58	60	48	72	58	71	58	
	3	52	42	58	47	55	44	50	41	56	45	53	43	50	41	56	45	53	43	
	5	1	72	59	82	73	79	68	70	57	82	71	77	65	70	57	82	71	77	65
		2	62	50	74	61	73	61	60	48	72	58	71	58	60	48	72	58	71	58
		3	52	42	58	47	55	44	50	41	56	45	53	43	50	41	56	45	53	43
	10	1	72	59	77	73	79	68	70	57	77	71	77	65	70	57	77	71	77	65
		2	62	50	74	61	73	61	60	48	72	58	71	58	60	48	72	58	71	58
		3	52	42	58	47	55	44	50	41	56	45	53	43	50	41	56	45	53	43
0	1	68	54	80	69	75	63	70	57	82	71	77	65	70	57	82	71	77	65	
	2	57	46	70	56	69	56	60	48	72	58	71	58	60	48	72	58	71	58	
	3	48	39	54	43	51	41	50	41	56	45	53	43	50	41	56	45	53	43	
	5	1	68	54	80	69	75	63	70	57	82	71	77	65	70	57	82	71	77	65
		2	57	46	70	56	69	56	60	48	72	58	71	58	60	48	72	58	71	58
		3	48	39	54	43	51	41	50	41	56	45	53	43	50	41	56	45	53	43
	10	1	68	54	77	69	75	63	70	57	77	71	77	65	70	57	77	71	77	65
		2	57	46	70	56	69	56	60	48	72	58	71	58	60	48	72	58	71	58
		3	48	39	54	43	51	41	50	41	56	45	53	43	50	41	56	45	53	43

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	65	52	78	66	73	60	60	49	74	61	69	56	56	45	71	57	65
2		55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
3		46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
5	1	65	52	78	66	73	60	60	49	74	61	69	56	56	45	71	57	65	52
	2	55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
10	1	65	52	77	66	73	60	60	49	74	61	69	56	56	45	71	57	65	52
	2	55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
Wind Speed [mph]		170						180											
0	1	53	43	67	54	61	49	50	40	63	51	57	46	50	40	63	51	57	46
	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
5	1	53	43	67	54	61	49	50	40	63	51	57	46	50	40	63	51	57	46
	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
10	1	53	43	67	54	61	49	50	40	63	51	57	46	50	40	63	51	57	46
	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
Wind Speed [mph]		190						200											
0	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27
5	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27
10	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	73	68	74	74	79	75	73	65	74	74	79	73	73	62	74	74	79
2		71	58	74	70	79	70	68	55	74	67	78	66	65	53	74	64	76	63
3		60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
20	1	70	68	70	70	77	75	70	65	70	70	77	73	70	62	70	70	77	70
	2	70	58	70	70	77	70	68	55	70	67	77	66	65	53	70	64	76	63
	3	60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
25	1	70	68	70	70	74	74	70	65	70	70	74	73	70	62	70	70	74	70
	2	70	58	70	70	74	70	68	55	70	67	74	66	65	53	70	64	74	63
	3	60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
Wind Speed [mph]		110						115											
15	1	72	59	74	73	79	68	70	57	74	71	77	65						
	2	62	50	74	61	73	61	60	48	72	58	71	58						
	3	52	42	58	47	55	44	50	41	56	45	53	43						
20	1	70	59	70	70	77	68	70	57	70	70	77	65						
	2	62	50	70	61	73	61	60	48	70	58	71	58						
	3	52	42	58	47	55	44	50	41	56	45	53	43						
25	1	70	59	70	70	74	68	70	57	70	70	74	65						
	2	62	50	70	61	73	61	60	48	70	58	71	58						
	3	52	42	58	47	55	44	50	41	56	45	53	43						
Wind Speed [mph]		120						130											
15	1	68	54	74	69	75	63	70	57	74	71	77	65						
	2	57	46	70	56	69	56	60	48	72	58	71	58						
	3	48	39	54	43	51	41	50	41	56	45	53	43						
20	1	68	54	70	69	75	63	70	57	70	70	77	65						
	2	57	46	70	56	69	56	60	48	70	58	71	58						
	3	48	39	54	43	51	41	50	41	56	45	53	43						
25	1	68	54	70	69	74	63	70	57	70	70	74	65						
	2	57	46	70	56	69	56	60	48	70	58	71	58						
	3	48	39	54	43	51	41	50	41	56	45	53	43						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	65	52	74	66	73	60	60	49	74	61	69	56	56	45	71	57	65
2		55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
3		46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
20	1	65	52	70	66	73	60	60	49	70	61	69	56	56	45	70	57	65	52
	2	55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
25	1	65	52	70	66	73	60	60	49	70	61	69	56	56	45	70	57	65	52
	2	55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
Wind Speed [mph]		170						180											
15	1	53	43	67	54	61	49	50	40	63	51	57	46						
	2	45	36	55	44	54	44	42	34	51	42	51	41						
	3	38	31	42	34	40	32	36	29	40	32	38	30						
20	1	53	43	67	54	61	49	50	40	63	51	57	46						
	2	45	36	55	44	54	44	42	34	51	42	51	41						
	3	38	31	42	34	40	32	36	29	40	32	38	30						
25	1	53	43	67	54	61	49	50	40	63	51	57	46						
	2	45	36	55	44	54	44	42	34	51	42	51	41						
	3	38	31	42	34	40	32	36	29	40	32	38	30						
Wind Speed [mph]		190						200											
15	1	47	38	59	48	54	44	45	36	56	45	51	41						
	2	40	33	48	39	48	39	38	31	46	37	46	37						
	3	34	27	38	31	36	29	32	26	36	29	34	27						
20	1	47	38	59	48	54	44	45	36	56	45	51	41						
	2	40	33	48	39	48	39	38	31	46	37	46	37						
	3	34	27	38	31	36	29	32	26	36	29	34	27						
25	1	47	38	59	48	54	44	45	36	56	45	51	41						
	2	40	33	48	39	48	39	38	31	46	37	46	37						
	3	34	27	38	31	36	29	32	26	36	29	34	27						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
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 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches														
Exposure Category : B	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	68	68	69	69	72	72	68	65	69	69	72	72	68	62	69	69	72	70
		2	68	58	69	69	72	70	68	55	69	67	72	66	65	53	69	64	72	63
		3	60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
	35	1	67	67	67	67	70	70	67	65	67	67	70	70	67	62	67	67	70	70
		2	67	58	67	67	70	70	67	55	67	67	70	66	65	53	67	64	70	63
		3	60	48	67	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
	40	1	65	65	65	65	69	69	65	65	65	65	69	69	65	62	65	65	69	69
		2	65	58	65	65	69	69	65	55	65	65	69	66	65	53	65	64	69	63
		3	60	48	65	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
	30	1	68	59	69	69	72	68	68	57	69	69	72	65	68	57	69	69	72	65
		2	62	50	69	61	72	61	60	48	69	58	71	58	60	48	69	58	71	58
		3	52	42	58	47	55	44	50	41	56	45	53	43	50	41	56	45	53	43
	35	1	67	59	67	67	70	68	67	57	67	67	70	65	67	57	67	67	70	65
		2	62	50	67	61	70	61	60	48	67	58	70	58	60	48	67	58	70	58
		3	52	42	58	47	55	44	50	41	56	45	53	43	50	41	56	45	53	43
	40	1	65	59	65	65	69	68	65	57	65	65	69	65	65	57	65	65	69	65
		2	62	50	65	61	69	61	60	48	65	58	69	58	60	48	65	58	69	58
3		52	42	58	47	55	44	50	41	56	45	53	43	50	41	56	45	53	43	
30	1	68	54	69	69	72	63	68	57	69	69	72	65	68	57	69	69	72	65	
	2	57	46	69	56	69	56	60	48	69	58	71	58	60	48	69	58	71	58	
	3	48	39	54	43	51	41	50	41	56	45	53	43	50	41	56	45	53	43	
35	1	67	54	67	67	70	63	67	57	67	67	70	65	67	57	67	67	70	65	
	2	57	46	67	56	69	56	60	48	67	58	70	58	60	48	67	58	70	58	
	3	48	39	54	43	51	41	50	41	56	45	53	43	50	41	56	45	53	43	
40	1	65	54	65	65	69	63	65	57	65	65	69	65	65	57	65	65	69	65	
	2	57	46	65	56	69	56	60	48	65	58	69	58	60	48	65	58	69	58	
	3	48	39	54	43	51	41	50	41	56	45	53	43	50	41	56	45	53	43	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	1	65	52	69	66	72	60	60	49	69	61	69	56	56	45	69	57	65	52
30	2	55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
	1	65	52	67	66	70	60	60	49	67	61	69	56	56	45	67	57	65	52
35	2	55	45	67	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
	1	65	52	65	65	69	60	60	49	65	61	69	56	56	45	65	57	65	52
40	2	55	45	65	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
	1	53	43	67	54	61	49	50	40	63	51	57	46	50	40	63	51	57	46
30	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
	1	53	43	67	54	61	49	50	40	63	51	57	46	50	40	63	51	57	46
35	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
	1	53	43	65	54	61	49	50	40	63	51	57	46	50	40	63	51	57	46
40	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
30	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27
	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
35	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27
	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
40	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	45	1	63	63	64	64	67	67	63	63	64	64	67	67	63	62	64	64	67
2		63	58	64	64	67	67	63	55	64	64	67	66	63	53	64	64	67	63
3		60	48	64	54	63	51	57	46	64	51	60	48	55	44	61	49	57	46
50	1	62	62	62	62	66	66	62	62	62	62	66	66	62	62	62	62	66	66
	2	62	58	62	62	66	66	62	55	62	62	66	66	62	53	62	62	66	63
	3	60	48	62	54	63	51	57	46	62	51	60	48	55	44	61	49	57	46
60	1	57	57	58	58	63	63	57	57	58	58	63	63	57	57	58	58	63	63
	2	57	57	58	58	63	63	57	55	58	58	63	63	57	53	58	58	63	63
	3	57	48	58	54	63	51	57	46	58	51	60	48	55	44	58	49	57	46
45	Wind Speed [mph]		110						115										
	1	63	59	64	64	67	67	63	57	64	64	67	65						
	2	62	50	64	61	67	61	60	48	64	58	67	58						
50	3	52	42	58	47	55	44	50	41	56	45	53	43						
	1	62	59	62	62	66	66	62	57	62	62	66	65						
	2	62	50	62	61	66	61	60	48	62	58	66	58						
60	3	52	42	58	47	55	44	50	41	56	45	53	43						
	1	57	57	58	58	63	63	57	57	58	58	63	63						
	2	57	50	58	58	63	61	57	48	58	58	63	58						
45	Wind Speed [mph]		120						130										
	1	63	54	64	64	67	63	63	57	64	64	67	65						
	2	57	46	64	56	67	56	60	48	64	58	67	58						
50	3	48	39	54	43	51	41	50	41	56	45	53	43						
	1	62	54	62	62	66	63	62	57	62	62	66	65						
	2	57	46	62	56	66	56	60	48	62	58	66	58						
60	3	48	39	54	43	51	41	50	41	56	45	53	43						
	1	57	54	58	58	63	63	57	57	58	58	63	63						
	2	57	46	58	56	63	56	57	48	58	58	63	58						
45	Wind Speed [mph]		120						130										
	1	63	54	64	64	67	63	63	57	64	64	67	65						
	2	57	46	64	56	67	56	60	48	64	58	67	58						
50	3	48	39	54	43	51	41	50	41	56	45	53	43						
	1	62	54	62	62	66	63	62	57	62	62	66	65						
	2	57	46	62	56	66	56	60	48	62	58	66	58						
60	3	48	39	54	43	51	41	50	41	56	45	53	43						
	1	57	54	58	58	63	63	57	57	58	58	63	63						
	2	57	46	58	56	63	56	57	48	58	58	63	58						

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	63	52	64	64	67	60	60	49	64	61	67	56	56	45	64	57	65
2		55	45	64	54	67	54	51	42	62	50	62	50	48	39	58	47	58	47
3		46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
50	1	62	52	62	62	66	60	60	49	62	61	66	56	56	45	62	57	65	52
	2	55	45	62	54	66	54	51	42	62	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
60	1	57	52	58	58	63	60	57	49	58	58	63	56	56	45	58	57	63	52
	2	55	45	58	54	63	54	51	42	58	50	62	50	48	39	58	47	58	47
	3	46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
Wind Speed [mph]		170						180											
45	1	53	43	64	54	61	49	50	40	63	51	57	46	50	40	63	51	57	46
	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
50	1	53	43	62	54	61	49	50	40	62	51	57	46	50	40	62	51	57	46
	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
60	1	53	43	58	54	61	49	50	40	58	51	57	46	50	40	58	51	57	46
	2	45	36	55	44	54	44	42	34	51	42	51	41	42	34	51	42	51	41
	3	38	31	42	34	40	32	36	29	40	32	38	30	36	29	40	32	38	30
Wind Speed [mph]		190						200											
45	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27
50	1	47	38	59	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27
60	1	47	38	58	48	54	44	45	36	56	45	51	41	45	36	56	45	51	41
	2	40	33	48	39	48	39	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	27	38	31	36	29	32	26	36	29	34	27	32	26	36	29	34	27

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61
2		53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
3		53	48	54	54	61	51	53	46	54	51	60	48	53	44	54	49	57	46
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	3	50	48	51	51	58	51	50	46	51	51	58	48	50	44	51	49	57	46
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	3	47	47	48	48	55	51	47	46	48	48	55	48	47	44	48	48	55	46
Wind Speed [mph]		110						115											
70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
	2	53	50	54	54	61	61	53	48	54	54	61	58	53	48	54	54	61	58
	3	52	42	54	47	55	44	50	41	54	45	53	43	50	41	54	45	53	43
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	50	51	51	58	58	50	48	51	51	58	58	50	48	51	51	58	58
	3	50	42	51	47	55	44	50	41	51	45	53	43	50	41	51	45	53	43
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	3	47	42	48	47	55	44	47	41	48	45	53	43	47	41	48	45	53	43
Wind Speed [mph]		120						130											
70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61	61
	2	53	46	54	54	61	56	53	48	54	54	61	58	53	48	54	54	61	58
	3	48	39	54	43	51	41	50	41	54	45	53	43	50	41	54	45	53	43
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	46	51	51	58	56	50	48	51	51	58	58	50	48	51	51	58	58
	3	48	39	51	43	51	41	50	41	51	45	53	43	50	41	51	45	53	43
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	46	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	3	47	39	48	43	51	41	47	41	48	45	53	43	47	41	48	45	53	43

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	52	54	54	61	60	53	49	54	54	61	56	53	45	54	54	61
2		53	45	54	54	61	54	51	42	54	50	61	50	48	39	54	47	58	47
3		46	38	52	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
80	1	50	50	51	51	58	58	50	49	51	51	58	56	50	45	51	51	58	52
	2	50	45	51	51	58	54	50	42	51	50	58	50	48	39	51	47	58	47
	3	46	38	51	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	45	48	48	55	52
	2	47	45	48	48	55	54	47	42	48	48	55	50	47	39	48	47	55	47
	3	46	38	48	42	49	39	43	35	48	39	45	37	40	33	45	36	42	34
Wind Speed [mph]		170						180											
70	1	53	43	54	54	61	49	50	40	54	51	57	46						
	2	45	36	54	44	54	44	42	34	51	42	51	41						
	3	38	31	42	34	40	32	36	29	40	32	38	30						
80	1	50	43	51	51	58	49	50	40	51	51	57	46						
	2	45	36	51	44	54	44	42	34	51	42	51	41						
	3	38	31	42	34	40	32	36	29	40	32	38	30						
90	1	47	43	48	48	55	49	47	40	48	48	55	46						
	2	45	36	48	44	54	44	42	34	48	42	51	41						
	3	38	31	42	34	40	32	36	29	40	32	38	30						
Wind Speed [mph]		190						200											
70	1	47	38	54	48	54	44	45	36	54	45	51	41						
	2	40	33	48	39	48	39	38	31	46	37	46	37						
	3	34	27	38	31	36	29	32	26	36	29	34	27						
80	1	47	38	51	48	54	44	45	36	51	45	51	41						
	2	40	33	48	39	48	39	38	31	46	37	46	37						
	3	34	27	38	31	36	29	32	26	36	29	34	27						
90	1	47	38	48	48	54	44	45	36	48	45	51	41						
	2	40	33	48	39	48	39	38	31	46	37	46	37						
	3	34	27	38	31	36	29	32	26	36	29	34	27						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52
2		45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52	52
3		45	45	46	46	52	51	45	45	46	46	52	48	45	44	46	46	52	46
Wind Speed [mph]		110						115											
100	1	45	45	46	46	52	52	45	45	46	46	52	52						
	2	45	45	46	46	52	52	45	45	46	46	52	52						
	3	45	42	46	46	52	44	45	41	46	45	52	43						
Wind Speed [mph]		120						130											
100	1	45	45	46	46	52	52	45	45	46	46	52	52						
	2	45	45	46	46	52	52	45	45	46	46	52	52						
	3	45	39	46	43	51	41	45	41	46	45	52	43						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52	52
100	2	45	45	46	46	52	52	45	42	46	46	52	50	45	39	46	46	52	47
	3	45	38	46	42	49	39	43	35	46	39	45	37	40	33	45	36	42	34
Wind Speed [mph]		170				180													
100	1	45	43	46	46	52	49	45	40	46	46	52	46						
	2	45	36	46	44	52	44	42	34	46	42	51	41						
	3	38	31	42	34	40	32	36	29	40	32	38	30						
Wind Speed [mph]		190				200													
100	1	45	38	46	46	52	44	45	36	46	45	51	41						
	2	40	33	46	39	48	39	38	31	46	37	46	37						
	3	34	27	38	31	36	29	32	26	36	29	34	27						

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	71	58	83	72	78	67	69	55	81	70	76	63	66	53	78	67	73
2		61	49	73	60	72	60	58	47	70	57	70	57	56	45	68	54	67	54
3		51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
5	1	71	58	82	72	78	67	69	55	81	70	76	63	66	53	78	67	73	61
	2	61	49	73	60	72	60	58	47	70	57	70	57	56	45	68	54	67	54
	3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
10	1	71	58	77	72	78	67	69	55	77	70	76	63	66	53	77	67	73	61
	2	61	49	73	60	72	60	58	47	70	57	70	57	56	45	68	54	67	54
	3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
0	1	63	51	76	64	71	58	60	48	74	61	69	56	60	48	74	61	69	56
	2	53	43	65	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
	3	45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37
5	1	63	51	76	64	71	58	60	48	74	61	69	56	60	48	74	61	69	56
	2	53	43	65	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
	3	45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37
10	1	63	51	76	64	71	58	60	48	74	61	69	56	60	48	74	61	69	56
	2	53	43	65	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
	3	45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37
0	1	58	47	72	59	66	54	60	48	74	61	69	56	60	48	74	61	69	56
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37
5	1	58	47	72	59	66	54	60	48	74	61	69	56	60	48	74	61	69	56
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37
10	1	58	47	72	59	66	54	60	48	74	61	69	56	60	48	74	61	69	56
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches														
Exposure Category : C	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	56	45	70	56	64	51	52	42	65	52	59	48	48	39	61	49	55	45
		2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
		3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
	5	1	56	45	70	56	64	51	52	42	65	52	59	48	48	39	61	49	55	45
		2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
		3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
	10	1	56	45	70	56	64	51	52	42	65	52	59	48	48	39	61	49	55	45
		2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
		3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
	0	1	45	37	57	46	52	42	43	35	54	43	49	40	43	35	54	43	49	40
		2	39	31	47	38	47	38	36	30	44	36	44	36	36	30	44	36	44	36
		3	33	26	36	29	34	28	31	25	34	28	32	26	31	25	34	28	32	26
	5	1	45	37	57	46	52	42	43	35	54	43	49	40	43	35	54	43	49	40
		2	39	31	47	38	47	38	36	30	44	36	44	36	36	30	44	36	44	36
		3	33	26	36	29	34	28	31	25	34	28	32	26	31	25	34	28	32	26
	10	1	45	37	57	46	52	42	43	35	54	43	49	40	43	35	54	43	49	40
		2	39	31	47	38	47	38	36	30	44	36	44	36	36	30	44	36	44	36
3		33	26	36	29	34	28	31	25	34	28	32	26	31	25	34	28	32	26	
0	1	40	33	51	41	46	37	38	31	48	39	44	36	38	31	48	39	44	36	
	2	34	28	42	34	42	34	33	26	39	32	39	32	33	26	39	32	39	32	
	3	29	24	32	26	31	25	28	22	31	25	29	23	28	22	31	25	29	23	
5	1	40	33	51	41	46	37	38	31	48	39	44	36	38	31	48	39	44	36	
	2	34	28	42	34	42	34	33	26	39	32	39	32	33	26	39	32	39	32	
	3	29	24	32	26	31	25	28	22	31	25	29	23	28	22	31	25	29	23	
10	1	40	33	51	41	46	37	38	31	48	39	44	36	38	31	48	39	44	36	
	2	34	28	42	34	42	34	33	26	39	32	39	32	33	26	39	32	39	32	
	3	29	24	32	26	31	25	28	22	31	25	29	23	28	22	31	25	29	23	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	15	1	71	58	74	72	78	67	69	55	74	70	76	63	66	53	74	67	73
2		61	49	73	60	72	60	58	47	70	57	70	57	56	45	68	54	67	54
3		51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
20	1	70	58	70	70	77	67	69	55	70	70	76	63	66	53	70	67	73	61
	2	61	49	70	60	72	60	58	47	70	57	70	57	56	45	68	54	67	54
	3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
25	1	70	58	70	70	74	67	69	55	70	70	74	63	66	53	70	67	73	61
	2	61	49	70	60	72	60	58	47	70	57	70	57	56	45	68	54	67	54
	3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
15	1	63	51	74	64	71	58	60	48	74	61	69	56	63	51	65	52	64	52
	2	53	43	65	52	64	52	51	41	62	50	62	50	45	36	50	40	47	38
	3	45	36	50	40	47	38	43	35	48	39	45	37	63	51	70	64	71	58
20	1	63	51	70	64	71	58	60	48	70	61	69	56	63	51	65	52	64	52
	2	53	43	65	52	64	52	51	41	62	50	62	50	45	36	50	40	47	38
	3	45	36	50	40	47	38	43	35	48	39	45	37	63	51	70	64	71	58
25	1	63	51	70	64	71	58	60	48	70	61	69	56	63	51	65	52	64	52
	2	53	43	65	52	64	52	51	41	62	50	62	50	45	36	50	40	47	38
	3	45	36	50	40	47	38	43	35	48	39	45	37	63	51	70	64	71	58
15	1	58	47	72	59	66	54	60	48	74	61	69	56	58	47	60	48	59	48
	2	49	40	60	48	59	48	51	41	62	50	62	50	41	34	46	37	43	35
	3	41	34	46	37	43	35	43	35	48	39	45	37	58	47	70	59	66	54
20	1	58	47	70	59	66	54	60	48	70	61	69	56	58	47	60	48	59	48
	2	49	40	60	48	59	48	51	41	62	50	62	50	41	34	46	37	43	35
	3	41	34	46	37	43	35	43	35	48	39	45	37	58	47	70	59	66	54
25	1	58	47	70	59	66	54	60	48	70	61	69	56	58	47	60	48	59	48
	2	49	40	60	48	59	48	51	41	62	50	62	50	41	34	46	37	43	35
	3	41	34	46	37	43	35	43	35	48	39	45	37	58	47	70	59	66	54

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	15	1	56	45	70	56	64	51	52	42	65	52	59	48	48	39	61	49	55
2		47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
3		40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
20	1	56	45	70	56	64	51	52	42	65	52	59	48	48	39	61	49	55	45
	2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
25	1	56	45	70	56	64	51	52	42	65	52	59	48	48	39	61	49	55	45
	2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
Wind Speed [mph]	170						180												
	Group	Array Interior	Array Edge																
15	1	45	37	57	46	52	42	43	35	54	43	49	40	39	31	47	38	47	38
	2	39	31	47	38	47	38	36	30	44	36	44	36	31	25	34	28	32	26
	3	33	26	36	29	34	28	31	25	34	28	32	26	43	35	54	43	49	40
20	1	45	37	57	46	52	42	43	35	54	43	49	40	39	31	47	38	47	38
	2	39	31	47	38	47	38	36	30	44	36	44	36	31	25	34	28	32	26
	3	33	26	36	29	34	28	31	25	34	28	32	26	43	35	54	43	49	40
25	1	45	37	57	46	52	42	43	35	54	43	49	40	39	31	47	38	47	38
	2	39	31	47	38	47	38	36	30	44	36	44	36	31	25	34	28	32	26
	3	33	26	36	29	34	28	31	25	34	28	32	26	43	35	54	43	49	40
Wind Speed [mph]	190						200												
	Group	Array Interior	Array Edge																
15	1	40	33	51	41	46	37	38	31	48	39	44	36	33	26	39	32	39	32
	2	34	28	42	34	42	34	28	22	31	25	29	23	38	31	48	39	44	36
	3	29	24	32	26	31	25	28	22	31	25	29	23	33	26	39	32	39	32
20	1	40	33	51	41	46	37	38	31	48	39	44	36	28	22	31	25	29	23
	2	34	28	42	34	42	34	33	26	39	32	39	32	38	31	48	39	44	36
	3	29	24	32	26	31	25	28	22	31	25	29	23	33	26	39	32	39	32
25	1	40	33	51	41	46	37	38	31	48	39	44	36	28	22	31	25	29	23
	2	34	28	42	34	42	34	33	26	39	32	39	32	38	31	48	39	44	36
	3	29	24	32	26	31	25	28	22	31	25	29	23	33	26	39	32	39	32

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches														
Exposure Category : C	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	68	58	69	69	72	67	68	55	69	69	72	63	66	53	69	67	72	61
		2	61	49	69	60	72	60	58	47	69	57	70	57	56	45	68	54	67	54
		3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
	35	1	67	58	67	67	70	67	67	55	67	67	70	63	66	53	67	67	70	61
		2	61	49	67	60	70	60	58	47	67	57	70	57	56	45	67	54	67	54
		3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
	40	1	65	58	65	65	69	67	65	55	65	65	69	63	65	53	65	65	69	61
		2	61	49	65	60	69	60	58	47	65	57	69	57	56	45	65	54	67	54
		3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
	30	1	63	51	69	64	71	58	60	48	69	61	69	56	60	48	69	61	69	56
		2	53	43	65	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
		3	45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37
	35	1	63	51	67	64	70	58	60	48	67	61	69	56	60	48	67	61	69	56
		2	53	43	65	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
		3	45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37
	40	1	63	51	65	64	69	58	60	48	65	61	69	56	60	48	65	61	69	56
		2	53	43	65	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
3		45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37	
30	1	58	47	69	59	66	54	60	48	69	61	69	56	60	48	69	61	69	56	
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50	
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37	
35	1	58	47	67	59	66	54	60	48	67	61	69	56	60	48	67	61	69	56	
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50	
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37	
40	1	58	47	65	59	66	54	60	48	65	61	69	56	60	48	65	61	69	56	
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50	
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	30	1	56	45	69	56	64	51	52	42	65	52	59	48	48	39	61	49	55
2		47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
3		40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
35	1	56	45	67	56	64	51	52	42	65	52	59	48	48	39	61	49	55	45
	2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
40	1	56	45	65	56	64	51	52	42	65	52	59	48	48	39	61	49	55	45
	2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
30	Wind Speed [mph]		170						180										
	1	45	37	57	46	52	42	43	35	54	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
35	1	45	37	57	46	52	42	43	35	54	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
40	1	45	37	57	46	52	42	43	35	54	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
30	Wind Speed [mph]		190						200										
	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
35	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						
40	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches														
Exposure Category : C	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	63	58	64	64	67	67	63	55	64	64	67	63	63	53	64	64	67	61
		2	61	49	64	60	67	60	58	47	64	57	67	57	56	45	64	54	67	54
		3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
	50	1	62	58	62	62	66	66	62	55	62	62	66	63	62	53	62	62	66	61
		2	61	49	62	60	66	60	58	47	62	57	66	57	56	45	62	54	66	54
		3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
	60	1	57	57	58	58	63	63	57	55	58	58	63	63	57	53	58	58	63	61
		2	57	49	58	58	63	60	57	47	58	57	63	57	56	45	58	54	63	54
		3	51	41	57	46	54	44	49	40	55	44	51	42	47	38	52	42	49	40
	45	1	63	51	64	64	67	58	60	48	64	61	67	56	60	48	64	61	67	56
		2	53	43	64	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
		3	45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37
	50	1	62	51	62	62	66	58	60	48	62	61	66	56	60	48	62	61	66	56
		2	53	43	62	52	64	52	51	41	62	50	62	50	51	41	62	50	62	50
		3	45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37
	60	1	57	51	58	58	63	58	57	48	58	58	63	56	57	48	58	58	63	56
		2	53	43	58	52	63	52	51	41	58	50	62	50	51	41	58	50	62	50
3		45	36	50	40	47	38	43	35	48	39	45	37	43	35	48	39	45	37	
45	1	58	47	64	59	66	54	60	48	64	61	67	56	60	48	64	61	67	56	
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50	
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37	
50	1	58	47	62	59	66	54	60	48	62	61	66	56	60	48	62	61	66	56	
	2	49	40	60	48	59	48	51	41	62	50	62	50	51	41	62	50	62	50	
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37	
60	1	57	47	58	58	63	54	57	48	58	58	63	56	57	48	58	58	63	56	
	2	49	40	58	48	59	48	51	41	58	50	62	50	51	41	58	50	62	50	
	3	41	34	46	37	43	35	43	35	48	39	45	37	43	35	48	39	45	37	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	1	56	45	64	56	64	51	52	42	64	52	59	48	48	39	61	49	55	45
45	2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
	1	56	45	62	56	64	51	52	42	62	52	59	48	48	39	61	49	55	45
50	2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
	1	56	45	58	56	63	51	52	42	58	52	59	48	48	39	58	49	55	45
60	2	47	38	57	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
	Wind Speed [mph]		170						180										
45	1	45	37	57	46	52	42	43	35	54	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
50	1	45	37	57	46	52	42	43	35	54	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
60	1	45	37	57	46	52	42	43	35	54	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
Wind Speed [mph]		190						200											
45	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						
50	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						
60	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	53	54	54	61	61	53	53	54	54	61	61	53	53	54	54	61
2		53	49	54	54	61	60	53	47	54	54	61	57	53	45	54	54	61	54
3		51	41	54	46	54	44	49	40	54	44	51	42	47	38	52	42	49	40
80	1	50	50	51	51	58	58	50	50	51	51	58	58	50	50	51	51	58	58
	2	50	49	51	51	58	58	50	47	51	51	58	57	50	45	51	51	58	54
	3	50	41	51	46	54	44	49	40	51	44	51	42	47	38	51	42	49	40
90	1	47	47	48	48	55	55	47	47	48	48	55	55	47	47	48	48	55	55
	2	47	47	48	48	55	55	47	47	48	48	55	55	47	45	48	48	55	54
	3	47	41	48	46	54	44	47	40	48	44	51	42	47	38	48	42	49	40
Wind Speed [mph]		110						115											
70	1	53	51	54	54	61	58	53	48	54	54	61	56						
	2	53	43	54	52	61	52	51	41	54	50	61	50						
	3	45	36	50	40	47	38	43	35	48	39	45	37						
80	1	50	50	51	51	58	58	50	48	51	51	58	56						
	2	50	43	51	51	58	52	50	41	51	50	58	50						
	3	45	36	50	40	47	38	43	35	48	39	45	37						
90	1	47	47	48	48	55	55	47	47	48	48	55	55						
	2	47	43	48	48	55	52	47	41	48	48	55	50						
	3	45	36	48	40	47	38	43	35	48	39	45	37						
Wind Speed [mph]		120						130											
70	1	53	47	54	54	61	54	53	48	54	54	61	56						
	2	49	40	54	48	59	48	51	41	54	50	61	50						
	3	41	34	46	37	43	35	43	35	48	39	45	37						
80	1	50	47	51	51	58	54	50	48	51	51	58	56						
	2	49	40	51	48	58	48	50	41	51	50	58	50						
	3	41	34	46	37	43	35	43	35	48	39	45	37						
90	1	47	47	48	48	55	54	47	47	48	48	55	55						
	2	47	40	48	48	55	48	47	41	48	48	55	50						
	3	41	34	46	37	43	35	43	35	48	39	45	37						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	70	1	53	45	54	54	61	51	52	42	54	52	59	48	48	39	54	49	55
2		47	38	54	46	57	46	44	36	53	43	53	43	41	33	50	40	50	40
3		40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
80	1	50	45	51	51	58	51	50	42	51	51	58	48	48	39	51	49	55	45
	2	47	38	51	46	57	46	44	36	51	43	53	43	41	33	50	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
90	1	47	45	48	48	55	51	47	42	48	48	55	48	47	39	48	48	55	45
	2	47	38	48	46	55	46	44	36	48	43	53	43	41	33	48	40	50	40
	3	40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
70	170						180												
	1	45	37	54	46	52	42	43	35	54	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
80	1	45	37	51	46	52	42	43	35	51	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
90	1	45	37	48	46	52	42	43	35	48	43	49	40						
	2	39	31	47	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
70	190						200												
	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
80	1	40	33	51	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						
90	1	40	33	48	41	46	37	38	31	48	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52
2		45	45	46	46	52	52	45	45	46	46	52	52	45	45	46	46	52	52
3		45	41	46	46	52	44	45	40	46	44	51	42	45	38	46	42	49	40
Wind Speed [mph]		110						115											
100	1	45	45	46	46	52	52	45	45	46	46	52	52						
	2	45	43	46	46	52	52	45	41	46	46	52	50						
	3	45	36	46	40	47	38	43	35	46	39	45	37						
Wind Speed [mph]		120						130											
100	1	45	45	46	46	52	52	45	45	46	46	52	52						
	2	45	40	46	46	52	48	45	41	46	46	52	50						
	3	41	34	46	37	43	35	43	35	46	39	45	37						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	45	45	46	46	52	51	45	42	46	46	52	48	45	39	46	46	52
2		45	38	46	46	52	46	44	36	46	43	52	43	41	33	46	40	50	40
3		40	32	44	36	42	34	37	30	41	33	39	32	35	28	39	31	36	30
Wind Speed [mph]		170						180											
100	1	45	37	46	46	52	42	43	35	46	43	49	40						
	2	39	31	46	38	47	38	36	30	44	36	44	36						
	3	33	26	36	29	34	28	31	25	34	28	32	26						
Wind Speed [mph]		190						200											
100	1	40	33	46	41	46	37	38	31	46	39	44	36						
	2	34	28	42	34	42	34	33	26	39	32	39	32						
	3	29	24	32	26	31	25	28	22	31	25	29	23						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	67	54	79	68	74	62	64	51	77	65	72	59	61	49	74	62	70
2		57	46	69	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
5	1	67	54	79	68	74	62	64	51	77	65	72	59	61	49	74	62	70	56
	2	57	46	69	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
10	1	67	54	77	68	74	62	64	51	77	65	72	59	61	49	74	62	70	56
	2	57	46	69	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
0	1	58	47	72	59	67	54	56	45	70	57	64	52	58	47	60	48	60	48
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	70	57	64	52
5	1	58	47	72	59	67	54	56	45	70	57	64	52	58	47	60	48	60	48
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	70	57	64	52
10	1	58	47	72	59	67	54	56	45	70	57	64	52	58	47	60	48	60	48
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	70	57	64	52
0	1	54	43	68	54	62	50	56	45	70	57	64	52	48	38	58	47	57	46
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	54	43	68	54	62	50
5	1	54	43	68	54	62	50	56	45	70	57	64	52	48	38	58	47	57	46
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	54	43	68	54	62	50
10	1	54	43	68	54	62	50	56	45	70	57	64	52	48	38	58	47	57	46
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	54	43	68	54	62	50

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
0	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
5	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
10	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
Wind Speed [mph]		170				180													
0	1	42	34	53	43	48	39	40	32	50	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
5	1	42	34	53	43	48	39	40	32	50	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
10	1	42	34	53	43	48	39	40	32	50	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
Wind Speed [mph]		190				200													
0	1	37	30	47	38	43	35	36	29	45	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	29	23	27	22						
5	1	37	30	47	38	43	35	36	29	45	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	29	23	27	22						
10	1	37	30	47	38	43	35	36	29	45	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	29	23	27	22						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	67	54	74	68	74	62	64	51	74	65	72	59	61	49	74	62	70
2		57	46	69	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
20	1	67	54	70	68	74	62	64	51	70	65	72	59	61	49	70	62	70	56
	2	57	46	69	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
25	1	67	54	70	68	74	62	64	51	70	65	72	59	61	49	70	62	70	56
	2	57	46	69	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
15	1	58	47	72	59	67	54	56	45	70	57	64	52	58	47	60	48	60	48
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	70	57	64	52
20	1	58	47	70	59	67	54	56	45	70	57	64	52	58	47	60	48	60	48
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	70	57	64	52
25	1	58	47	70	59	67	54	56	45	70	57	64	52	58	47	60	48	60	48
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	70	57	64	52
15	1	54	43	68	54	62	50	56	45	70	57	64	52	54	43	68	54	62	50
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	70	57	64	52
20	1	54	43	68	54	62	50	56	45	70	57	64	52	54	43	68	54	62	50
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	70	57	64	52
25	1	54	43	68	54	62	50	56	45	70	57	64	52	54	43	68	54	62	50
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	70	57	64	52

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
15	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
20	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
25	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
Wind Speed [mph]		170				180													
15	1	42	34	53	43	48	39	40	32	50	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
20	1	42	34	53	43	48	39	40	32	50	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
25	1	42	34	53	43	48	39	40	32	50	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
Wind Speed [mph]		190				200													
15	1	37	30	47	38	43	35	36	29	45	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	29	23	27	22						
20	1	37	30	47	38	43	35	36	29	45	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	29	23	27	22						
25	1	37	30	47	38	43	35	36	29	45	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	29	23	27	22						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																	
	30	1	67	54	70	68	74	62	64	51	70	65	72	59	61	49	70	62	70	56
2		57	46	69	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50	
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37	
35		1	67	54	68	68	72	62	64	51	68	65	72	59	61	49	68	62	70	56
		2	57	46	68	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
		3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
40		1	66	54	67	67	70	62	64	51	67	65	70	59	61	49	67	62	70	56
		2	57	46	67	55	69	55	54	44	66	53	65	53	52	42	63	51	63	50
		3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
30	1	58	47	70	59	67	54	56	45	70	57	64	52	58	47	60	48	60	48	
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35	
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	68	57	64	52	
	35	1	58	47	68	59	67	54	56	45	68	57	64	52	48	38	58	47	57	46
		2	50	40	60	48	60	48	48	38	58	47	57	46	40	32	45	36	42	34
		3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	67	57	64	52
	40	1	58	47	67	59	67	54	56	45	67	57	64	52	48	38	58	47	57	46
		2	50	40	60	48	60	48	48	38	58	47	57	46	40	32	45	36	42	34
		3	42	34	46	38	44	35	40	32	45	36	42	34						
30	1	54	43	68	54	62	50	56	45	70	57	64	52	54	43	55	45	55	45	
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34	
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	68	57	64	52	
	35	1	54	43	68	54	62	50	56	45	68	57	64	52	48	38	58	47	57	46
		2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
		3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	67	57	64	52
	40	1	54	43	67	54	62	50	56	45	67	57	64	52	48	38	58	47	57	46
		2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
		3	38	31	43	35	40	33	40	32	45	36	42	34						
30	1	54	43	68	54	62	50	56	45	70	57	64	52	54	43	55	45	55	45	
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34	
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	68	57	64	52	
	35	1	54	43	68	54	62	50	56	45	68	57	64	52	48	38	58	47	57	46
		2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
		3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	67	57	64	52
	40	1	54	43	67	54	62	50	56	45	67	57	64	52	48	38	58	47	57	46
		2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
		3	38	31	43	35	40	33	40	32	45	36	42	34						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
30	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
35	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
40	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
Wind Speed [mph]		170				180				190				200					
30	1	42	34	53	43	48	39	40	32	50	40	46	37	34	27	41	33	41	33
	2	36	29	43	35	43	35	34	27	41	33	41	33	29	23	32	26	30	24
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
35	1	42	34	53	43	48	39	40	32	50	40	46	37	34	27	41	33	41	33
	2	36	29	43	35	43	35	34	27	41	33	41	33	29	23	32	26	30	24
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
40	1	42	34	53	43	48	39	40	32	50	40	46	37	34	27	41	33	41	33
	2	36	29	43	35	43	35	34	27	41	33	41	33	29	23	32	26	30	24
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
30	1	37	30	47	38	43	35	36	29	45	36	41	33	30	25	37	30	37	30
	2	32	26	39	31	39	31	30	25	37	30	37	30	26	22	30	24	28	23
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
35	1	37	30	47	38	43	35	36	29	45	36	41	33	30	25	37	30	37	30
	2	32	26	39	31	39	31	30	25	37	30	37	30	26	22	30	24	28	23
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
40	1	37	30	47	38	43	35	36	29	45	36	41	33	30	25	37	30	37	30
	2	32	26	39	31	39	31	30	25	37	30	37	30	26	22	30	24	28	23
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	65	54	65	65	69	62	64	51	65	65	69	59	61	49	65	62	69
2		57	46	65	55	69	55	54	44	65	53	65	53	52	42	63	51	63	50
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
50	1	63	54	64	64	67	62	63	51	64	64	67	59	61	49	64	62	67	56
	2	57	46	64	55	67	55	54	44	64	53	65	53	52	42	63	51	63	50
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
60	1	60	54	61	61	65	62	60	51	61	61	65	59	60	49	61	61	65	56
	2	57	46	61	55	65	55	54	44	61	53	65	53	52	42	61	51	63	50
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
Wind Speed [mph]		110						115											
45	1	58	47	65	59	67	54	56	45	65	57	64	52	58	47	60	48	60	48
	2	50	40	60	48	60	48	48	38	58	47	57	46	42	34	46	38	44	35
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	64	57	64	52
50	1	58	47	64	59	67	54	56	45	64	57	64	52	48	38	58	47	57	46
	2	50	40	60	48	60	48	48	38	58	47	57	46	40	32	45	36	42	34
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	61	57	64	52
60	1	58	47	61	59	65	54	56	45	61	57	64	52	48	38	58	47	57	46
	2	50	40	60	48	60	48	48	38	58	47	57	46	40	32	45	36	42	34
	3	42	34	46	38	44	35	40	32	45	36	42	34	56	45	61	57	64	52
Wind Speed [mph]		120						130											
45	1	54	43	65	54	62	50	56	45	65	57	64	52	46	37	55	45	55	45
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	64	57	64	52
50	1	54	43	64	54	62	50	56	45	64	57	64	52	48	38	58	47	57	46
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	61	57	64	52
60	1	54	43	61	54	62	50	56	45	61	57	64	52	48	38	58	47	57	46
	2	46	37	55	45	55	45	48	38	58	47	57	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	56	45	61	57	64	52

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	140						150						160						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
	1	52	42	65	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
45	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	64	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
50	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	61	52	59	48	48	39	60	49	55	45	45	36	56	46	51	42
60	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
45	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
50	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
60	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
45	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
50	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
60	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
45	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
60	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	56	54	57	57	63	62	56	51	57	57	63	59	56	49	57	57	63
2		56	46	57	55	63	55	54	44	57	53	63	53	52	42	57	51	63	50
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
80	1	53	53	54	54	61	61	53	51	54	54	61	59	53	49	54	54	61	56
	2	53	46	54	54	61	55	53	44	54	53	61	53	52	42	54	51	61	50
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
90	1	50	50	51	51	58	58	50	50	51	51	58	58	50	49	51	51	58	56
	2	50	46	51	51	58	55	50	44	51	51	58	53	50	42	51	51	58	50
	3	48	39	51	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
Wind Speed [mph]		110						115											
70	1	56	47	57	57	63	54	56	45	57	57	63	52						
	2	50	40	57	48	60	48	48	38	57	47	57	46						
	3	42	34	46	38	44	35	40	32	45	36	42	34						
80	1	53	47	54	54	61	54	53	45	54	54	61	52						
	2	50	40	54	48	60	48	48	38	54	47	57	46						
	3	42	34	46	38	44	35	40	32	45	36	42	34						
90	1	50	47	51	51	58	54	50	45	51	51	58	52						
	2	50	40	51	48	58	48	48	38	51	47	57	46						
	3	42	34	46	38	44	35	40	32	45	36	42	34						
Wind Speed [mph]		120						130											
70	1	54	43	57	54	62	50	56	45	57	57	63	52						
	2	46	37	55	45	55	45	48	38	57	47	57	46						
	3	38	31	43	35	40	33	40	32	45	36	42	34						
80	1	53	43	54	54	61	50	53	45	54	54	61	52						
	2	46	37	54	45	55	45	48	38	54	47	57	46						
	3	38	31	43	35	40	33	40	32	45	36	42	34						
90	1	50	43	51	51	58	50	50	45	51	51	58	52						
	2	46	37	51	45	55	45	48	38	51	47	57	46						
	3	38	31	43	35	40	33	40	32	45	36	42	34						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches													
Wind Speed [mph]	140						150						160						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
	1	52	42	57	52	59	48	48	39	57	49	55	45	45	36	56	46	51	42
70	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	52	42	54	52	59	48	48	39	54	49	55	45	45	36	54	46	51	42
80	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	1	50	42	51	51	58	48	48	39	51	49	55	45	45	36	51	46	51	42
90	2	44	36	51	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	35	28	38	31	36	29	32	26	36	29	34	28
	Wind Speed [mph]																		
170																			
70	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
80	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
90	1	42	34	51	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
Wind Speed [mph]																			
190																			
70	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
80	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
90	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
Wind Speed [mph]																			
200																			
70	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
80	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22
90	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	29	23	27	22	26	21	29	23	27	22

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		70in x 41in		Span, inches														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																	
	100	1	48	48	48	48	55	55	48	48	48	48	55	55	48	48	48	48	55	55
		2	48	46	48	48	55	55	48	44	48	48	55	53	48	42	48	48	55	50
		3	48	39	48	43	50	41	46	37	48	41	48	39	44	35	48	39	46	37
Wind Speed [mph]		110				115														
100	1	48	47	48	48	55	54	48	45	48	48	55	52							
	2	48	40	48	48	55	48	48	38	48	47	55	46							
	3	42	34	46	38	44	35	40	32	45	36	42	34							
0	1																			
	2																			
	3																			
0	1																			
	2																			
	3																			
Wind Speed [mph]		120				130														
100	1	48	43	48	48	55	50	48	45	48	48	55	52							
	2	46	37	48	45	55	45	48	38	48	47	55	46							
	3	38	31	43	35	40	33	40	32	45	36	42	34							

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	81	72	81	81	82	79	81	70	81	81	82	77	79	67	81	79	82
2		75	62	81	74	82	73	72	59	81	71	82	71	70	57	80	69	80	69
3		65	52	71	58	68	55	62	50	69	55	65	52	59	48	66	53	62	50
5	1	81	72	81	81	82	79	81	70	81	81	82	77	79	67	81	79	82	74
	2	75	62	81	74	82	73	72	59	81	71	82	71	70	57	80	69	80	69
	3	65	52	71	58	68	55	62	50	69	55	65	52	59	48	66	53	62	50
10	1	76	72	76	76	81	79	76	70	76	76	81	77	76	67	76	76	81	74
	2	75	62	76	74	81	73	72	59	76	71	81	71	70	57	76	69	80	69
	3	65	52	71	58	68	55	62	50	69	55	65	52	59	48	66	53	62	50
0	1	76	64	81	77	82	72	74	61	81	75	81	70						
	2	67	54	78	66	77	66	65	52	76	63	75	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
5	1	76	64	81	77	82	72	74	61	81	75	81	70						
	2	67	54	78	66	77	66	65	52	76	63	75	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
10	1	76	64	76	76	81	72	74	61	76	75	81	70						
	2	67	54	76	66	77	66	65	52	76	63	75	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
0	1	72	59	81	73	79	67	74	61	81	75	81	70						
	2	62	50	74	61	73	60	65	52	76	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
5	1	72	59	81	73	79	67	74	61	81	75	81	70						
	2	62	50	74	61	73	60	65	52	76	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
10	1	72	59	76	73	79	67	74	61	76	75	81	70						
	2	62	50	74	61	73	60	65	52	76	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
0	1	72	59	81	73	79	67	74	61	81	75	81	70						
	2	62	50	74	61	73	60	65	52	76	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
5	1	72	59	81	73	79	67	74	61	81	75	81	70						
	2	62	50	74	61	73	60	65	52	76	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
10	1	72	59	76	73	79	67	74	61	76	75	81	70						
	2	62	50	74	61	73	60	65	52	76	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	70	56	81	71	77	65	65	52	78	66	73	60	61	49	74	62	70
2		60	48	72	58	71	58	55	45	67	54	67	54	52	42	63	51	63	50
3		50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
5	1	70	56	81	71	77	65	65	52	78	66	73	60	61	49	74	62	70	56
	2	60	48	72	58	71	58	55	45	67	54	67	54	52	42	63	51	63	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
10	1	70	56	76	71	77	65	65	52	76	66	73	60	61	49	74	62	70	56
	2	60	48	72	58	71	58	55	45	67	54	67	54	52	42	63	51	63	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
Wind Speed [mph]		170						180											
0	1	57	46	71	58	65	53	54	43	68	54	62	50						
	2	49	39	59	47	59	47	46	37	55	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
5	1	57	46	71	58	65	53	54	43	68	54	62	50						
	2	49	39	59	47	59	47	46	37	55	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
10	1	57	46	71	58	65	53	54	43	68	54	62	50						
	2	49	39	59	47	59	47	46	37	55	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
Wind Speed [mph]		190						200											
0	1	51	41	64	51	58	47	48	39	60	49	55	44						
	2	43	35	52	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						
5	1	51	41	64	51	58	47	48	39	60	49	55	44						
	2	43	35	52	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						
10	1	51	41	64	51	58	47	48	39	60	49	55	44						
	2	43	35	52	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	72	72	72	72	78	78	72	70	72	72	78	77	72	67	72	72	78
2		72	62	72	72	78	73	72	59	72	71	78	71	70	57	72	69	78	69
3		65	52	71	58	68	55	62	50	69	55	65	52	59	48	66	53	62	50
20	1	69	69	69	69	75	75	69	69	69	69	75	75	69	67	69	69	75	74
	2	69	62	69	69	75	73	69	59	69	69	75	71	69	57	69	69	75	69
	3	65	52	69	58	68	55	62	50	69	55	65	52	59	48	66	53	62	50
25	1	69	69	69	69	73	73	69	69	69	69	73	73	69	67	69	69	73	73
	2	69	62	69	69	73	73	69	59	69	69	73	71	69	57	69	69	73	69
	3	65	52	69	58	68	55	62	50	69	55	65	52	59	48	66	53	62	50
Wind Speed [mph]		110						115											
15	1	72	64	72	72	78	72	72	61	72	72	78	70						
	2	67	54	72	66	77	66	65	52	72	63	75	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
20	1	69	64	69	69	75	72	69	61	69	69	75	70						
	2	67	54	69	66	75	66	65	52	69	63	75	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
25	1	69	64	69	69	73	72	69	61	69	69	73	70						
	2	67	54	69	66	73	66	65	52	69	63	73	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
Wind Speed [mph]		120						130											
15	1	72	59	72	72	78	67	72	61	72	72	78	70						
	2	62	50	72	61	73	60	65	52	72	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
20	1	69	59	69	69	75	67	69	61	69	69	75	70						
	2	62	50	69	61	73	60	65	52	69	63	75	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
25	1	69	59	69	69	73	67	69	61	69	69	73	70						
	2	62	50	69	61	73	60	65	52	69	63	73	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	70	56	72	71	77	65	65	52	72	66	73	60	61	49	72	62	70
2		60	48	72	58	71	58	55	45	67	54	67	54	52	42	63	51	63	50
3		50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
20	1	69	56	69	69	75	65	65	52	69	66	73	60	61	49	69	62	70	56
	2	60	48	69	58	71	58	55	45	67	54	67	54	52	42	63	51	63	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
25	1	69	56	69	69	73	65	65	52	69	66	73	60	61	49	69	62	70	56
	2	60	48	69	58	71	58	55	45	67	54	67	54	52	42	63	51	63	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
15	1	57	46	71	58	65	53	54	43	68	54	62	50	46	37	55	45	55	45
	2	49	39	59	47	59	47	46	37	55	45	55	45	38	31	43	35	40	33
	3	41	33	45	37	43	35	38	31	43	35	40	33	54	43	68	54	62	50
20	1	57	46	69	58	65	53	54	43	68	54	62	50	46	37	55	45	55	45
	2	49	39	59	47	59	47	46	37	55	45	55	45	38	31	43	35	40	33
	3	41	33	45	37	43	35	38	31	43	35	40	33	54	43	68	54	62	50
25	1	57	46	69	58	65	53	54	43	68	54	62	50	46	37	55	45	55	45
	2	49	39	59	47	59	47	46	37	55	45	55	45	38	31	43	35	40	33
	3	41	33	45	37	43	35	38	31	43	35	40	33						
15	1	51	41	64	51	58	47	48	39	60	49	55	44	41	33	49	40	49	40
	2	43	35	52	42	52	42	41	33	49	40	49	40	34	28	38	31	36	29
	3	36	29	40	33	38	31	34	28	38	31	36	29	51	41	64	51	58	47
20	1	51	41	64	51	58	47	48	39	60	49	55	44	41	33	49	40	49	40
	2	43	35	52	42	52	42	41	33	49	40	49	40	34	28	38	31	36	29
	3	36	29	40	33	38	31	34	28	38	31	36	29	51	41	64	51	58	47
25	1	51	41	64	51	58	47	48	39	60	49	55	44	41	33	49	40	49	40
	2	43	35	52	42	52	42	41	33	49	40	49	40	34	28	38	31	36	29
	3	36	29	40	33	38	31	34	28	38	31	36	29						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	67	67	68	68	71	71	67	67	68	68	71	71	67	67	68	68	71
2		67	62	68	68	71	71	67	59	68	68	71	71	67	57	68	68	71	69
3		65	52	68	58	68	55	62	50	68	55	65	52	59	48	66	53	62	50
35	1	65	65	66	66	69	69	65	65	66	66	69	69	65	65	66	66	69	69
	2	65	62	66	66	69	69	65	59	66	66	69	69	65	57	66	66	69	69
	3	65	52	66	58	68	55	62	50	66	55	65	52	59	48	66	53	62	50
40	1	64	64	64	64	68	68	64	64	64	64	68	68	64	64	64	64	68	68
	2	64	62	64	64	68	68	64	59	64	64	68	68	64	57	64	64	68	68
	3	64	52	64	58	68	55	62	50	64	55	65	52	59	48	64	53	62	50
Wind Speed [mph]		110						115											
30	1	67	64	68	68	71	71	67	61	68	68	71	70						
	2	67	54	68	66	71	66	65	52	68	63	71	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
35	1	65	64	66	66	69	69	65	61	66	66	69	69						
	2	65	54	66	66	69	66	65	52	66	63	69	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
40	1	64	64	64	64	68	68	64	61	64	64	68	68						
	2	64	54	64	64	68	66	64	52	64	63	68	63						
	3	56	46	63	51	59	48	54	44	60	49	57	46						
Wind Speed [mph]		120						130											
30	1	67	59	68	68	71	67	67	61	68	68	71	70						
	2	62	50	68	61	71	60	65	52	68	63	71	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
35	1	65	59	66	66	69	67	65	61	66	66	69	69						
	2	62	50	66	61	69	60	65	52	66	63	69	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						
40	1	64	59	64	64	68	67	64	61	64	64	68	68						
	2	62	50	64	61	68	60	64	52	64	63	68	63						
	3	52	42	58	47	55	44	54	44	60	49	57	46						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	67	56	68	68	71	65	65	52	68	66	71	60	61	49	68	62	70
2		60	48	68	58	71	58	55	45	67	54	67	54	52	42	63	51	63	50
3		50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
35	1	65	56	66	66	69	65	65	52	66	66	69	60	61	49	66	62	69	56
	2	60	48	66	58	69	58	55	45	66	54	67	54	52	42	63	51	63	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
40	1	64	56	64	64	68	65	64	52	64	64	68	60	61	49	64	62	68	56
	2	60	48	64	58	68	58	55	45	64	54	67	54	52	42	63	51	63	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
Wind Speed [mph]		170						180											
30	1	57	46	68	58	65	53	54	43	68	54	62	50	54	43	55	45	55	45
	2	49	39	59	47	59	47	46	37	55	45	55	45	46	37	55	45	55	45
	3	41	33	45	37	43	35	38	31	43	35	40	33	38	31	43	35	40	33
35	1	57	46	66	58	65	53	54	43	66	54	62	50	54	43	55	45	55	45
	2	49	39	59	47	59	47	46	37	55	45	55	45	46	37	55	45	55	45
	3	41	33	45	37	43	35	38	31	43	35	40	33	38	31	43	35	40	33
40	1	57	46	64	58	65	53	54	43	64	54	62	50	54	43	55	45	55	45
	2	49	39	59	47	59	47	46	37	55	45	55	45	46	37	55	45	55	45
	3	41	33	45	37	43	35	38	31	43	35	40	33	38	31	43	35	40	33
Wind Speed [mph]		190						200											
30	1	51	41	64	51	58	47	48	39	60	49	55	44	48	39	49	40	49	40
	2	43	35	52	42	52	42	41	33	49	40	49	40	41	33	49	40	49	40
	3	36	29	40	33	38	31	34	28	38	31	36	29	34	28	38	31	36	29
35	1	51	41	64	51	58	47	48	39	60	49	55	44	48	39	49	40	49	40
	2	43	35	52	42	52	42	41	33	49	40	49	40	41	33	49	40	49	40
	3	36	29	40	33	38	31	34	28	38	31	36	29	34	28	38	31	36	29
40	1	51	41	64	51	58	47	48	39	60	49	55	44	48	39	49	40	49	40
	2	43	35	52	42	52	42	41	33	49	40	49	40	41	33	49	40	49	40
	3	36	29	40	33	38	31	34	28	38	31	36	29	34	28	38	31	36	29

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	62	62	62	62	66	66	62	62	62	62	66	66	62	62	62	62	66
2		62	62	62	62	66	66	62	59	62	62	66	66	62	57	62	62	66	66
3		62	52	62	58	66	55	62	50	62	55	65	52	59	48	62	53	62	50
50	1	60	60	61	61	65	65	60	60	61	61	65	65	60	60	61	61	65	65
	2	60	60	61	61	65	65	60	59	61	61	65	65	60	57	61	61	65	65
	3	60	52	61	58	65	55	60	50	61	55	65	52	59	48	61	53	62	50
60	1	56	56	57	57	62	62	56	56	57	57	62	62	56	56	57	57	62	62
	2	56	56	57	57	62	62	56	56	57	57	62	62	56	56	57	57	62	62
	3	56	52	57	57	62	55	56	50	57	55	62	52	56	48	57	53	62	50
Wind Speed [mph]		110				115				110				115					
45	1	62	62	62	62	66	66	62	61	62	62	66	66	62	61	62	62	66	66
	2	62	54	62	62	66	66	62	52	62	62	66	63	62	52	62	62	66	63
	3	56	46	62	51	59	48	54	44	60	49	57	46	54	44	60	49	57	46
50	1	60	60	61	61	65	65	60	60	61	61	65	65	60	60	61	61	65	65
	2	60	54	61	61	65	65	60	52	61	61	65	63	60	52	61	61	65	63
	3	56	46	61	51	59	48	54	44	60	49	57	46	54	44	60	49	57	46
60	1	56	56	57	57	62	62	56	56	57	57	62	62	56	56	57	57	62	62
	2	56	54	57	57	62	62	56	52	57	57	62	62	56	52	57	57	62	62
	3	56	46	57	51	59	48	54	44	57	49	57	46	54	44	57	49	57	46
Wind Speed [mph]		120				130				120				130					
45	1	62	59	62	62	66	66	62	61	62	62	66	66	62	61	62	62	66	66
	2	62	50	62	61	66	60	62	52	62	62	66	63	62	52	62	62	66	63
	3	52	42	58	47	55	44	54	44	60	49	57	46	54	44	60	49	57	46
50	1	60	59	61	61	65	65	60	60	61	61	65	65	60	60	61	61	65	65
	2	60	50	61	61	65	60	60	52	61	61	65	63	60	52	61	61	65	63
	3	52	42	58	47	55	44	54	44	60	49	57	46	54	44	60	49	57	46
60	1	56	56	57	57	62	62	56	56	57	57	62	62	56	56	57	57	62	62
	2	56	50	57	57	62	60	56	52	57	57	62	62	56	52	57	57	62	62
	3	52	42	57	47	55	44	54	44	57	49	57	46	54	44	57	49	57	46

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	62	56	62	62	66	65	62	52	62	62	66	60	61	49	62	62	66
2		60	48	62	58	66	58	55	45	62	54	66	54	52	42	62	51	63	50
3		50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
50	1	60	56	61	61	65	65	60	52	61	61	65	60	60	49	61	61	65	56
	2	60	48	61	58	65	58	55	45	61	54	65	54	52	42	61	51	63	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
60	1	56	56	57	57	62	62	56	52	57	57	62	60	56	49	57	57	62	56
	2	56	48	57	57	62	58	55	45	57	54	62	54	52	42	57	51	62	50
	3	50	40	56	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
Wind Speed [mph]		170						180											
45	1	57	46	62	58	65	53	54	43	62	54	62	50						
	2	49	39	59	47	59	47	46	37	55	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
50	1	57	46	61	58	65	53	54	43	61	54	62	50						
	2	49	39	59	47	59	47	46	37	55	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
60	1	56	46	57	57	62	53	54	43	57	54	62	50						
	2	49	39	57	47	59	47	46	37	55	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
Wind Speed [mph]		190						200											
45	1	51	41	62	51	58	47	48	39	60	49	55	44						
	2	43	35	52	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						
50	1	51	41	61	51	58	47	48	39	60	49	55	44						
	2	43	35	52	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						
60	1	51	41	57	51	58	47	48	39	57	49	55	44						
	2	43	35	52	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	52	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59
2		52	52	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59	59
3		52	52	53	53	59	55	52	50	53	53	59	52	52	48	53	53	59	50
80	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	3	49	49	49	49	56	55	49	49	49	49	56	52	49	48	49	49	56	50
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	3	46	46	47	47	53	53	46	46	47	47	53	52	46	46	47	47	53	50
Wind Speed [mph]		110				115													
70	1	52	52	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59	59
	2	52	52	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59	59
	3	52	46	53	51	59	48	52	44	53	49	57	46	52	44	53	49	57	46
80	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	3	49	46	49	49	56	48	49	44	49	49	56	46	49	46	49	49	56	46
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	3	46	46	47	47	53	48	46	44	47	47	53	46	46	44	47	47	53	46
Wind Speed [mph]		120				130													
70	1	52	52	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59	59
	2	52	50	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59	59
	3	52	42	53	47	55	44	52	44	53	49	57	46	52	44	53	49	57	46
80	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	3	49	42	49	47	55	44	49	44	49	49	56	46	49	44	49	49	56	46
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	3	46	42	47	47	53	44	46	44	47	47	53	46	46	44	47	47	53	46

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	52	53	53	59	59	52	52	53	53	59	59	52	49	53	53	59
2		52	48	53	53	59	58	52	45	53	53	59	54	52	42	53	51	59	50
3		50	40	53	45	53	42	47	38	52	42	49	40	43	35	48	39	46	37
80	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	48	49	49	56	56	49	45	49	49	56	54	49	42	49	49	56	50
	3	49	40	49	45	53	42	47	38	49	42	49	40	43	35	48	39	46	37
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	46	47	47	53	53	46	45	47	47	53	53	46	42	47	47	53	50
	3	46	40	47	45	53	42	46	38	47	42	49	40	43	35	47	39	46	37
Wind Speed [mph]		170						180											
70	1	52	46	53	53	59	53	52	43	53	53	59	50						
	2	49	39	53	47	59	47	46	37	53	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
80	1	49	46	49	49	56	53	49	43	49	49	56	50						
	2	49	39	49	47	56	47	46	37	49	45	55	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
90	1	46	46	47	47	53	53	46	43	47	47	53	50						
	2	46	39	47	47	53	47	46	37	47	45	53	45						
	3	41	33	45	37	43	35	38	31	43	35	40	33						
Wind Speed [mph]		190						200											
70	1	51	41	53	51	58	47	48	39	53	49	55	44						
	2	43	35	52	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						
80	1	49	41	49	49	56	47	48	39	49	49	55	44						
	2	43	35	49	42	52	42	41	33	49	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						
90	1	46	41	47	47	53	47	46	39	47	47	53	44						
	2	43	35	47	42	52	42	41	33	47	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50
	2	44	44	44	44	50	50	44	44	44	44	50	50	44	42	44	44	50	50
	3	44	40	44	44	50	42	44	38	44	42	49	40	43	35	44	39	46	37
Wind Speed [mph]		170						180											
100	1	44	44	44	44	50	50	44	43	44	44	50	50						
	2	44	39	44	44	50	47	44	37	44	44	50	45						
	3	41	33	44	37	43	35	38	31	43	35	40	33						
Wind Speed [mph]		190						200											
100	1	44	41	44	44	50	47	44	39	44	44	50	44						
	2	43	35	44	42	50	42	41	33	44	40	49	40						
	3	36	29	40	33	38	31	34	28	38	31	36	29						

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches																																																																																																																																																																						
Wind Speed [mph]		95						100						105																																																																																																																																																																						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																																																																																																																																																		
Ground Snow	Group	Array Interior	Array Edge																																																																																																																																																																																	
	0	1	74	61	81	75	81	70	71	58	81	72	79	67	69	56	81	70	76	64																																																																																																																																																																
2		65	52	76	63	75	63	62	50	73	60	73	60	59	47	71	57	71	57																																																																																																																																																																	
3		54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42																																																																																																																																																																	
5	1	74	61	81	75	81	70	71	58	81	72	79	67	69	56	81	70	76	64																																																																																																																																																																	
	2	65	52	76	63	75	63	62	50	73	60	73	60	59	47	71	57	71	57																																																																																																																																																																	
	3	54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42																																																																																																																																																																	
10	1	74	61	76	75	81	70	71	58	76	72	79	67	69	56	76	70	76	64																																																																																																																																																																	
	2	65	52	76	63	75	63	62	50	73	60	73	60	59	47	71	57	71	57																																																																																																																																																																	
	3	54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42																																																																																																																																																																	
0	1	66	53	79	67	74	61	63	51	77	64	72	59	56	45	68	55	68	55																																																																																																																																																																	
	2	56	45	68	55	68	55	54	44	66	53	65	53	47	38	53	43	50	40																																																																																																																																																																	
	3	47	38	53	43	50	40	45	37	51	41	48	39	1	66	53	79	67	74																																																																																																																																																																	
5	1	66	53	79	67	74	61	63	51	77	64	72	59	56	45	68	55	68	55																																																																																																																																																																	
	2	56	45	68	55	68	55	54	44	66	53	65	53	47	38	53	43	50	40																																																																																																																																																																	
	3	47	38	53	43	50	40	45	37	51	41	48	39	1	66	53	76	67	74																																																																																																																																																																	
10	1	66	53	76	67	74	61	63	51	76	64	72	59	56	45	68	55	68	55																																																																																																																																																																	
	2	56	45	68	55	68	55	54	44	66	53	65	53	47	38	53	43	50	40																																																																																																																																																																	
	3	47	38	53	43	50	40	45	37	51	41	48	39	0	1	61	49	75	62	70	56	63	51	77	64	72	59	52	42	63	51	63	51	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	75	62	70	5	1	61	49	75	62	70	56	63	51	77	64	72	59	52	42	63	51	63	51	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	75	62	70	10	1	61	49	75	62	70	56	63	51	76	64	72	59	52	42	63	51	63	51	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37	3	44	35	49	39	46	37	45	37	51	41	48
0	1	61	49	75	62	70	56	63	51	77	64	72	59		52	42	63	51	63	51																																																																																																																																																																
	2	52	42	63	51	63	51	54	44	66	53	65	53		44	35	49	39	46	37																																																																																																																																																																
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	75	62	70																																																																																																																																																																	
5	1	61	49	75	62	70	56	63	51	77	64	72	59	52	42	63	51	63	51																																																																																																																																																																	
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37																																																																																																																																																																	
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	75	62	70																																																																																																																																																																	
10	1	61	49	75	62	70	56	63	51	76	64	72	59	52	42	63	51	63	51																																																																																																																																																																	
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37																																																																																																																																																																	
	3	44	35	49	39	46	37	45	37	51	41	48	39																																																																																																																																																																							

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	59	47	73	59	67	54	54	44	69	55	63	50	51	41	64	52	58
2		50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
3		42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
5	1	59	47	73	59	67	54	54	44	69	55	63	50	51	41	64	52	58	47
	2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
10	1	59	47	73	59	67	54	54	44	69	55	63	50	51	41	64	52	58	47
	2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
Wind Speed [mph]		170						180											
0	1	48	39	60	48	55	44	45	36	56	46	52	42						
	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
5	1	48	39	60	48	55	44	45	36	56	46	52	42						
	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
10	1	48	39	60	48	55	44	45	36	56	46	52	42						
	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
Wind Speed [mph]		190						200											
0	1	42	34	53	43	49	39	40	33	50	41	46	37						
	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						
5	1	42	34	53	43	49	39	40	33	50	41	46	37						
	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						
10	1	42	34	53	43	49	39	40	33	50	41	46	37						
	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	72	61	72	72	78	70	71	58	72	72	78	67	69	56	72	70	76
2		65	52	72	63	75	63	62	50	72	60	73	60	59	47	71	57	71	57
3		54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42
20	1	69	61	69	69	75	70	69	58	69	69	75	67	69	56	69	69	75	64
	2	65	52	69	63	75	63	62	50	69	60	73	60	59	47	69	57	71	57
	3	54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42
25	1	69	61	69	69	73	70	69	58	69	69	73	67	69	56	69	69	73	64
	2	65	52	69	63	73	63	62	50	69	60	73	60	59	47	69	57	71	57
	3	54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42
15	1	66	53	72	67	74	61	63	51	72	64	72	59	66	45	68	55	68	55
	2	56	45	68	55	68	55	54	44	66	53	65	53	47	38	53	43	50	40
	3	47	38	53	43	50	40	45	37	51	41	48	39	1	66	53	69	67	74
20	1	66	53	69	67	74	61	63	51	69	64	72	59	66	45	68	55	68	55
	2	56	45	68	55	68	55	54	44	66	53	65	53	47	38	53	43	50	40
	3	47	38	53	43	50	40	45	37	51	41	48	39	1	66	53	69	67	73
25	1	66	53	69	67	73	61	63	51	69	64	72	59	66	45	68	55	68	55
	2	56	45	68	55	68	55	54	44	66	53	65	53	47	38	53	43	50	40
	3	47	38	53	43	50	40	45	37	51	41	48	39						
15	1	61	49	72	62	70	56	63	51	72	64	72	59	61	49	69	62	70	56
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	69	62	70
20	1	61	49	69	62	70	56	63	51	69	64	72	59	61	49	69	62	70	56
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	69	62	70
25	1	61	49	69	62	70	56	63	51	69	64	72	59	61	49	69	62	70	56
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37
	3	44	35	49	39	46	37	45	37	51	41	48	39						
15	1	61	49	72	62	70	56	63	51	72	64	72	59	61	49	69	62	70	56
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	69	62	70
20	1	61	49	69	62	70	56	63	51	69	64	72	59	61	49	69	62	70	56
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	69	62	70
25	1	61	49	69	62	70	56	63	51	69	64	72	59	61	49	69	62	70	56
	2	52	42	63	51	63	51	54	44	66	53	65	53	44	35	49	39	46	37
	3	44	35	49	39	46	37	45	37	51	41	48	39						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	140						150						160						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
	1	59	47	72	59	67	54	54	44	69	55	63	50	51	41	64	52	58	47
15	2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
	1	59	47	69	59	67	54	54	44	69	55	63	50	51	41	64	52	58	47
20	2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
	1	59	47	69	59	67	54	54	44	69	55	63	50	51	41	64	52	58	47
25	2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
	1	59	47	69	59	67	54	54	44	69	55	63	50	51	41	64	52	58	47
Wind Speed [mph]	170						180												
	1	48	39	60	48	55	44	45	36	56	46	52	42						
15	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
	1	48	39	60	48	55	44	45	36	56	46	52	42						
20	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
	1	48	39	60	48	55	44	45	36	56	46	52	42						
25	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
	1	48	39	60	48	55	44	45	36	56	46	52	42						
Wind Speed [mph]	190						200												
	1	42	34	53	43	49	39	40	33	50	41	46	37						
15	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						
	1	42	34	53	43	49	39	40	33	50	41	46	37						
20	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						
	1	42	34	53	43	49	39	40	33	50	41	46	37						
25	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						
	1	42	34	53	43	49	39	40	33	50	41	46	37						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches												
Wind Speed [mph]		95						100						105												
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
	30	1	67	61	68	68	71	70	67	58	68	68	71	67	67	56	68	68	71	64						
2		65	52	68	63	71	63	62	50	68	60	71	60	59	47	68	57	71	57							
3		54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42							
35	1	65	61	66	66	69	69	65	58	66	66	69	67	65	56	66	66	69	64							
	2	65	52	66	63	69	63	62	50	66	60	69	60	59	47	66	57	69	57							
	3	54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42							
40	1	64	61	64	64	68	68	64	58	64	64	68	67	64	56	64	64	68	64							
	2	64	52	64	63	68	63	62	50	64	60	68	60	59	47	64	57	68	57							
	3	54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42							
Wind Speed [mph]		110						115																		
30	1	66	53	68	67	71	61	63	51	68	64	71	59	66	45	68	55	68	55							
	2	56	45	68	55	68	55	54	44	66	53	65	53	47	38	53	43	50	40							
	3	47	38	53	43	50	40	45	37	51	41	48	39	1	65	53	66	66	69							
35	1	65	53	66	66	69	61	63	51	66	64	69	59	2	56	45	66	55	68							
	2	56	45	66	55	68	55	54	44	66	53	65	53	3	47	38	53	43	50							
	3	47	38	53	43	50	40	45	37	51	41	48	39	1	64	53	64	64	68							
40	1	64	53	64	64	68	61	63	51	64	64	68	59	2	56	45	64	55	68							
	2	56	45	64	55	68	55	54	44	64	53	65	53	3	47	38	53	43	50							
	3	47	38	53	43	50	40	45	37	51	41	48	39	Wind Speed [mph]		120						130				
30	1	61	49	68	62	70	56	63	51	68	64	71	59	2	52	42	63	51	63							
	2	52	42	63	51	63	51	54	44	66	53	65	53	3	44	35	49	39	46							
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	66	62	69							
35	1	61	49	66	62	69	56	63	51	66	64	69	59	2	52	42	63	51	63							
	2	52	42	63	51	63	51	54	44	66	53	65	53	3	44	35	49	39	46							
	3	44	35	49	39	46	37	45	37	51	41	48	39	1	61	49	64	62	68							
40	1	61	49	64	62	68	56	63	51	64	64	68	59	2	52	42	63	51	63							
	2	52	42	63	51	63	51	54	44	64	53	65	53	3	44	35	49	39	46							
	3	44	35	49	39	46	37	45	37	51	41	48	39													

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches														
Exposure Category : C	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	59	47	68	59	67	54	54	44	68	55	63	50	51	41	64	52	58	47
		2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
		3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
	35	1	59	47	66	59	67	54	54	44	66	55	63	50	51	41	64	52	58	47
		2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
		3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
	40	1	59	47	64	59	67	54	54	44	64	55	63	50	51	41	64	52	58	47
		2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
		3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
	30	1	48	39	60	48	55	44	45	36	56	46	52	42	45	36	56	46	52	42
		2	41	33	49	40	49	40	38	31	46	37	46	37	38	31	46	37	46	37
		3	34	28	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
	35	1	48	39	60	48	55	44	45	36	56	46	52	42	45	36	56	46	52	42
		2	41	33	49	40	49	40	38	31	46	37	46	37	38	31	46	37	46	37
		3	34	28	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
	40	1	48	39	60	48	55	44	45	36	56	46	52	42	45	36	56	46	52	42
		2	41	33	49	40	49	40	38	31	46	37	46	37	38	31	46	37	46	37
3		34	28	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28	
30	1	42	34	53	43	49	39	40	33	50	41	46	37	40	33	50	41	46	37	
	2	36	29	44	35	44	35	34	28	41	34	41	34	34	28	41	34	41	34	
	3	31	25	34	28	32	26	29	23	32	26	30	25	29	23	32	26	30	25	
35	1	42	34	53	43	49	39	40	33	50	41	46	37	40	33	50	41	46	37	
	2	36	29	44	35	44	35	34	28	41	34	41	34	34	28	41	34	41	34	
	3	31	25	34	28	32	26	29	23	32	26	30	25	29	23	32	26	30	25	
40	1	42	34	53	43	49	39	40	33	50	41	46	37	40	33	50	41	46	37	
	2	36	29	44	35	44	35	34	28	41	34	41	34	34	28	41	34	41	34	
	3	31	25	34	28	32	26	29	23	32	26	30	25	29	23	32	26	30	25	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	45	1	62	61	62	62	66	66	62	58	62	62	66	66	62	56	62	62	66
2		62	52	62	62	66	63	62	50	62	60	66	60	59	47	62	57	66	57
3		54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42
50	1	60	60	61	61	65	65	60	58	61	61	65	65	60	56	61	61	65	64
	2	60	52	61	61	65	63	60	50	61	60	65	60	59	47	61	57	65	57
	3	54	44	60	49	57	46	52	42	58	46	54	44	49	40	55	44	52	42
60	1	56	56	57	57	62	62	56	56	57	57	62	62	56	56	57	57	62	62
	2	56	52	57	57	62	62	56	50	57	57	62	60	56	47	57	57	62	57
	3	54	44	57	49	57	46	52	42	57	46	54	44	49	40	55	44	52	42
45	1	62	53	62	62	66	61	62	51	62	62	66	59	62	51	62	62	66	59
	2	56	45	62	55	66	55	54	44	62	53	65	53	54	44	62	53	65	53
	3	47	38	53	43	50	40	45	37	51	41	48	39	45	37	51	41	48	39
50	1	60	53	61	61	65	61	60	51	61	61	65	59	60	51	61	61	65	59
	2	56	45	61	55	65	55	54	44	61	53	65	53	54	44	61	53	65	53
	3	47	38	53	43	50	40	45	37	51	41	48	39	45	37	51	41	48	39
60	1	56	53	57	57	62	61	56	51	57	57	62	59	56	51	57	57	62	59
	2	56	45	57	55	62	55	54	44	57	53	62	53	54	44	57	53	62	53
	3	47	38	53	43	50	40	45	37	51	41	48	39	45	37	51	41	48	39
45	1	61	49	62	62	66	56	62	51	62	62	66	59	62	51	62	62	66	59
	2	52	42	62	51	63	51	54	44	62	53	65	53	54	44	62	53	65	53
	3	44	35	49	39	46	37	45	37	51	41	48	39	45	37	51	41	48	39
50	1	60	49	61	61	65	56	60	51	61	61	65	59	60	51	61	61	65	59
	2	52	42	61	51	63	51	54	44	61	53	65	53	54	44	61	53	65	53
	3	44	35	49	39	46	37	45	37	51	41	48	39	45	37	51	41	48	39
60	1	56	49	57	57	62	56	56	51	57	57	62	59	56	51	57	57	62	59
	2	52	42	57	51	62	51	54	44	57	53	62	53	54	44	57	53	62	53
	3	44	35	49	39	46	37	45	37	51	41	48	39	45	37	51	41	48	39

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	59	47	62	59	66	54	54	44	62	55	63	50	51	41	62	52	58
2		50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
3		42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
50	1	59	47	61	59	65	54	54	44	61	55	63	50	51	41	61	52	58	47
	2	50	40	60	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
60	1	56	47	57	57	62	54	54	44	57	55	62	50	51	41	57	52	58	47
	2	50	40	57	49	60	49	46	38	56	45	56	45	43	35	52	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
45	1	48	39	60	48	55	44	45	36	56	46	52	42	45	36	56	46	52	42
	2	41	33	49	40	49	40	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	28	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
50	1	48	39	60	48	55	44	45	36	56	46	52	42	45	36	56	46	52	42
	2	41	33	49	40	49	40	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	28	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
60	1	48	39	57	48	55	44	45	36	56	46	52	42	45	36	56	46	52	42
	2	41	33	49	40	49	40	38	31	46	37	46	37	38	31	46	37	46	37
	3	34	28	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
45	1	42	34	53	43	49	39	40	33	50	41	46	37	40	33	50	41	46	37
	2	36	29	44	35	44	35	34	28	41	34	41	34	34	28	41	34	41	34
	3	31	25	34	28	32	26	29	23	32	26	30	25	29	23	32	26	30	25
50	1	42	34	53	43	49	39	40	33	50	41	46	37	40	33	50	41	46	37
	2	36	29	44	35	44	35	34	28	41	34	41	34	34	28	41	34	41	34
	3	31	25	34	28	32	26	29	23	32	26	30	25	29	23	32	26	30	25
60	1	42	34	53	43	49	39	40	33	50	41	46	37	40	33	50	41	46	37
	2	36	29	44	35	44	35	34	28	41	34	41	34	34	28	41	34	41	34
	3	31	25	34	28	32	26	29	23	32	26	30	25	29	23	32	26	30	25

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	52	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59
2		52	52	53	53	59	59	52	50	53	53	59	59	52	47	53	53	59	57
3		52	44	53	49	57	46	52	42	53	46	54	44	49	40	53	44	52	42
80	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	49	49	49	56	56	49	49	49	49	56	56	49	47	49	49	56	56
	3	49	44	49	49	56	46	49	42	49	46	54	44	49	40	49	44	52	42
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	3	46	44	47	47	53	46	46	42	47	46	53	44	46	40	47	44	52	42
Wind Speed [mph]		110						115											
70	1	52	52	53	53	59	59	52	51	53	53	59	59						
	2	52	45	53	53	59	55	52	44	53	53	59	53						
	3	47	38	53	43	50	40	45	37	51	41	48	39						
80	1	49	49	49	49	56	56	49	49	49	49	56	56						
	2	49	45	49	49	56	55	49	44	49	49	56	53						
	3	47	38	49	43	50	40	45	37	49	41	48	39						
90	1	46	46	47	47	53	53	46	46	47	47	53	53						
	2	46	45	47	47	53	53	46	44	47	47	53	53						
	3	46	38	47	43	50	40	45	37	47	41	48	39						
Wind Speed [mph]		120						130											
70	1	52	49	53	53	59	56	52	51	53	53	59	59						
	2	52	42	53	51	59	51	52	44	53	53	59	53						
	3	44	35	49	39	46	37	45	37	51	41	48	39						
80	1	49	49	49	49	56	56	49	49	49	49	56	56						
	2	49	42	49	49	56	51	49	44	49	49	56	53						
	3	44	35	49	39	46	37	45	37	49	41	48	39						
90	1	46	46	47	47	53	53	46	46	47	47	53	53						
	2	46	42	47	47	53	51	46	44	47	47	53	53						
	3	44	35	47	39	46	37	45	37	47	41	48	39						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	47	53	53	59	54	52	44	53	53	59	50	51	41	53	52	58
2		50	40	53	49	59	49	46	38	53	45	56	45	43	35	52	42	52	42
3		42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
80	1	49	47	49	49	56	54	49	44	49	49	56	50	49	41	49	49	56	47
	2	49	40	49	49	56	49	46	38	49	45	56	45	43	35	49	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
90	1	46	46	47	47	53	53	46	44	47	47	53	50	46	41	47	47	53	47
	2	46	40	47	47	53	49	46	38	47	45	53	45	43	35	47	42	52	42
	3	42	34	47	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
Wind Speed [mph]		170						180											
70	1	48	39	53	48	55	44	45	36	53	46	52	42						
	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
80	1	48	39	49	48	55	44	45	36	49	46	52	42						
	2	41	33	49	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
90	1	46	39	47	47	53	44	45	36	47	46	52	42						
	2	41	33	47	40	49	40	38	31	46	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
Wind Speed [mph]		190						200											
70	1	42	34	53	43	49	39	40	33	50	41	46	37						
	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						
80	1	42	34	49	43	49	39	40	33	49	41	46	37						
	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						
90	1	42	34	47	43	49	39	40	33	47	41	46	37						
	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50
	2	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50
	3	44	44	44	44	50	46	44	42	44	44	50	44	44	40	44	44	50	42
Wind Speed [mph]		110						115											
100	1	44	44	44	44	50	50	44	44	44	44	50	50						
	2	44	44	44	44	50	50	44	44	44	44	50	50						
	3	44	38	44	43	50	40	44	37	44	41	48	39						
Wind Speed [mph]		120						130											
100	1	44	44	44	44	50	50	44	44	44	44	50	50						
	2	44	42	44	44	50	50	44	44	44	44	50	50						
	3	44	35	44	39	46	37	44	37	44	41	48	39						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	44	44	44	44	50	50	44	44	44	44	50	50	44	41	44	44	50
	2	44	40	44	44	50	49	44	38	44	44	50	45	43	35	44	42	50	42
	3	42	34	44	38	44	36	39	32	43	35	41	33	36	30	41	33	38	31
Wind Speed [mph]		170						180											
100	1	44	39	44	44	50	44	44	36	44	44	50	42						
	2	41	33	44	40	49	40	38	31	44	37	46	37						
	3	34	28	38	31	36	29	32	26	36	29	34	28						
Wind Speed [mph]		190						200											
100	1	42	34	44	43	49	39	40	33	44	41	46	37						
	2	36	29	44	35	44	35	34	28	41	34	41	34						
	3	31	25	34	28	32	26	29	23	32	26	30	25						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	69	56	81	70	76	64	66	53	79	67	74	61	63	51	76	64	72
2		59	48	71	58	71	57	56	45	68	55	68	55	54	43	65	52	65	52
3		49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
5	1	69	56	81	70	76	64	66	53	79	67	74	61	63	51	76	64	72	58
	2	59	48	71	58	71	57	56	45	68	55	68	55	54	43	65	52	65	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
10	1	69	56	76	70	76	64	66	53	76	67	74	61	63	51	76	64	72	58
	2	59	48	71	58	71	57	56	45	68	55	68	55	54	43	65	52	65	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
0	1	60	49	74	61	69	56	58	47	72	59	67	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	49	40	60	48	60	48
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
5	1	60	49	74	61	69	56	58	47	72	59	67	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	49	40	60	48	60	48
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
10	1	60	49	74	61	69	56	58	47	72	59	67	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	49	40	60	48	60	48
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
0	1	56	45	70	57	64	52	58	47	72	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	49	40	60	48	60	48
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
5	1	56	45	70	57	64	52	58	47	72	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	49	40	60	48	60	48
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
10	1	56	45	70	57	64	52	58	47	72	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	49	40	60	48	60	48
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	54	43	68	54	61	50	50	40	63	51	57	46	46	38	59	47	53
2		46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
3		38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
5	1	54	43	68	54	61	50	50	40	63	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
10	1	54	43	68	54	61	50	50	40	63	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
Wind Speed [mph]		170						180											
0	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
5	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
10	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
Wind Speed [mph]		190						200											
0	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
5	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
10	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	69	56	72	70	76	64	66	53	72	67	74	61	63	51	72	64	72
2		59	48	71	58	71	57	56	45	68	55	68	55	54	43	65	52	65	52
3		49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
20	1	69	56	69	69	76	64	66	53	69	67	74	61	63	51	69	64	72	58
	2	59	48	69	58	71	57	56	45	68	55	68	55	54	43	65	52	65	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
25	1	69	56	69	69	74	64	66	53	69	67	74	61	63	51	69	64	72	58
	2	59	48	69	58	71	57	56	45	68	55	68	55	54	43	65	52	65	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
15	1	60	49	72	61	69	56	58	47	72	59	67	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	41	34	46	37	44	35
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
20	1	60	49	69	61	69	56	58	47	69	59	67	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	41	34	46	37	44	35
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
25	1	60	49	69	61	69	56	58	47	69	59	67	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	41	34	46	37	44	35
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
15	1	56	45	70	57	64	52	58	47	72	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
20	1	56	45	69	57	64	52	58	47	69	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
25	1	56	45	69	57	64	52	58	47	69	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
15	1	56	45	70	57	64	52	58	47	72	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
20	1	56	45	69	57	64	52	58	47	69	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
25	1	56	45	69	57	64	52	58	47	69	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	54	43	68	54	61	50	50	40	63	51	57	46	46	38	59	47	53
2		46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
3		38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
20	1	54	43	68	54	61	50	50	40	63	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
25	1	54	43	68	54	61	50	50	40	63	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
Wind Speed [mph]		170						180											
15	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
20	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
25	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
Wind Speed [mph]		190						200											
15	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
20	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
25	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	69	56	69	69	72	64	66	53	69	67	72	61	63	51	69	64	72
2		59	48	69	58	71	57	56	45	68	55	68	55	54	43	65	52	65	52
3		49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
35	1	67	56	67	67	71	64	66	53	67	67	71	61	63	51	67	64	71	58
	2	59	48	67	58	71	57	56	45	67	55	68	55	54	43	65	52	65	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
40	1	65	56	65	65	69	64	65	53	65	65	69	61	63	51	65	64	69	58
	2	59	48	65	58	69	57	56	45	65	55	68	55	54	43	65	52	65	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
30	1	60	49	69	61	69	56	58	47	69	59	67	54	58	47	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	49	40	60	48	60	48
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
35	1	60	49	67	61	69	56	58	47	67	59	67	54	58	47	65	59	67	54
	2	51	42	62	50	62	50	49	40	60	48	60	48	49	40	60	48	60	48
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
40	1	60	49	65	61	69	56	58	47	65	59	67	54	58	47	65	59	67	54
	2	51	42	62	50	62	50	49	40	60	48	60	48	49	40	60	48	60	48
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
30	1	56	45	69	57	64	52	58	47	69	59	67	54	58	47	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	49	40	60	48	60	48
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
35	1	56	45	67	57	64	52	58	47	67	59	67	54	58	47	65	59	67	54
	2	47	38	57	46	57	46	49	40	60	48	60	48	49	40	60	48	60	48
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
40	1	56	45	65	57	64	52	58	47	65	59	67	54	58	47	65	59	67	54
	2	47	38	57	46	57	46	49	40	60	48	60	48	49	40	60	48	60	48
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	54	43	68	54	61	50	50	40	63	51	57	46	46	38	59	47	53
2		46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
3		38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
35	1	54	43	67	54	61	50	50	40	63	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
40	1	54	43	65	54	61	50	50	40	63	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
30	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
35	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
40	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
30	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
35	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
40	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	64	56	64	64	68	64	64	53	64	64	68	61	63	51	64	64	68
2		59	48	64	58	68	57	56	45	64	55	68	55	54	43	64	52	65	52
3		49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
50	1	62	56	63	63	66	64	62	53	63	63	66	61	62	51	63	63	66	58
	2	59	48	63	58	66	57	56	45	63	55	66	55	54	43	63	52	65	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
60	1	59	56	59	59	64	64	59	53	59	59	64	61	59	51	59	59	64	58
	2	59	48	59	58	64	57	56	45	59	55	64	55	54	43	59	52	64	52
	3	49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
45	1	60	49	64	61	68	56	58	47	64	59	67	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	41	34	46	37	44	35
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
50	1	60	49	63	61	66	56	58	47	63	59	66	54	49	40	60	48	60	48
	2	51	42	62	50	62	50	49	40	60	48	60	48	41	34	46	37	44	35
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
60	1	59	49	59	59	64	56	58	47	59	59	64	54	49	40	59	48	60	48
	2	51	42	59	50	62	50	49	40	59	48	60	48	41	34	46	37	44	35
	3	43	35	48	39	45	37	41	34	46	37	44	35	41	34	46	37	44	35
45	1	56	45	64	57	64	52	58	47	64	59	67	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
50	1	56	45	63	57	64	52	58	47	63	59	66	54	49	40	60	48	60	48
	2	47	38	57	46	57	46	49	40	60	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35
60	1	56	45	59	57	64	52	58	47	59	59	64	54	49	40	59	48	60	48
	2	47	38	57	46	57	46	49	40	59	48	60	48	41	34	46	37	44	35
	3	40	32	44	36	42	34	41	34	46	37	44	35	41	34	46	37	44	35

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	54	43	64	54	61	50	50	40	63	51	57	46	46	38	59	47	53
2		46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
3		38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
50	1	54	43	63	54	61	50	50	40	63	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
60	1	54	43	59	54	61	50	50	40	59	51	57	46	46	38	59	47	53	43
	2	46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
Wind Speed [mph]		170						180											
45	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
50	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
60	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
Wind Speed [mph]		190						200											
45	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
50	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
60	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	55	55	56	56	62	62	55	53	56	56	62	61	55	51	56	56	62
2		55	48	56	56	62	57	55	45	56	55	62	55	54	43	56	52	62	52
3		49	40	55	45	52	42	47	38	53	43	50	40	45	36	50	41	47	38
80	1	52	52	52	52	59	59	52	52	52	52	59	59	52	51	52	52	59	58
	2	52	48	52	52	59	57	52	45	52	52	59	55	52	43	52	52	59	52
	3	49	40	52	45	52	42	47	38	52	43	50	40	45	36	50	41	47	38
90	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	48	49	49	56	56	49	45	49	49	56	55	49	43	49	49	56	52
	3	49	40	49	45	52	42	47	38	49	43	50	40	45	36	49	41	47	38
Wind Speed [mph]		110						115											
70	1	55	49	56	56	62	56	55	47	56	56	62	54						
	2	51	42	56	50	62	50	49	40	56	48	60	48						
	3	43	35	48	39	45	37	41	34	46	37	44	35						
80	1	52	49	52	52	59	56	52	47	52	52	59	54						
	2	51	42	52	50	59	50	49	40	52	48	59	48						
	3	43	35	48	39	45	37	41	34	46	37	44	35						
90	1	49	49	49	49	56	56	49	47	49	49	56	54						
	2	49	42	49	49	56	50	49	40	49	48	56	48						
	3	43	35	48	39	45	37	41	34	46	37	44	35						
Wind Speed [mph]		120						130											
70	1	55	45	56	56	62	52	55	47	56	56	62	54						
	2	47	38	56	46	57	46	49	40	56	48	60	48						
	3	40	32	44	36	42	34	41	34	46	37	44	35						
80	1	52	45	52	52	59	52	52	47	52	52	59	54						
	2	47	38	52	46	57	46	49	40	52	48	59	48						
	3	40	32	44	36	42	34	41	34	46	37	44	35						
90	1	49	45	49	49	56	52	49	47	49	49	56	54						
	2	47	38	49	46	56	46	49	40	49	48	56	48						
	3	40	32	44	36	42	34	41	34	46	37	44	35						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	54	43	56	54	61	50	50	40	56	51	57	46	46	38	56	47	53
2		46	37	55	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
3		38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
80	1	52	43	52	52	59	50	50	40	52	51	57	46	46	38	52	47	53	43
	2	46	37	52	45	55	45	42	34	51	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
90	1	49	43	49	49	56	50	49	40	49	49	56	46	46	38	49	47	53	43
	2	46	37	49	45	55	45	42	34	49	41	51	41	40	32	48	39	48	39
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28
Wind Speed [mph]		170						180											
70	1	44	35	55	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
80	1	44	35	52	44	50	41	41	33	52	42	47	38	41	33	52	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
90	1	44	35	49	44	50	41	41	33	49	42	47	38	41	33	49	42	47	38
	2	37	30	45	36	45	36	35	28	42	34	42	34	35	28	42	34	42	34
	3	31	25	35	28	33	27	30	24	33	27	31	25	30	24	33	27	31	25
Wind Speed [mph]		190						200											
70	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
80	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23
90	1	39	31	49	39	45	36	37	30	46	37	42	34	37	30	46	37	42	34
	2	33	27	40	32	40	32	31	26	38	31	38	31	31	26	38	31	38	31
	3	28	23	31	25	29	24	27	22	30	24	28	23	27	22	30	24	28	23

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53
2		46	46	47	47	53	53	46	45	47	47	53	53	46	43	47	47	53	52
3		46	40	47	45	52	42	46	38	47	43	50	40	45	36	47	41	47	38
Wind Speed [mph]		110						115											
100	1	46	46	47	47	53	53	46	46	47	47	53	53						
	2	46	42	47	47	53	50	46	40	47	47	53	48						
	3	43	35	47	39	45	37	41	34	46	37	44	35						
0	1																		
	2																		
	3																		
0	1																		
	2																		
	3																		
Wind Speed [mph]		120						130											
100	1	46	45	47	47	53	52	46	46	47	47	53	53						
	2	46	38	47	46	53	46	46	40	47	47	53	48						
	3	40	32	44	36	42	34	41	34	46	37	44	35						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches															
Wind Speed [mph]		140				150				160											
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																		
100	1	46	43	47	47	53	50	46	40	47	47	53	46	46	38	47	47	53	43		
	2	46	37	47	45	53	45	42	34	47	41	51	41	40	32	47	39	48	39		
	3	38	31	43	35	40	33	36	29	40	32	38	30	33	27	37	30	35	28		
Wind Speed [mph]		170				180															
100	1	44	35	47	44	50	41	41	33	47	42	47	38								
	2	37	30	45	36	45	36	35	28	42	34	42	34								
	3	31	25	35	28	33	27	30	24	33	27	31	25								
Wind Speed [mph]		190				200															
100	1	39	31	47	39	45	36	37	30	46	37	42	34								
	2	33	27	40	32	40	32	31	26	38	31	38	31								
	3	28	23	31	25	29	24	27	22	30	24	28	23								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches														
Exposure Category : B	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	78	66	81	79	82	74	75	63	81	76	82	71	73	60	81	74	80	69
		2	70	56	80	68	79	68	66	53	77	65	77	65	63	51	75	62	74	62
		3	58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
	5	1	78	66	81	79	82	74	75	63	81	76	82	71	73	60	81	74	80	69
		2	70	56	80	68	79	68	66	53	77	65	77	65	63	51	75	62	74	62
		3	58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
	10	1	76	66	76	76	81	74	75	63	76	76	81	71	73	60	76	74	80	69
		2	70	56	76	68	79	68	66	53	76	65	77	65	63	51	75	62	74	62
		3	58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
	0	1	71	57	81	72	78	66	69	55	81	70	76	63	69	55	81	70	76	63
		2	61	49	72	59	72	59	58	47	70	57	70	57	58	47	70	57	70	57
		3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
	5	1	71	57	81	72	78	66	69	55	81	70	76	63	69	55	81	70	76	63
		2	61	49	72	59	72	59	58	47	70	57	70	57	58	47	70	57	70	57
		3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
	10	1	71	57	76	72	78	66	69	55	76	70	76	63	69	55	76	70	76	63
		2	61	49	72	59	72	59	58	47	70	57	70	57	58	47	70	57	70	57
3		51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41	
0	1	66	53	79	67	74	61	69	55	81	70	76	63	69	55	81	70	76	63	
	2	56	45	68	55	68	54	58	47	70	57	70	57	58	47	70	57	70	57	
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41	
5	1	66	53	79	67	74	61	69	55	81	70	76	63	69	55	81	70	76	63	
	2	56	45	68	55	68	54	58	47	70	57	70	57	58	47	70	57	70	57	
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41	
10	1	66	53	76	67	74	61	69	55	76	70	76	63	69	55	76	70	76	63	
	2	56	45	68	55	68	54	58	47	70	57	70	57	58	47	70	57	70	57	
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches														
Exposure Category : B	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	63	51	77	64	72	58	59	47	73	60	67	54	55	44	69	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	5	1	63	51	77	64	72	58	59	47	73	60	67	54	55	44	69	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	10	1	63	51	76	64	72	58	59	47	73	60	67	54	55	44	69	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	Wind Speed [mph]	170						180												
	0	1	51	42	65	52	59	48	48	39	61	49	56	45						
		2	44	35	53	43	53	43	41	33	50	40	50	40						
		3	37	30	41	33	39	31	35	28	39	31	37	30						
	5	1	51	42	65	52	59	48	48	39	61	49	56	45						
		2	44	35	53	43	53	43	41	33	50	40	50	40						
		3	37	30	41	33	39	31	35	28	39	31	37	30						
	10	1	51	42	65	52	59	48	48	39	61	49	56	45						
	2	44	35	53	43	53	43	41	33	50	40	50	40							
	3	37	30	41	33	39	31	35	28	39	31	37	30							
Wind Speed [mph]	190						200													
0	1	46	37	58	46	52	42	43	35	54	44	50	40							
	2	39	32	47	38	47	38	37	30	45	36	45	36							
	3	33	27	37	30	35	28	31	25	35	28	33	27							
5	1	46	37	58	46	52	42	43	35	54	44	50	40							
	2	39	32	47	38	47	38	37	30	45	36	45	36							
	3	33	27	37	30	35	28	31	25	35	28	33	27							
10	1	46	37	58	46	52	42	43	35	54	44	50	40							
	2	39	32	47	38	47	38	37	30	45	36	45	36							
	3	33	27	37	30	35	28	31	25	35	28	33	27							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	15	1	72	66	72	72	78	74	72	63	72	72	78	71	72	60	72	72	78
2		70	56	72	68	78	68	66	53	72	65	77	65	63	51	72	62	74	62
3		58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
20	1	69	66	69	69	75	74	69	63	69	69	75	71	69	60	69	69	75	69
	2	69	56	69	68	75	68	66	53	69	65	75	65	63	51	69	62	74	62
	3	58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
25	1	69	66	69	69	73	73	69	63	69	69	73	71	69	60	69	69	73	69
	2	69	56	69	68	73	68	66	53	69	65	73	65	63	51	69	62	73	62
	3	58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
15	1	71	57	72	72	78	66	69	55	72	70	76	63	69	55	72	70	76	63
	2	61	49	72	59	72	59	58	47	70	57	70	57	58	47	70	57	70	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
20	1	69	57	69	69	75	66	69	55	69	69	75	63	69	55	69	69	75	63
	2	61	49	69	59	72	59	58	47	69	57	70	57	58	47	69	57	70	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
25	1	69	57	69	69	73	66	69	55	69	69	73	63	69	55	69	69	73	63
	2	61	49	69	59	72	59	58	47	69	57	70	57	58	47	69	57	70	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
15	1	66	53	72	67	74	61	69	55	72	70	76	63	69	55	72	70	76	63
	2	56	45	68	55	68	54	58	47	70	57	70	57	58	47	70	57	70	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41
20	1	66	53	69	67	74	61	69	55	69	69	75	63	69	55	69	69	75	63
	2	56	45	68	55	68	54	58	47	69	57	70	57	58	47	69	57	70	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41
25	1	66	53	69	67	73	61	69	55	69	69	73	63	69	55	69	69	73	63
	2	56	45	68	55	68	54	58	47	69	57	70	57	58	47	69	57	70	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches														
Exposure Category : B	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	63	51	72	64	72	58	59	47	72	60	67	54	55	44	69	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	20	1	63	51	69	64	72	58	59	47	69	60	67	54	55	44	69	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	25	1	63	51	69	64	72	58	59	47	69	60	67	54	55	44	69	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	15	Wind Speed [mph]	170						180											
		1	51	42	65	52	59	48	48	39	61	49	56	45						
		2	44	35	53	43	53	43	41	33	50	40	50	40						
		3	37	30	41	33	39	31	35	28	39	31	37	30						
		20	1	51	42	65	52	59	48	48	39	61	49	56	45					
			2	44	35	53	43	53	43	41	33	50	40	50	40					
			3	37	30	41	33	39	31	35	28	39	31	37	30					
		25	1	51	42	65	52	59	48	48	39	61	49	56	45					
2			44	35	53	43	53	43	41	33	50	40	50	40						
3			37	30	41	33	39	31	35	28	39	31	37	30						
15		Wind Speed [mph]	190						200											
		1	46	37	58	46	52	42	43	35	54	44	50	40						
	2	39	32	47	38	47	38	37	30	45	36	45	36							
	3	33	27	37	30	35	28	31	25	35	28	33	27							
	20	1	46	37	58	46	52	42	43	35	54	44	50	40						
		2	39	32	47	38	47	38	37	30	45	36	45	36						
		3	33	27	37	30	35	28	31	25	35	28	33	27						
	25	1	46	37	58	46	52	42	43	35	54	44	50	40						
		2	39	32	47	38	47	38	37	30	45	36	45	36						
		3	33	27	37	30	35	28	31	25	35	28	33	27						

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : B

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	30	1	67	66	68	68	71	71	67	63	68	68	71	71	67	60	68	68	71
2		67	56	68	68	71	68	66	53	68	65	71	65	63	51	68	62	71	62
3		58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
35	1	65	65	66	66	69	69	65	63	66	66	69	69	65	60	66	66	69	69
	2	65	56	66	66	69	68	65	53	66	65	69	65	63	51	66	62	69	62
	3	58	47	65	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
40	1	64	64	64	64	68	68	64	63	64	64	68	68	64	60	64	64	68	68
	2	64	56	64	64	68	68	64	53	64	64	68	65	63	51	64	62	68	62
	3	58	47	64	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
30	1	67	57	68	68	71	66	67	55	68	68	71	63	67	55	68	68	71	63
	2	61	49	68	59	71	59	58	47	68	57	70	57	58	47	68	57	70	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
35	1	65	57	66	66	69	66	65	55	66	66	69	63	65	55	66	66	69	63
	2	61	49	66	59	69	59	58	47	66	57	69	57	58	47	66	57	69	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
40	1	64	57	64	64	68	66	64	55	64	64	68	63	64	55	64	64	68	63
	2	61	49	64	59	68	59	58	47	64	57	68	57	58	47	64	57	68	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
30	1	66	53	68	67	71	61	67	55	68	68	71	63	67	55	68	68	71	63
	2	56	45	68	55	68	54	58	47	68	57	70	57	58	47	68	57	70	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41
35	1	65	53	66	66	69	61	65	55	66	66	69	63	65	55	66	66	69	63
	2	56	45	66	55	68	54	58	47	66	57	69	57	58	47	66	57	69	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41
40	1	64	53	64	64	68	61	64	55	64	64	68	63	64	55	64	64	68	63
	2	56	45	64	55	68	54	58	47	64	57	68	57	58	47	64	57	68	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches														
Exposure Category : B	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	63	51	68	64	71	58	59	47	68	60	67	54	55	44	68	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	35	1	63	51	66	64	69	58	59	47	66	60	67	54	55	44	66	56	63	51
		2	54	43	65	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	40	1	63	51	64	64	68	58	59	47	64	60	67	54	55	44	64	56	63	51
		2	54	43	64	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46
		3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
	30	1	51	42	65	52	59	48	48	39	61	49	56	45	48	39	61	49	56	45
		2	44	35	53	43	53	43	41	33	50	40	50	40	41	33	50	40	50	40
		3	37	30	41	33	39	31	35	28	39	31	37	30	35	28	39	31	37	30
	35	1	51	42	65	52	59	48	48	39	61	49	56	45	48	39	61	49	56	45
		2	44	35	53	43	53	43	41	33	50	40	50	40	41	33	50	40	50	40
		3	37	30	41	33	39	31	35	28	39	31	37	30	35	28	39	31	37	30
	40	1	51	42	64	52	59	48	48	39	61	49	56	45	48	39	61	49	56	45
		2	44	35	53	43	53	43	41	33	50	40	50	40	41	33	50	40	50	40
3		37	30	41	33	39	31	35	28	39	31	37	30	35	28	39	31	37	30	
30	1	46	37	58	46	52	42	43	35	54	44	50	40	43	35	54	44	50	40	
	2	39	32	47	38	47	38	37	30	45	36	45	36	37	30	45	36	45	36	
	3	33	27	37	30	35	28	31	25	35	28	33	27	31	25	35	28	33	27	
35	1	46	37	58	46	52	42	43	35	54	44	50	40	43	35	54	44	50	40	
	2	39	32	47	38	47	38	37	30	45	36	45	36	37	30	45	36	45	36	
	3	33	27	37	30	35	28	31	25	35	28	33	27	31	25	35	28	33	27	
40	1	46	37	58	46	52	42	43	35	54	44	50	40	43	35	54	44	50	40	
	2	39	32	47	38	47	38	37	30	45	36	45	36	37	30	45	36	45	36	
	3	33	27	37	30	35	28	31	25	35	28	33	27	31	25	35	28	33	27	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	45	1	62	62	62	62	66	66	62	62	62	62	66	66	62	60	62	62	66
2		62	56	62	62	66	66	62	53	62	62	66	65	62	51	62	62	66	62
3		58	47	62	52	61	49	56	45	62	50	58	47	53	43	59	48	56	45
50	1	60	60	61	61	65	65	60	60	61	61	65	65	60	60	61	61	65	65
	2	60	56	61	61	65	65	60	53	61	61	65	65	60	51	61	61	65	62
	3	58	47	61	52	61	49	56	45	61	50	58	47	53	43	59	48	56	45
60	1	56	56	57	57	62	62	56	56	57	57	62	62	56	56	57	57	62	62
	2	56	56	57	57	62	62	56	53	57	57	62	62	56	51	57	57	62	62
	3	56	47	57	52	61	49	56	45	57	50	58	47	53	43	57	48	56	45
45	1	62	57	62	62	66	66	62	55	62	62	66	63	62	55	62	62	66	63
	2	61	49	62	59	66	59	58	47	62	57	66	57	58	47	62	57	66	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
50	1	60	57	61	61	65	65	60	55	61	61	65	63	60	55	61	61	65	63
	2	60	49	61	59	65	59	58	47	61	57	65	57	58	47	61	57	65	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
60	1	56	56	57	57	62	62	56	55	57	57	62	62	56	55	57	57	62	62
	2	56	49	57	57	62	59	56	47	57	57	62	57	56	47	57	57	62	57
	3	51	41	57	46	53	43	49	39	54	44	51	41	49	39	54	44	51	41
45	1	62	53	62	62	66	61	62	55	62	62	66	63	62	55	62	62	66	63
	2	56	45	62	55	66	54	58	47	62	57	66	57	58	47	62	57	66	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41
50	1	60	53	61	61	65	61	60	55	61	61	65	63	60	55	61	61	65	63
	2	56	45	61	55	65	54	58	47	61	57	65	57	58	47	61	57	65	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41
60	1	56	53	57	57	62	61	56	55	57	57	62	62	56	55	57	57	62	62
	2	56	45	57	55	62	54	56	47	57	57	62	57	56	47	57	57	62	57
	3	47	38	52	42	49	40	49	39	54	44	51	41	49	39	54	44	51	41

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches														
Wind Speed [mph]	140						150						160							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																	
	1	62	51	62	62	66	58	59	47	62	60	66	54	55	44	62	56	63	51	
45	2	54	43	62	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46	
	3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33	
	1	60	51	61	61	65	58	59	47	61	60	65	54	55	44	61	56	63	51	
50	2	54	43	61	53	65	52	50	40	61	49	60	49	47	38	57	46	56	46	
	3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33	
	1	56	51	57	57	62	58	56	47	57	57	62	54	55	44	57	56	62	51	
60	2	54	43	57	53	62	52	50	40	57	49	60	49	47	38	57	46	56	46	
	3	45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33	
	Wind Speed [mph]																			
45	170						180													
	1	51	42	62	52	59	48	48	39	61	49	56	45							
50	2	44	35	53	43	53	43	41	33	50	40	50	40							
	3	37	30	41	33	39	31	35	28	39	31	37	30							
	1	51	42	61	52	59	48	48	39	61	49	56	45							
60	2	44	35	53	43	53	43	41	33	50	40	50	40							
	3	37	30	41	33	39	31	35	28	39	31	37	30							
	Wind Speed [mph]																			
45	190						200													
	1	46	37	58	46	52	42	43	35	54	44	50	40							
50	2	39	32	47	38	47	38	37	30	45	36	45	36							
	3	33	27	37	30	35	28	31	25	35	28	33	27							
	1	46	37	58	46	52	42	43	35	54	44	50	40							
60	2	39	32	47	38	47	38	37	30	45	36	45	36							
	3	33	27	37	30	35	28	31	25	35	28	33	27							
	Wind Speed [mph]																			
45	190						200													
	1	46	37	57	46	52	42	43	35	54	44	50	40							
	2	39	32	47	38	47	38	37	30	45	36	45	36							
60	3	33	27	37	30	35	28	31	25	35	28	33	27							
	Wind Speed [mph]																			
	190																			
200																				
190																				
200																				

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	52	53	53	59	59	52	52	53	53	59	59	52	52	53	53	59
2		52	52	53	53	59	59	52	52	53	53	59	59	52	51	53	53	59	59
3		52	47	53	52	59	49	52	45	53	50	58	47	52	43	53	48	56	45
80	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	3	49	47	49	49	56	49	49	45	49	49	56	47	49	43	49	48	56	45
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	3	46	46	47	47	53	49	46	45	47	47	53	47	46	43	47	47	53	45
70	110						115												
	1	52	52	53	53	59	59	52	52	53	53	59	59						
	2	52	49	53	53	59	59	52	47	53	53	59	57						
80	3	51	41	53	46	53	43	49	39	53	44	51	41						
	1	49	49	49	49	56	56	49	49	49	49	56	56						
	2	49	49	49	49	56	56	49	47	49	49	56	56						
90	3	49	41	49	46	53	43	49	39	49	44	51	41						
	1	46	46	47	47	53	53	46	46	47	47	53	53						
	2	46	46	47	47	53	53	46	46	47	47	53	53						
70	120						130												
	1	52	52	53	53	59	59	52	52	53	53	59	59						
	2	52	45	53	53	59	54	52	47	53	53	59	57						
80	3	47	38	52	42	49	40	49	39	53	44	51	41						
	1	49	49	49	49	56	56	49	49	49	49	56	56						
	2	49	45	49	49	56	54	49	47	49	49	56	56						
90	3	47	38	49	42	49	40	49	39	49	44	51	41						
	1	46	46	47	47	53	53	46	46	47	47	53	53						
	2	46	45	47	47	53	53	46	46	47	47	53	53						
90	3	46	38	47	42	49	40	46	39	47	44	51	41						

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	51	53	53	59	58	52	47	53	53	59	54	52	44	53	53	59
2		52	43	53	53	59	52	50	40	53	49	59	49	47	38	53	46	56	46
3		45	37	50	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
80	1	49	49	49	49	56	56	49	47	49	49	56	54	49	44	49	49	56	51
	2	49	43	49	49	56	52	49	40	49	49	56	49	47	38	49	46	56	46
	3	45	37	49	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	44	47	47	53	51
	2	46	43	47	47	53	52	46	40	47	47	53	49	46	38	47	46	53	46
	3	45	37	47	41	47	38	42	34	47	38	44	36	39	32	44	35	41	33
Wind Speed [mph]	170						180												
	Group	Array Interior	Array Edge																
70	1	51	42	53	52	59	48	48	39	53	49	56	45	44	35	53	43	53	43
	2	44	35	53	43	53	43	41	33	50	40	50	40	37	30	41	33	39	31
	3	37	30	41	33	39	31	35	28	39	31	37	30	49	42	49	49	56	48
80	1	49	42	49	49	56	48	48	39	49	49	56	45	41	33	49	40	50	40
	2	44	35	49	43	53	43	41	33	49	40	50	40	35	28	39	31	37	30
	3	37	30	41	33	39	31	35	28	39	31	37	30	46	42	47	47	53	48
90	1	46	42	47	47	53	48	46	39	47	47	53	45	44	35	53	43	53	43
	2	44	35	47	43	53	43	41	33	47	40	50	40	37	30	41	33	39	31
	3	37	30	41	33	39	31	35	28	39	31	37	30	46	37	53	46	52	42
Wind Speed [mph]	190						200												
	Group	Array Interior	Array Edge																
70	1	46	37	53	46	52	42	43	35	53	44	50	40	39	32	47	38	47	38
	2	39	32	47	38	47	38	37	30	45	36	45	36	33	27	37	30	35	28
	3	33	27	37	30	35	28	31	25	35	28	33	27	46	37	49	46	52	42
80	1	46	37	49	46	52	42	43	35	49	44	50	40	37	32	47	38	47	38
	2	39	32	47	38	47	38	37	30	45	36	45	36	33	27	37	30	35	28
	3	33	27	37	30	35	28	31	25	35	28	33	27	46	37	47	46	52	42
90	1	46	37	47	46	52	42	43	35	47	44	50	40	39	32	47	38	47	38
	2	39	32	47	38	47	38	37	30	45	36	45	36	33	27	37	30	35	28
	3	33	27	37	30	35	28	31	25	35	28	33	27						

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50
2		44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50
3		44	44	44	44	50	49	44	44	44	44	50	47	44	43	44	44	50	45
Wind Speed [mph]		110						115											
100	1	44	44	44	44	50	50	44	44	44	44	50	50						
	2	44	44	44	44	50	50	44	44	44	44	50	50						
	3	44	41	44	44	50	43	44	39	44	44	50	41						
Wind Speed [mph]		120						130											
100	1	44	44	44	44	50	50	44	44	44	44	50	50						
	2	44	44	44	44	50	50	44	44	44	44	50	50						
	3	44	38	44	42	49	40	44	39	44	44	50	41						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)

$a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
0	1	70	56	81	71	77	65	67	54	79	68	74	62	64	51	77	65	72	59
	2	59	48	71	58	71	58	57	46	69	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
5	1	70	56	81	71	77	65	67	54	79	68	74	62	64	51	77	65	72	59
	2	59	48	71	58	71	58	57	46	69	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
10	1	70	56	76	71	77	65	67	54	76	68	74	62	64	51	76	65	72	59
	2	59	48	71	58	71	58	57	46	69	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
Wind Speed [mph]	110						115												
	1	61	49	75	62	70	56	58	47	72	59	67	54						
	2	52	42	63	51	63	51	50	40	60	49	60	49						
0	3	44	35	49	39	46	37	42	34	47	38	44	36						
	1	61	49	75	62	70	56	58	47	72	59	67	54						
	2	52	42	63	51	63	51	50	40	60	49	60	49						
5	3	44	35	49	39	46	37	42	34	47	38	44	36						
	1	61	49	75	62	70	56	58	47	72	59	67	54						
	2	52	42	63	51	63	51	50	40	60	49	60	49						
10	3	44	35	49	39	46	37	42	34	47	38	44	36						
	1	61	49	75	62	70	56	58	47	72	59	67	54						
	2	52	42	63	51	63	51	50	40	60	49	60	49						
Wind Speed [mph]	120						130												
	1	56	45	71	57	65	52	58	47	72	59	67	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
0	3	40	33	45	36	42	34	42	34	47	38	44	36						
	1	56	45	71	57	65	52	58	47	72	59	67	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
5	3	40	33	45	36	42	34	42	34	47	38	44	36						
	1	56	45	71	57	65	52	58	47	72	59	67	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
10	3	40	33	45	36	42	34	42	34	47	38	44	36						
	1	56	45	71	57	65	52	58	47	72	59	67	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
3	3	40	33	45	36	42	34	42	34	47	38	44	36						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : C

Wind Speed [mph]	140							150							160						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																		
0	1	54	44	68	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44		
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39		
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29		
5	1	54	44	68	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44		
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39		
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29		
10	1	54	44	68	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44		
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39		
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29		
0	170							180													
	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35		
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25		
5	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35		
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25		
	3	32	26	35	29	33	27	30	24	33	27	31	25	1	1	1	1	1	1		
10	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35		
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25		
	3	32	26	35	29	33	27	30	24	33	27	31	25	2 = 2	2 = 2	2 = 2	2 = 2	2 = 2	2 = 2		
0	190							200													
	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31		
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23		
5	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31		
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23		
	3	28	23	31	25	30	24	27	22	30	24	28	23	1 = 1	1 = 1	1 = 1	1 = 1	1 = 1	1 = 1		
10	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31		
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23		
	3	28	23	31	25	30	24	27	22	30	24	28	23	3 = 3	3 = 3	3 = 3	3 = 3	3 = 3	3 = 3		

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
15	1	70	56	72	71	77	65	67	54	72	68	74	62	64	51	72	65	72	59
	2	59	48	71	58	71	58	57	46	69	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
20	1	69	56	69	69	75	65	67	54	69	68	74	62	64	51	69	65	72	59
	2	59	48	69	58	71	58	57	46	69	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
25	1	69	56	69	69	73	65	67	54	69	68	73	62	64	51	69	65	72	59
	2	59	48	69	58	71	58	57	46	69	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
15	110						115												
	1	61	49	72	62	70	56	58	47	72	59	67	54						
	2	52	42	63	51	63	51	50	40	60	49	60	49						
20	3	44	35	49	39	46	37	42	34	47	38	44	36						
	1	61	49	69	62	70	56	58	47	69	59	67	54						
	2	52	42	63	51	63	51	50	40	60	49	60	49						
25	3	44	35	49	39	46	37	42	34	47	38	44	36						
	1	61	49	69	62	70	56	58	47	69	59	67	54						
	2	52	42	63	51	63	51	50	40	60	49	60	49						
15	120						130												
	1	56	45	71	57	65	52	58	47	72	59	67	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
20	3	40	33	45	36	42	34	42	34	47	38	44	36						
	1	56	45	69	57	65	52	58	47	69	59	67	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
25	3	40	33	45	36	42	34	42	34	47	38	44	36						
	1	56	45	69	57	65	52	58	47	69	59	67	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
3	40	33	45	36	42	34	42	34	47	38	44	36							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : C

Wind Speed [mph]	140							150							160												
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																		
15	1	54	44	68	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44								
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39								
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29								
20	1	54	44	68	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44								
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39								
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29								
25	1	54	44	68	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44								
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39								
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29								
Wind Speed [mph]	170							180																			
15	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35								
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25								
	3	32	26	35	29	33	27	30	24	33	27	31	25	41	34	52	42	48	39								
20	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35								
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25								
	3	32	26	35	29	33	27	30	24	33	27	31	25	41	34	52	42	48	39								
25	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35								
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25								
	3	32	26	35	29	33	27	30	24	33	27	31	25	Wind Speed [mph]	190							200					
15	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31								
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23								
	3	28	23	31	25	30	24	27	22	30	24	28	23	39	32	49	40	45	36								
20	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31								
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23								
	3	28	23	31	25	30	24	27	22	30	24	28	23	39	32	49	40	45	36								
25	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31								
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23								
	3	28	23	31	25	30	24	27	22	30	24	28	23														

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
30	1	67	56	68	68	71	65	67	54	68	68	71	62	64	51	68	65	71	59
	2	59	48	68	58	71	58	57	46	68	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
35	1	65	56	66	66	69	65	65	54	66	66	69	62	64	51	66	65	69	59
	2	59	48	66	58	69	58	57	46	66	55	69	55	54	44	66	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
40	1	64	56	64	64	68	65	64	54	64	64	68	62	64	51	64	64	68	59
	2	59	48	64	58	68	58	57	46	64	55	68	55	54	44	64	53	66	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
30	1	61	49	68	62	70	56	58	47	68	59	67	54	58	47	68	59	67	54
	2	52	42	63	51	63	51	50	40	60	49	60	49	50	40	60	49	60	49
	3	44	35	49	39	46	37	42	34	47	38	44	36	42	34	47	38	44	36
35	1	61	49	66	62	69	56	58	47	66	59	67	54	58	47	66	59	67	54
	2	52	42	63	51	63	51	50	40	60	49	60	49	50	40	60	49	60	49
	3	44	35	49	39	46	37	42	34	47	38	44	36	42	34	47	38	44	36
40	1	61	49	64	62	68	56	58	47	64	59	67	54	58	47	64	59	67	54
	2	52	42	63	51	63	51	50	40	60	49	60	49	50	40	60	49	60	49
	3	44	35	49	39	46	37	42	34	47	38	44	36	42	34	47	38	44	36
30	1	56	45	68	57	65	52	58	47	68	59	67	54	58	47	68	59	67	54
	2	48	39	58	47	58	47	50	40	60	49	60	49	50	40	60	49	60	49
	3	40	33	45	36	42	34	42	34	47	38	44	36	42	34	47	38	44	36
35	1	56	45	66	57	65	52	58	47	66	59	67	54	58	47	66	59	67	54
	2	48	39	58	47	58	47	50	40	60	49	60	49	50	40	60	49	60	49
	3	40	33	45	36	42	34	42	34	47	38	44	36	42	34	47	38	44	36
40	1	56	45	64	57	65	52	58	47	64	59	67	54	58	47	64	59	67	54
	2	48	39	58	47	58	47	50	40	60	49	60	49	50	40	60	49	60	49
	3	40	33	45	36	42	34	42	34	47	38	44	36	42	34	47	38	44	36

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	30	1	54	44	68	55	62	50	50	41	63	51	58	47	47	38	59	48	54
2		46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39
3		39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29
35	1	54	44	66	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29
40	1	54	44	64	55	62	50	50	41	63	51	58	47	47	38	59	48	54	44
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29
30	Wind Speed [mph]		170						180										
	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25
35	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25
	3	32	26	35	29	33	27	30	24	33	27	31	25	1	1	1	1	1	1
40	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25
	3	32	26	35	29	33	27	30	24	33	27	31	25	2	2	2	2	2	2
30	Wind Speed [mph]		190						200										
	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23
35	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23
	3	28	23	31	25	30	24	27	22	30	24	28	23	1	1	1	1	1	1
40	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23
	3	28	23	31	25	30	24	27	22	30	24	28	23	2	2	2	2	2	2

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	62	56	62	62	66	65	62	54	62	62	66	62	62	51	62	62	66
2		59	48	62	58	66	58	57	46	62	55	66	55	54	44	62	53	66	53
3		50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
50	1	60	56	61	61	65	65	60	54	61	61	65	62	60	51	61	61	65	59
	2	59	48	61	58	65	58	57	46	61	55	65	55	54	44	61	53	65	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
60	1	56	56	57	57	62	62	56	54	57	57	62	62	56	51	57	57	62	59
	2	56	48	57	57	62	58	56	46	57	55	62	55	54	44	57	53	62	53
	3	50	40	56	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
Wind Speed [mph]		110						115											
45	1	61	49	62	62	66	56	58	47	62	59	66	54						
	2	52	42	62	51	63	51	50	40	60	49	60	49						
	3	44	35	49	39	46	37	42	34	47	38	44	36						
50	1	60	49	61	61	65	56	58	47	61	59	65	54						
	2	52	42	61	51	63	51	50	40	60	49	60	49						
	3	44	35	49	39	46	37	42	34	47	38	44	36						
60	1	56	49	57	57	62	56	56	47	57	57	62	54						
	2	52	42	57	51	62	51	50	40	57	49	60	49						
	3	44	35	49	39	46	37	42	34	47	38	44	36						
Wind Speed [mph]		120						130											
45	1	56	45	62	57	65	52	58	47	62	59	66	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
	3	40	33	45	36	42	34	42	34	47	38	44	36						
50	1	56	45	61	57	65	52	58	47	61	59	65	54						
	2	48	39	58	47	58	47	50	40	60	49	60	49						
	3	40	33	45	36	42	34	42	34	47	38	44	36						
60	1	56	45	57	57	62	52	56	47	57	57	62	54						
	2	48	39	57	47	58	47	50	40	57	49	60	49						
	3	40	33	45	36	42	34	42	34	47	38	44	36						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]	140						150						160													
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30									
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
	45	1	54	44	62	55	62	50	50	41	62	51	58	47	47	38	59	48	54	44						
2		46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39							
3		39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29							
50	1	54	44	61	55	62	50	50	41	61	51	58	47	47	38	59	48	54	44							
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39							
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29							
60	1	54	44	57	55	62	50	50	41	57	51	58	47	47	38	57	48	54	44							
	2	46	37	56	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39							
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29							
45	Wind Speed [mph]		170						180																	
	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35							
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25							
50	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35							
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25							
	3	32	26	35	29	33	27	30	24	33	27	31	25	1	44	36	55	45	51	41						
60	1	44	36	55	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35							
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25							
	3	32	26	35	29	33	27	30	24	33	27	31	25	Wind Speed [mph]		190						200				
45	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31							
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23							
	3	28	23	31	25	30	24	27	22	30	24	28	23	1	39	32	49	40	45	36						
50	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31							
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23							
	3	28	23	31	25	30	24	27	22	30	24	28	23	1	39	32	49	40	45	36						
60	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31							
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23							
	3	28	23	31	25	30	24	27	22	30	24	28	23													

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	52	53	53	59	59	52	52	53	53	59	59	52	51	53	53	59
2		52	48	53	53	59	58	52	46	53	53	59	55	52	44	53	53	59	53
3		50	40	53	45	52	42	48	38	53	43	50	40	46	37	51	41	48	39
80	1	49	49	49	49	56	56	49	49	49	49	56	56	49	49	49	49	56	56
	2	49	48	49	49	56	56	49	46	49	49	56	55	49	44	49	49	56	53
	3	49	40	49	45	52	42	48	38	49	43	50	40	46	37	49	41	48	39
90	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	46	47	47	53	53	46	46	47	47	53	53	46	44	47	47	53	53
	3	46	40	47	45	52	42	46	38	47	43	50	40	46	37	47	41	48	39
Wind Speed [mph]		110						115											
70	1	52	49	53	53	59	56	52	47	53	53	59	54						
	2	52	42	53	51	59	51	50	40	53	49	59	49						
	3	44	35	49	39	46	37	42	34	47	38	44	36						
80	1	49	49	49	49	56	56	49	47	49	49	56	54						
	2	49	42	49	49	56	51	49	40	49	49	56	49						
	3	44	35	49	39	46	37	42	34	47	38	44	36						
90	1	46	46	47	47	53	53	46	46	47	47	53	53						
	2	46	42	47	47	53	51	46	40	47	47	53	49						
	3	44	35	47	39	46	37	42	34	47	38	44	36						
Wind Speed [mph]		120						130											
70	1	52	45	53	53	59	52	52	47	53	53	59	54						
	2	48	39	53	47	58	47	50	40	53	49	59	49						
	3	40	33	45	36	42	34	42	34	47	38	44	36						
80	1	49	45	49	49	56	52	49	47	49	49	56	54						
	2	48	39	49	47	56	47	49	40	49	49	56	49						
	3	40	33	45	36	42	34	42	34	47	38	44	36						
90	1	46	45	47	47	53	52	46	46	47	47	53	53						
	2	46	39	47	47	53	47	46	40	47	47	53	49						
	3	40	33	45	36	42	34	42	34	47	38	44	36						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : C

Wind Speed [mph]	140						150						160												
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																		
	70	1	52	44	53	53	59	50	50	41	53	51	58	47	47	38	53	48	54	44					
2		46	37	53	45	56	45	43	35	52	42	52	42	40	32	48	39	48	39						
3		39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29						
80	1	49	44	49	49	56	50	49	41	49	49	56	47	47	38	49	48	54	44						
	2	46	37	49	45	56	45	43	35	49	42	52	42	40	32	48	39	48	39						
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29						
90	1	46	44	47	47	53	50	46	41	47	47	53	47	46	38	47	47	53	44						
	2	46	37	47	45	53	45	43	35	47	42	52	42	40	32	47	39	48	39						
	3	39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29						
Wind Speed [mph]	170						180																		
70	1	44	36	53	45	51	41	41	34	52	42	48	39	35	29	43	35	43	35						
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25						
	3	32	26	35	29	33	27	30	24	33	27	31	25	41	34	49	42	48	39						
80	1	44	36	49	45	51	41	41	34	49	42	48	39	35	29	43	35	43	35						
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25						
	3	32	26	35	29	33	27	30	24	33	27	31	25	41	34	47	42	48	39						
90	1	44	36	47	45	51	41	41	34	47	42	48	39	35	29	43	35	43	35						
	2	38	30	45	37	45	37	35	29	43	35	43	35	30	24	33	27	31	25						
	3	32	26	35	29	33	27	30	24	33	27	31	25	Wind Speed [mph]	190						200				
70	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31						
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23						
	3	28	23	31	25	30	24	27	22	30	24	28	23	37	30	47	38	43	35						
80	1	39	32	49	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31						
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23						
	3	28	23	31	25	30	24	27	22	30	24	28	23	37	30	47	38	43	35						
90	1	39	32	47	40	45	36	37	30	47	38	43	35	32	26	38	31	38	31						
	2	33	27	40	33	40	33	32	26	38	31	38	31	27	22	30	24	28	23						
	3	28	23	31	25	30	24	27	22	30	24	28	23												

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50
2		44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50
3		44	40	44	44	50	42	44	38	44	43	50	40	44	37	44	41	48	39
Wind Speed [mph]		110						115											
100	1	44	44	44	44	50	50	44	44	44	44	50	50						
	2	44	42	44	44	50	50	44	40	44	44	50	49						
	3	44	35	44	39	46	37	42	34	44	38	44	36						
Wind Speed [mph]		120						130											
100	1	44	44	44	44	50	50	44	44	44	44	50	50						
	2	44	39	44	44	50	47	44	40	44	44	50	49						
	3	40	33	44	36	42	34	42	34	44	38	44	36						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)

$a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ =Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	44	44	44	44	50	50	44	41	44	44	50	47	44	38	44	44	50
2		44	37	44	44	50	45	43	35	44	42	50	42	40	32	44	39	48	39
3		39	31	43	35	41	33	36	29	40	33	38	31	34	27	38	30	35	29
Wind Speed [mph]		170						180											
100	1	44	36	44	44	50	41	41	34	44	42	48	39						
	2	38	30	44	37	45	37	35	29	43	35	43	35						
	3	32	26	35	29	33	27	30	24	33	27	31	25						
Wind Speed [mph]		190						200											
100	1	39	32	44	40	45	36	37	30	44	38	43	35						
	2	33	27	40	33	40	33	32	26	38	31	38	31						
	3	28	23	31	25	30	24	27	22	30	24	28	23						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : D

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
0	1	65	52	78	66	73	60	62	50	75	63	71	57	59	48	73	60	68	55
	2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
5	1	65	52	78	66	73	60	62	50	75	63	71	57	59	48	73	60	68	55
	2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
10	1	65	52	76	66	73	60	62	50	75	63	71	57	59	48	73	60	68	55
	2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
Wind Speed [mph]	110						115												
	1	57	46	71	57	65	52	54	44	69	55	62	50						
	2	48	39	58	47	58	47	46	37	56	45	56	45						
0	3	41	33	45	37	43	35	39	32	43	35	41	33						
	1	57	46	71	57	65	52	54	44	69	55	62	50						
	2	48	39	58	47	58	47	46	37	56	45	56	45						
5	3	41	33	45	37	43	35	39	32	43	35	41	33						
	1	57	46	71	57	65	52	54	44	69	55	62	50						
	2	48	39	58	47	58	47	46	37	56	45	56	45						
10	3	41	33	45	37	43	35	39	32	43	35	41	33						
	1	57	46	71	57	65	52	54	44	69	55	62	50						
	2	48	39	58	47	58	47	46	37	56	45	56	45						
Wind Speed [mph]	120						130												
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
0	3	37	30	42	34	39	32	39	32	43	35	41	33						
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
5	3	37	30	42	34	39	32	39	32	43	35	41	33						
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
10	3	37	30	42	34	39	32	39	32	43	35	41	33						
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
Wind Speed [mph]	120						130												
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
0	3	37	30	42	34	39	32	39	32	43	35	41	33						
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
5	3	37	30	42	34	39	32	39	32	43	35	41	33						
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
10	3	37	30	42	34	39	32	39	32	43	35	41	33						
	1	52	42	66	53	60	48	54	44	69	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : D

Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	0	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50
2		43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
3		36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
5	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
10	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
Wind Speed [mph]	170						180												
0	1	41	33	51	42	47	38	39	31	48	39	44	36	33	27	40	32	40	32
	2	35	28	42	34	42	34	33	27	40	32	40	32	28	23	31	25	29	24
	3	29	24	33	27	31	25	28	23	31	25	29	24	39	31	48	39	44	36
5	1	41	33	51	42	47	38	39	31	48	39	44	36	33	27	40	32	40	32
	2	35	28	42	34	42	34	33	27	40	32	40	32	28	23	31	25	29	24
	3	29	24	33	27	31	25	28	23	31	25	29	24	39	31	48	39	44	36
10	1	41	33	51	42	47	38	39	31	48	39	44	36	33	27	40	32	40	32
	2	35	28	42	34	42	34	33	27	40	32	40	32	28	23	31	25	29	24
	3	29	24	33	27	31	25	28	23	31	25	29	24	39	31	48	39	44	36
Wind Speed [mph]	190						200												
0	1	36	30	46	37	42	34	35	28	43	35	40	32	30	24	36	29	36	29
	2	31	25	38	30	38	30	30	24	36	29	36	29	25	20	28	22	26	21
	3	26	21	29	24	28	22	25	20	28	22	26	21	35	28	43	35	40	32
5	1	36	30	46	37	42	34	35	28	43	35	40	32	30	24	36	29	36	29
	2	31	25	38	30	38	30	30	24	36	29	36	29	25	20	28	22	26	21
	3	26	21	29	24	28	22	25	20	28	22	26	21	35	28	43	35	40	32
10	1	36	30	46	37	42	34	35	28	43	35	40	32	30	24	36	29	36	29
	2	31	25	38	30	38	30	30	24	36	29	36	29	25	20	28	22	26	21
	3	26	21	29	24	28	22	25	20	28	22	26	21	35	28	43	35	40	32

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : D

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
15	1	65	52	72	66	73	60	62	50	72	63	71	57	59	48	72	60	68	55
	2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
20	1	65	52	69	66	73	60	62	50	69	63	71	57	59	48	69	60	68	55
	2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
25	1	65	52	69	66	73	60	62	50	69	63	71	57	59	48	69	60	68	55
	2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
15	1	57	46	71	57	65	52	54	44	69	55	62	50	54	44	69	55	62	50
	2	48	39	58	47	58	47	46	37	56	45	56	45	46	37	56	45	56	45
	3	41	33	45	37	43	35	39	32	43	35	41	33	39	32	43	35	41	33
20	1	57	46	69	57	65	52	54	44	69	55	62	50	54	44	69	55	62	50
	2	48	39	58	47	58	47	46	37	56	45	56	45	46	37	56	45	56	45
	3	41	33	45	37	43	35	39	32	43	35	41	33	39	32	43	35	41	33
25	1	57	46	69	57	65	52	54	44	69	55	62	50	54	44	69	55	62	50
	2	48	39	58	47	58	47	46	37	56	45	56	45	46	37	56	45	56	45
	3	41	33	45	37	43	35	39	32	43	35	41	33	39	32	43	35	41	33
15	1	52	42	66	53	60	48	54	44	69	55	62	50	54	44	69	55	62	50
	2	44	36	54	43	54	43	46	37	56	45	56	45	46	37	56	45	56	45
	3	37	30	42	34	39	32	39	32	43	35	41	33	39	32	43	35	41	33
20	1	52	42	66	53	60	48	54	44	69	55	62	50	54	44	69	55	62	50
	2	44	36	54	43	54	43	46	37	56	45	56	45	46	37	56	45	56	45
	3	37	30	42	34	39	32	39	32	43	35	41	33	39	32	43	35	41	33
25	1	52	42	66	53	60	48	54	44	69	55	62	50	54	44	69	55	62	50
	2	44	36	54	43	54	43	46	37	56	45	56	45	46	37	56	45	56	45
	3	37	30	42	34	39	32	39	32	43	35	41	33	39	32	43	35	41	33

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : D

Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	15	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50
2		43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
3		36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
20	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
25	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
15	170						180												
	1	41	33	51	42	47	38	39	31	48	39	44	36						
	2	35	28	42	34	42	34	33	27	40	32	40	32						
20	3	29	24	33	27	31	25	28	23	31	25	29	24						
	1	41	33	51	42	47	38	39	31	48	39	44	36						
	2	35	28	42	34	42	34	33	27	40	32	40	32						
25	3	29	24	33	27	31	25	28	23	31	25	29	24						
	1	41	33	51	42	47	38	39	31	48	39	44	36						
	2	35	28	42	34	42	34	33	27	40	32	40	32						
15	190						200												
	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
20	3	26	21	29	24	28	22	25	20	28	22	26	21						
	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
25	3	26	21	29	24	28	22	25	20	28	22	26	21						
	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
15	190						200												
	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
20	3	26	21	29	24	28	22	25	20	28	22	26	21						
	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
25	3	26	21	29	24	28	22	25	20	28	22	26	21						
	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : D

Ground Snow	Panal Angle	95						100						105						
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
		Group	Array Interior	Array Edge																
30	30	1	65	52	69	66	72	60	62	50	69	63	71	57	59	48	69	60	68	55
		2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
		3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
	35	1	65	52	67	66	71	60	62	50	67	63	71	57	59	48	67	60	68	55
		2	55	45	67	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
		3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
	40	1	65	52	65	65	69	60	62	50	65	63	69	57	59	48	65	60	68	55
		2	55	45	65	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
		3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
30	30	1	57	46	69	57	65	52	54	44	69	55	62	50	57	46	69	57	65	52
		2	48	39	58	47	58	47	46	37	56	45	56	45	48	39	58	47	58	47
		3	41	33	45	37	43	35	39	32	43	35	41	33	41	33	45	37	43	35
	35	1	57	46	67	57	65	52	54	44	67	55	62	50	57	46	67	57	65	52
		2	48	39	58	47	58	47	46	37	56	45	56	45	48	39	58	47	58	47
		3	41	33	45	37	43	35	39	32	43	35	41	33	41	33	45	37	43	35
	40	1	57	46	65	57	65	52	54	44	65	55	62	50	57	46	65	57	65	52
		2	48	39	58	47	58	47	46	37	56	45	56	45	48	39	58	47	58	47
		3	41	33	45	37	43	35	39	32	43	35	41	33	41	33	45	37	43	35
30	30	1	52	42	66	53	60	48	54	44	69	55	62	50	52	42	66	53	60	48
		2	44	36	54	43	54	43	46	37	56	45	56	45	44	36	54	43	54	43
		3	37	30	42	34	39	32	39	32	43	35	41	33	37	30	42	34	39	32
	35	1	52	42	66	53	60	48	54	44	67	55	62	50	52	42	66	53	60	48
		2	44	36	54	43	54	43	46	37	56	45	56	45	44	36	54	43	54	43
		3	37	30	42	34	39	32	39	32	43	35	41	33	37	30	42	34	39	32
	40	1	52	42	65	53	60	48	54	44	65	55	62	50	52	42	65	53	60	48
		2	44	36	54	43	54	43	46	37	56	45	56	45	44	36	54	43	54	43
		3	37	30	42	34	39	32	39	32	43	35	41	33	37	30	42	34	39	32

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : D

Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	30	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50
2		43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
3		36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
35	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
40	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
30	170						180												
	1	41	33	51	42	47	38	39	31	48	39	44	36						
	2	35	28	42	34	42	34	33	27	40	32	40	32						
35	1	41	33	51	42	47	38	39	31	48	39	44	36						
	2	35	28	42	34	42	34	33	27	40	32	40	32						
	3	29	24	33	27	31	25	28	23	31	25	29	24						
40	1	41	33	51	42	47	38	39	31	48	39	44	36						
	2	35	28	42	34	42	34	33	27	40	32	40	32						
	3	29	24	33	27	31	25	28	23	31	25	29	24						
30	190						200												
	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
35	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
	3	26	21	29	24	28	22	25	20	28	22	26	21						
40	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
	3	26	21	29	24	28	22	25	20	28	22	26	21						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	45	1	64	52	64	64	68	60	62	50	64	63	68	57	59	48	64	60	68
2		55	45	64	54	67	54	53	43	64	51	64	51	50	41	61	49	61	49
3		46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
50	1	62	52	63	63	66	60	62	50	63	63	66	57	59	48	63	60	66	55
	2	55	45	63	54	66	54	53	43	63	51	64	51	50	41	61	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
60	1	59	52	59	59	64	60	59	50	59	59	64	57	59	48	59	59	64	55
	2	55	45	59	54	64	54	53	43	59	51	64	51	50	41	59	49	61	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
45	1	57	46	64	57	65	52	54	44	64	55	62	50	57	46	64	57	65	52
	2	48	39	58	47	58	47	46	37	56	45	56	45	48	39	58	47	58	47
	3	41	33	45	37	43	35	39	32	43	35	41	33	41	33	45	37	43	35
50	1	57	46	63	57	65	52	54	44	63	55	62	50	57	46	63	57	65	52
	2	48	39	58	47	58	47	46	37	56	45	56	45	48	39	58	47	58	47
	3	41	33	45	37	43	35	39	32	43	35	41	33	41	33	45	37	43	35
60	1	57	46	59	57	64	52	54	44	59	55	62	50	57	46	59	57	64	52
	2	48	39	58	47	58	47	46	37	56	45	56	45	48	39	58	47	58	47
	3	41	33	45	37	43	35	39	32	43	35	41	33	41	33	45	37	43	35
45	1	52	42	64	53	60	48	54	44	64	55	62	50	52	42	64	53	60	48
	2	44	36	54	43	54	43	46	37	56	45	56	45	44	36	54	43	54	43
	3	37	30	42	34	39	32	39	32	43	35	41	33	37	30	42	34	39	32
50	1	52	42	63	53	60	48	54	44	63	55	62	50	52	42	63	53	60	48
	2	44	36	54	43	54	43	46	37	56	45	56	45	44	36	54	43	54	43
	3	37	30	42	34	39	32	39	32	43	35	41	33	37	30	42	34	39	32
60	1	52	42	59	53	60	48	54	44	59	55	62	50	52	42	59	53	60	48
	2	44	36	54	43	54	43	46	37	56	45	56	45	44	36	54	43	54	43
	3	37	30	42	34	39	32	39	32	43	35	41	33	37	30	42	34	39	32

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Span, inches

Exposure Category : D

Ground Snow	140							150							160						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
	Group	Array Interior	Array Edge																		
45	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40		
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36		
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27		
50	1	50	41	63	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40		
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36		
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27		
60	1	50	41	59	51	58	47	47	38	59	47	54	43	44	35	55	44	50	40		
	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36		
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27		
170							180														
45	1	41	33	51	42	47	38	39	31	48	39	44	36								
	2	35	28	42	34	42	34	33	27	40	32	40	32								
	3	29	24	33	27	31	25	28	23	31	25	29	24								
50	1	41	33	51	42	47	38	39	31	48	39	44	36								
	2	35	28	42	34	42	34	33	27	40	32	40	32								
	3	29	24	33	27	31	25	28	23	31	25	29	24								
60	1	41	33	51	42	47	38	39	31	48	39	44	36								
	2	35	28	42	34	42	34	33	27	40	32	40	32								
	3	29	24	33	27	31	25	28	23	31	25	29	24								
190							200														
45	1	36	30	46	37	42	34	35	28	43	35	40	32								
	2	31	25	38	30	38	30	30	24	36	29	36	29								
	3	26	21	29	24	28	22	25	20	28	22	26	21								
50	1	36	30	46	37	42	34	35	28	43	35	40	32								
	2	31	25	38	30	38	30	30	24	36	29	36	29								
	3	26	21	29	24	28	22	25	20	28	22	26	21								
60	1	36	30	46	37	42	34	35	28	43	35	40	32								
	2	31	25	38	30	38	30	30	24	36	29	36	29								
	3	26	21	29	24	28	22	25	20	28	22	26	21								

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	55	52	56	56	62	60	55	50	56	56	62	57	55	48	56	56	62
2		55	45	56	54	62	54	53	43	56	51	62	51	50	41	56	49	61	49
3		46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
80	1	52	52	52	52	59	59	52	50	52	52	59	57	52	48	52	52	59	55
	2	52	45	52	52	59	54	52	43	52	51	59	51	50	41	52	49	59	49
	3	46	38	52	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
90	1	49	49	49	49	56	56	49	49	49	49	56	56	49	48	49	49	56	55
	2	49	45	49	49	56	54	49	43	49	49	56	51	49	41	49	49	56	49
	3	46	38	49	42	49	39	44	36	49	40	46	38	42	34	47	38	44	36
70	1	55	46	56	56	62	52	54	44	56	55	62	50						
	2	48	39	56	47	58	47	46	37	56	45	56	45						
	3	41	33	45	37	43	35	39	32	43	35	41	33						
80	1	52	46	52	52	59	52	52	44	52	52	59	50						
	2	48	39	52	47	58	47	46	37	52	45	56	45						
	3	41	33	45	37	43	35	39	32	43	35	41	33						
90	1	49	46	49	49	56	52	49	44	49	49	56	50						
	2	48	39	49	47	56	47	46	37	49	45	56	45						
	3	41	33	45	37	43	35	39	32	43	35	41	33						
70	1	52	42	56	53	60	48	54	44	56	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
	3	37	30	42	34	39	32	39	32	43	35	41	33						
80	1	52	42	52	52	59	48	52	44	52	52	59	50						
	2	44	36	52	43	54	43	46	37	52	45	56	45						
	3	37	30	42	34	39	32	39	32	43	35	41	33						
90	1	49	42	49	49	56	48	49	44	49	49	56	50						
	2	44	36	49	43	54	43	46	37	49	45	56	45						
	3	37	30	42	34	39	32	39	32	43	35	41	33						
70	1	52	42	56	53	60	48	54	44	56	55	62	50						
	2	44	36	54	43	54	43	46	37	56	45	56	45						
	3	37	30	42	34	39	32	39	32	43	35	41	33						
80	1	52	42	52	52	59	48	52	44	52	52	59	50						
	2	44	36	52	43	54	43	46	37	52	45	56	45						
	3	37	30	42	34	39	32	39	32	43	35	41	33						
90	1	49	42	49	49	56	48	49	44	49	49	56	50						
	2	44	36	49	43	54	43	46	37	49	45	56	45						
	3	37	30	42	34	39	32	39	32	43	35	41	33						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]	140						150						160						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
	1	50	41	56	51	58	47	47	38	56	47	54	43	44	35	55	44	50	40
70	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
	1	50	41	52	51	58	47	47	38	52	47	54	43	44	35	52	44	50	40
80	2	43	35	52	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
	1	49	41	49	49	56	47	47	38	49	47	54	43	44	35	49	44	50	40
90	2	43	35	49	42	52	42	40	32	48	39	48	39	37	30	45	36	45	36
	3	36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
	1	41	33	51	42	47	38	39	31	48	39	44	36	39	31	48	39	44	36
70	2	35	28	42	34	42	34	33	27	40	32	40	32	33	27	40	32	40	32
	3	29	24	33	27	31	25	28	23	31	25	29	24	28	23	31	25	29	24
	1	41	33	51	42	47	38	39	31	48	39	44	36	39	31	48	39	44	36
80	2	35	28	42	34	42	34	33	27	40	32	40	32	33	27	40	32	40	32
	3	29	24	33	27	31	25	28	23	31	25	29	24	28	23	31	25	29	24
	1	41	33	49	42	47	38	39	31	48	39	44	36	39	31	48	39	44	36
90	2	35	28	42	34	42	34	33	27	40	32	40	32	33	27	40	32	40	32
	3	29	24	33	27	31	25	28	23	31	25	29	24	28	23	31	25	29	24
	1	36	30	46	37	42	34	35	28	43	35	40	32	35	28	43	35	40	32
70	2	31	25	38	30	38	30	30	24	36	29	36	29	30	24	36	29	36	29
	3	26	21	29	24	28	22	25	20	28	22	26	21	25	20	28	22	26	21
	1	36	30	46	37	42	34	35	28	43	35	40	32	35	28	43	35	40	32
80	2	31	25	38	30	38	30	30	24	36	29	36	29	30	24	36	29	36	29
	3	26	21	29	24	28	22	25	20	28	22	26	21	25	20	28	22	26	21
	1	36	30	46	37	42	34	35	28	43	35	40	32	35	28	43	35	40	32
90	2	31	25	38	30	38	30	30	24	36	29	36	29	30	24	36	29	36	29
	3	26	21	29	24	28	22	25	20	28	22	26	21	25	20	28	22	26	21

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																	
	100	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
	2	46	45	47	47	53	53	46	43	47	47	53	51	46	41	47	47	53	49	
	3	46	38	47	42	49	39	44	36	47	40	46	38	42	34	47	38	44	36	
Wind Speed [mph]		110				115				120				130						
Exposure Category : D	100	1	46	46	47	47	53	52	46	44	47	47	53	50						
	2	46	39	47	47	53	47	46	37	47	45	53	45							
	3	41	33	45	37	43	35	39	32	43	35	41	33							
	0	1																		
	2																			
	3																			
	0	1																		
	2																			
	3																			
	100	1	46	42	47	47	53	48	46	44	47	47	53	50						
2	44	36	47	43	53	43	46	37	47	45	53	45								
3	37	30	42	34	39	32	39	32	43	35	41	33								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	46	41	47	47	53	47	46	38	47	47	53	43	44	35	47	44	50
2		43	35	47	42	52	42	40	32	47	39	48	39	37	30	45	36	45	36
3		36	29	40	33	38	31	34	27	37	30	35	29	31	25	35	28	33	27
Wind Speed [mph]		170						180											
100	1	41	33	47	42	47	38	39	31	47	39	44	36						
	2	35	28	42	34	42	34	33	27	40	32	40	32						
	3	29	24	33	27	31	25	28	23	31	25	29	24						
Wind Speed [mph]		190						200											
100	1	36	30	46	37	42	34	35	28	43	35	40	32						
	2	31	25	38	30	38	30	30	24	36	29	36	29						
	3	26	21	29	24	28	22	25	20	28	22	26	21						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	71	57	78	71	78	66	68	54	78	69	75	62	65	52	78	66	73
2		60	48	72	59	72	59	57	46	70	56	70	56	55	44	67	54	66	53
3		50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
5	1	71	57	78	71	78	66	68	54	78	69	75	62	65	52	78	66	73	60
	2	60	48	72	59	72	59	57	46	70	56	70	56	55	44	67	54	66	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
10	1	71	57	73	71	78	66	68	54	73	69	75	62	65	52	73	66	73	60
	2	60	48	72	59	72	59	57	46	70	56	70	56	55	44	67	54	66	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
0	1	62	50	75	63	71	57	59	48	73	60	68	55	53	42	64	51	64	51
	2	53	42	64	51	64	51	50	41	61	49	61	49	44	36	49	40	46	37
	3	44	36	49	40	46	37	42	34	47	38	44	36	44	36	49	40	46	37
5	1	62	50	75	63	71	57	59	48	73	60	68	55	53	42	64	51	64	51
	2	53	42	64	51	64	51	50	41	61	49	61	49	44	36	49	40	46	37
	3	44	36	49	40	46	37	42	34	47	38	44	36	44	36	49	40	46	37
10	1	62	50	73	63	71	57	59	48	73	60	68	55	53	42	64	51	64	51
	2	53	42	64	51	64	51	50	41	61	49	61	49	44	36	49	40	46	37
	3	44	36	49	40	46	37	42	34	47	38	44	36	44	36	49	40	46	37
0	1	57	46	71	58	65	53	59	48	73	60	68	55	48	39	59	47	58	47
	2	48	39	59	47	58	47	50	41	61	49	61	49	41	33	45	37	43	35
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36
5	1	57	46	71	58	65	53	59	48	73	60	68	55	48	39	59	47	58	47
	2	48	39	59	47	58	47	50	41	61	49	61	49	41	33	45	37	43	35
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36
10	1	57	46	71	58	65	53	59	48	73	60	68	55	48	39	59	47	58	47
	2	48	39	59	47	58	47	50	41	61	49	61	49	41	33	45	37	43	35
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	55	44	69	56	63	51	51	41	64	52	58	47	47	38	60	48	54
2		47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
3		39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
5	1	55	44	69	56	63	51	51	41	64	52	58	47	47	38	60	48	54	44
	2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
10	1	55	44	69	56	63	51	51	41	64	52	58	47	47	38	60	48	54	44
	2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
Wind Speed [mph]		170						180											
0	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
5	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
10	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
Wind Speed [mph]		190						200											
0	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
5	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
10	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	69	57	69	69	75	66	68	54	69	69	75	62	65	52	69	66	73
2		60	48	69	59	72	59	57	46	69	56	70	56	55	44	67	54	66	53
3		50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
20	1	66	57	66	66	72	66	66	54	66	66	72	62	65	52	66	66	72	60
	2	60	48	66	59	72	59	57	46	66	56	70	56	55	44	66	54	66	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
25	1	66	57	66	66	70	66	66	54	66	66	70	62	65	52	66	66	70	60
	2	60	48	66	59	70	59	57	46	66	56	70	56	55	44	66	54	66	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
15	1	62	50	69	63	71	57	59	48	69	60	68	55	59	48	69	60	68	55
	2	53	42	64	51	64	51	50	41	61	49	61	49	50	41	61	49	61	49
	3	44	36	49	40	46	37	42	34	47	38	44	36	42	34	47	38	44	36
20	1	62	50	66	63	71	57	59	48	66	60	68	55	59	48	66	60	68	55
	2	53	42	64	51	64	51	50	41	61	49	61	49	50	41	61	49	61	49
	3	44	36	49	40	46	37	42	34	47	38	44	36	42	34	47	38	44	36
25	1	62	50	66	63	70	57	59	48	66	60	68	55	59	48	66	60	68	55
	2	53	42	64	51	64	51	50	41	61	49	61	49	50	41	61	49	61	49
	3	44	36	49	40	46	37	42	34	47	38	44	36	42	34	47	38	44	36
15	1	57	46	69	58	65	53	59	48	69	60	68	55	59	48	69	60	68	55
	2	48	39	59	47	58	47	50	41	61	49	61	49	50	41	61	49	61	49
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36
20	1	57	46	66	58	65	53	59	48	66	60	68	55	59	48	66	60	68	55
	2	48	39	59	47	58	47	50	41	61	49	61	49	50	41	61	49	61	49
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36
25	1	57	46	66	58	65	53	59	48	66	60	68	55	59	48	66	60	68	55
	2	48	39	59	47	58	47	50	41	61	49	61	49	50	41	61	49	61	49
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	55	44	69	56	63	51	51	41	64	52	58	47	47	38	60	48	54
2		47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
3		39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
20	1	55	44	66	56	63	51	51	41	64	52	58	47	47	38	60	48	54	44
	2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
25	1	55	44	66	56	63	51	51	41	64	52	58	47	47	38	60	48	54	44
	2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
Wind Speed [mph]		170						180											
15	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
20	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
25	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
Wind Speed [mph]		190						200											
15	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
20	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
25	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Span, inches

Exposure Category : B

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
30	1	65	57	65	65	68	66	65	54	65	65	68	62	65	52	65	65	68	60
	2	60	48	65	59	68	59	57	46	65	56	68	56	55	44	65	54	66	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
35	1	63	57	63	63	67	66	63	54	63	63	67	62	63	52	63	63	67	60
	2	60	48	63	59	67	59	57	46	63	56	67	56	55	44	63	54	66	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
40	1	61	57	61	61	65	65	61	54	61	61	65	62	61	52	61	61	65	60
	2	60	48	61	59	65	59	57	46	61	56	65	56	55	44	61	54	65	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
30	110						115												
	1	62	50	65	63	68	57	59	48	65	60	68	55						
	2	53	42	64	51	64	51	50	41	61	49	61	49						
35	1	62	50	63	63	67	57	59	48	63	60	67	55						
	2	53	42	63	51	64	51	50	41	61	49	61	49						
	3	44	36	49	40	46	37	42	34	47	38	44	36						
40	1	61	50	61	61	65	57	59	48	61	60	65	55						
	2	53	42	61	51	64	51	50	41	61	49	61	49						
	3	44	36	49	40	46	37	42	34	47	38	44	36						
30	120						130												
	1	57	46	65	58	65	53	59	48	65	60	68	55						
	2	48	39	59	47	58	47	50	41	61	49	61	49						
35	1	57	46	63	58	65	53	59	48	63	60	67	55						
	2	48	39	59	47	58	47	50	41	61	49	61	49						
	3	41	33	45	37	43	35	42	34	47	38	44	36						
40	1	57	46	61	58	65	53	59	48	61	60	65	55						
	2	48	39	59	47	58	47	50	41	61	49	61	49						
	3	41	33	45	37	43	35	42	34	47	38	44	36						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																	
	30	1	55	44	65	56	63	51	51	41	64	52	58	47	47	38	60	48	54	44
2		47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39	
3		39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29	
35		1	55	44	63	56	63	51	51	41	63	52	58	47	47	38	60	48	54	44
		2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
		3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
40		1	55	44	61	56	63	51	51	41	61	52	58	47	47	38	60	48	54	44
		2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
		3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
30	Wind Speed [mph]		170						180											
	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39	
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35	
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26	
	35	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
		2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
		3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
	40	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
		2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
3		32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26	
30	Wind Speed [mph]		190						200											
	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35	
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31	
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23	
	35	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
		2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
		3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
	40	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
		2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
3		28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23	

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	59	57	59	59	64	64	59	54	59	59	64	62	59	52	59	59	64
2		59	48	59	59	64	59	57	46	59	56	64	56	55	44	59	54	64	53
3		50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
50	1	57	57	57	57	62	62	57	54	57	57	62	62	57	52	57	57	62	60
	2	57	48	57	57	62	59	57	46	57	56	62	56	55	44	57	54	62	53
	3	50	41	56	45	53	43	48	39	54	43	51	41	46	37	51	41	48	39
60	1	53	53	53	53	59	59	53	53	53	53	59	59	53	52	53	53	59	59
	2	53	48	53	53	59	59	53	46	53	53	59	56	53	44	53	53	59	53
	3	50	41	53	45	53	43	48	39	53	43	51	41	46	37	51	41	48	39
Wind Speed [mph]		110						115											
45	1	59	50	59	59	64	57	59	48	59	59	64	55	59	48	59	59	64	55
	2	53	42	59	51	64	51	50	41	59	49	61	49	50	41	57	49	61	49
	3	44	36	49	40	46	37	42	34	47	38	44	36	42	34	47	38	44	36
50	1	57	50	57	57	62	57	57	48	57	57	62	55	57	48	57	57	62	55
	2	53	42	57	51	62	51	50	41	57	49	61	49	50	41	57	49	61	49
	3	44	36	49	40	46	37	42	34	47	38	44	36	42	34	47	38	44	36
60	1	53	50	53	53	59	57	53	48	53	53	59	55	53	48	53	53	59	55
	2	53	42	53	51	59	51	50	41	53	49	59	49	50	41	53	49	59	49
	3	44	36	49	40	46	37	42	34	47	38	44	36	42	34	47	38	44	36
Wind Speed [mph]		120						130											
45	1	57	46	59	58	64	53	59	48	59	59	64	55	59	48	59	59	64	55
	2	48	39	59	47	58	47	50	41	59	49	61	49	50	41	59	49	61	49
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36
50	1	57	46	57	57	62	53	57	48	57	57	62	55	57	48	57	57	62	55
	2	48	39	57	47	58	47	50	41	57	49	61	49	50	41	57	49	61	49
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36
60	1	53	46	53	53	59	53	53	48	53	53	59	55	53	48	53	53	59	55
	2	48	39	53	47	58	47	50	41	53	49	59	49	50	41	53	49	59	49
	3	41	33	45	37	43	35	42	34	47	38	44	36	42	34	47	38	44	36

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	55	44	59	56	63	51	51	41	59	52	58	47	47	38	59	48	54	44
45	2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
	1	55	44	57	56	62	51	51	41	57	52	58	47	47	38	57	48	54	44
50	2	47	38	56	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
	1	53	44	53	53	59	51	51	41	53	52	58	47	47	38	53	48	54	44
60	2	47	38	53	46	56	45	43	35	52	42	52	42	40	33	49	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
	Wind Speed [mph]																		
170																			
45	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
50	1	44	36	56	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
60	1	44	36	53	45	51	41	42	34	53	43	48	39	42	34	53	43	48	39
	2	38	31	46	37	46	37	36	29	43	35	43	35	36	29	43	35	43	35
	3	32	26	36	29	34	27	30	24	34	27	32	26	30	24	34	27	32	26
Wind Speed [mph]																			
180																			
190																			
45	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
50	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
60	1	40	32	50	40	45	37	38	30	47	38	43	35	38	30	47	38	43	35
	2	34	27	41	33	41	33	32	26	39	31	39	31	32	26	39	31	39	31
	3	28	23	32	26	30	24	27	22	30	24	28	23	27	22	30	24	28	23
Wind Speed [mph]																			
200																			

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Span, inches

Exposure Category : B

Wind Speed [mph]	95							100							105						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																		
70	1	49	49	50	50	56	56	49	49	50	50	56	56	49	49	50	50	56	56		
	2	49	48	50	50	56	56	49	46	50	50	56	56	49	44	50	50	56	53		
	3	49	41	50	45	53	43	48	39	50	43	51	41	46	37	50	41	48	39		
80	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53		
	2	46	46	47	47	53	53	46	46	47	47	53	53	46	44	47	47	53	53		
	3	46	41	47	45	53	43	46	39	47	43	51	41	46	37	47	41	48	39		
90	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50		
	2	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50		
	3	44	41	44	44	50	43	44	39	44	43	50	41	44	37	44	41	48	39		
Wind Speed [mph]		110							115												
70	1	49	49	50	50	56	56	49	48	50	50	56	55								
	2	49	42	50	50	56	51	49	41	50	49	56	49								
	3	44	36	49	40	46	37	42	34	47	38	44	36								
80	1	46	46	47	47	53	53	46	46	47	47	53	53								
	2	46	42	47	47	53	51	46	41	47	47	53	49								
	3	44	36	47	40	46	37	42	34	47	38	44	36								
90	1	44	44	44	44	50	50	44	44	44	44	50	50								
	2	44	42	44	44	50	50	44	41	44	44	50	49								
	3	44	36	44	40	46	37	42	34	44	38	44	36								
Wind Speed [mph]		120							130												
70	1	49	46	50	50	56	53	49	48	50	50	56	55								
	2	48	39	50	47	56	47	49	41	50	49	56	49								
	3	41	33	45	37	43	35	42	34	47	38	44	36								
80	1	46	46	47	47	53	53	46	46	47	47	53	53								
	2	46	39	47	47	53	47	46	41	47	47	53	49								
	3	41	33	45	37	43	35	42	34	47	38	44	36								
90	1	44	44	44	44	50	50	44	44	44	44	50	50								
	2	44	39	44	44	50	47	44	41	44	44	50	49								
	3	41	33	44	37	43	35	42	34	44	38	44	36								

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	49	44	50	50	56	51	49	41	50	50	56	47	47	38	50	48	54
2		47	38	50	46	56	45	43	35	50	42	52	42	40	33	49	40	49	39
3		39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
80	1	46	44	47	47	53	51	46	41	47	47	53	47	46	38	47	47	53	44
	2	46	38	47	46	53	45	43	35	47	42	52	42	40	33	47	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
90	1	44	44	44	44	50	50	44	41	44	44	50	47	44	38	44	44	50	44
	2	44	38	44	44	50	45	43	35	44	42	50	42	40	33	44	40	49	39
	3	39	32	44	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
70	1	44	36	50	45	51	41	42	34	50	43	48	39	42	31	46	37	46	37
	2	38	31	46	37	46	37	36	29	43	35	43	35	30	24	34	27	30	26
	3	32	26	36	29	34	27	30	24	34	27	32	26	42	34	47	43	48	39
80	1	44	36	47	45	51	41	42	34	47	43	48	39	36	29	43	35	43	35
	2	38	31	46	37	46	37	36	29	43	35	43	35	30	24	34	27	30	26
	3	32	26	36	29	34	27	42	34	44	43	48	39	36	29	43	35	43	35
90	1	44	36	44	44	50	41	42	34	44	43	48	39	30	24	34	27	30	26
	2	38	31	44	37	46	37	36	29	43	35	43	35	42	34	44	43	48	39
	3	32	26	36	29	34	27	30	24	34	27	32	26	36	29	34	27	30	26
70	1	40	32	50	40	45	37	38	30	47	38	43	35	32	26	39	31	39	31
	2	34	27	41	33	41	33	32	26	39	31	39	31	27	22	30	24	28	23
	3	28	23	32	26	30	24	38	30	47	38	43	35	32	26	39	31	39	31
80	1	40	32	47	40	45	37	32	26	39	31	39	31	27	22	30	24	28	23
	2	34	27	41	33	41	33	38	30	47	38	43	35	32	26	39	31	39	31
	3	28	23	32	26	30	24	32	26	39	31	39	31	27	22	30	24	28	23
90	1	40	32	44	40	45	37	38	30	44	38	43	35	32	26	39	31	39	31
	2	34	27	41	33	41	33	32	26	39	31	39	31	27	22	30	24	28	23
	3	28	23	32	26	30	24	38	30	44	38	43	35	32	26	39	31	39	31

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	41	41	42	42	48	48	41	41	42	42	48	48	41	41	42	42	48
2		41	41	42	42	48	48	41	41	42	42	48	48	41	41	42	42	48	48
3		41	41	42	42	48	43	41	39	42	42	48	41	41	37	42	41	48	39
Wind Speed [mph]		110				115													
100	1	41	41	42	42	48	48	41	41	42	42	48	48	41	41	42	42	48	48
	2	41	41	42	42	48	48	41	41	42	42	48	48	41	41	42	42	48	48
	3	41	36	42	40	46	37	41	34	42	38	44	36	41	34	42	38	44	36
Wind Speed [mph]		120				130													
100	1	41	41	42	42	48	48	41	41	42	42	48	48	41	41	42	42	48	48
	2	41	39	42	42	48	47	41	41	42	42	48	48	41	41	42	42	48	48
	3	41	33	42	37	43	35	41	34	42	38	44	36	41	34	42	38	44	36

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	41	41	42	42	48	48	41	41	42	42	48	47	41	38	42	42	48
2		41	38	42	42	48	45	41	35	42	42	48	42	40	33	42	40	48	39
3		39	32	42	35	41	33	36	30	41	33	38	31	34	28	38	31	36	29
Wind Speed [mph]		170						180											
100	1	41	36	42	42	48	41	41	34	42	42	48	39						
	2	38	31	42	37	46	37	36	29	42	35	43	35						
	3	32	26	36	29	34	27	30	24	34	27	32	26						
Wind Speed [mph]		190						200											
100	1	40	32	42	40	45	37	38	30	42	38	43	35						
	2	34	27	41	33	41	33	32	26	39	31	39	31						
	3	28	23	32	26	30	24	27	22	30	24	28	23						

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	59	48	73	60	68	55	56	45	71	57	65	52	54	43	68	55	62
2		50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45
3		42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
5	1	59	48	73	60	68	55	56	45	71	57	65	52	54	43	68	55	62	50
	2	50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45
	3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
10	1	59	48	73	60	68	55	56	45	71	57	65	52	54	43	68	55	62	50
	2	50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45
	3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
0	1	52	42	65	52	59	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	53	43	53	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	41	33	39	31	35	29	40	32	37	30	35	29	40	32	37	30
5	1	52	42	65	52	59	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	53	43	53	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	41	33	39	31	35	29	40	32	37	30	35	29	40	32	37	30
10	1	52	42	65	52	59	48	49	40	62	50	57	46	49	40	62	50	57	46
	2	44	36	53	43	53	43	42	34	51	41	51	41	42	34	51	41	51	41
	3	37	30	41	33	39	31	35	29	40	32	37	30	35	29	40	32	37	30
0	1	48	38	60	48	55	44	49	40	62	50	57	46	49	40	62	50	57	46
	2	41	33	49	40	49	40	42	34	51	41	51	41	42	34	51	41	51	41
	3	34	28	38	31	36	29	35	29	40	32	37	30	35	29	40	32	37	30
5	1	48	38	60	48	55	44	49	40	62	50	57	46	49	40	62	50	57	46
	2	41	33	49	40	49	40	42	34	51	41	51	41	42	34	51	41	51	41
	3	34	28	38	31	36	29	35	29	40	32	37	30	35	29	40	32	37	30
10	1	48	38	60	48	55	44	49	40	62	50	57	46	49	40	62	50	57	46
	2	41	33	49	40	49	40	42	34	51	41	51	41	42	34	51	41	51	41
	3	34	28	38	31	36	29	35	29	40	32	37	30	35	29	40	32	37	30

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46
2		39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
3		33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
5	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37
	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
10	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37
	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
0	1	37	30	47	38	43	35	35	28	44	36	40	33	30	24	36	29	36	29
	2	32	26	38	31	38	31	30	24	36	29	36	29	25	21	28	23	27	22
	3	27	22	30	24	28	23	25	21	28	23	27	22	35	28	44	36	40	33
5	1	37	30	47	38	43	35	35	28	44	36	40	33	30	24	36	29	36	29
	2	32	26	38	31	38	31	30	24	36	29	36	29	25	21	28	23	27	22
	3	27	22	30	24	28	23	25	21	28	23	27	22	35	28	44	36	40	33
10	1	37	30	47	38	43	35	35	28	44	36	40	33	30	24	36	29	36	29
	2	32	26	38	31	38	31	30	24	36	29	36	29	25	21	28	23	27	22
	3	27	22	30	24	28	23	25	21	28	23	27	22	35	28	44	36	40	33
0	1	33	27	42	34	38	31	31	26	39	32	36	29	27	22	32	26	32	26
	2	28	23	34	28	34	28	27	22	32	26	32	26	23	18	25	20	24	19
	3	24	19	27	22	25	20	23	18	25	20	24	19	31	26	39	32	36	29
5	1	33	27	42	34	38	31	31	26	39	32	36	29	27	22	32	26	32	26
	2	28	23	34	28	34	28	27	22	32	26	32	26	23	18	25	20	24	19
	3	24	19	27	22	25	20	23	18	25	20	24	19	31	26	39	32	36	29
10	1	33	27	42	34	38	31	31	26	39	32	36	29	27	22	32	26	32	26
	2	28	23	34	28	34	28	27	22	32	26	32	26	23	18	25	20	24	19
	3	24	19	27	22	25	20	23	18	25	20	24	19	31	26	39	32	36	29

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	59	48	69	60	68	55	56	45	69	57	65	52	54	43	68	55	62
2		50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45
3		42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
20	1	59	48	66	60	68	55	56	45	66	57	65	52	54	43	66	55	62	50
	2	50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45
	3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
25	1	59	48	66	60	68	55	56	45	66	57	65	52	54	43	66	55	62	50
	2	50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45
	3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
Wind Speed [mph]		110						115											
15	1	52	42	65	52	59	48	49	40	62	50	57	46						
	2	44	36	53	43	53	43	42	34	51	41	51	41						
	3	37	30	41	33	39	31	35	29	40	32	37	30						
20	1	52	42	65	52	59	48	49	40	62	50	57	46						
	2	44	36	53	43	53	43	42	34	51	41	51	41						
	3	37	30	41	33	39	31	35	29	40	32	37	30						
25	1	52	42	65	52	59	48	49	40	62	50	57	46						
	2	44	36	53	43	53	43	42	34	51	41	51	41						
	3	37	30	41	33	39	31	35	29	40	32	37	30						
Wind Speed [mph]		120						130											
15	1	48	38	60	48	55	44	49	40	62	50	57	46						
	2	41	33	49	40	49	40	42	34	51	41	51	41						
	3	34	28	38	31	36	29	35	29	40	32	37	30						
20	1	48	38	60	48	55	44	49	40	62	50	57	46						
	2	41	33	49	40	49	40	42	34	51	41	51	41						
	3	34	28	38	31	36	29	35	29	40	32	37	30						
25	1	48	38	60	48	55	44	49	40	62	50	57	46						
	2	41	33	49	40	49	40	42	34	51	41	51	41						
	3	34	28	38	31	36	29	35	29	40	32	37	30						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]		140						150						160												
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
	15	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37						
2		39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33							
3		33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24							
20	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37							
	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33							
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24							
25	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37							
	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33							
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24							
Wind Speed [mph]		170						180																		
15	1	37	30	47	38	43	35	35	28	44	36	40	33	30	24	36	29	36	29							
	2	32	26	38	31	38	31	30	24	36	29	36	29	25	21	28	23	27	22							
	3	27	22	30	24	28	23	25	21	28	23	27	22	35	28	44	36	40	33							
20	1	37	30	47	38	43	35	35	28	44	36	40	33	30	24	36	29	36	29							
	2	32	26	38	31	38	31	30	24	36	29	36	29	25	21	28	23	27	22							
	3	27	22	30	24	28	23	25	21	28	23	27	22	35	28	44	36	40	33							
25	1	37	30	47	38	43	35	35	28	44	36	40	33	30	24	36	29	36	29							
	2	32	26	38	31	38	31	30	24	36	29	36	29	25	21	28	23	27	22							
	3	27	22	30	24	28	23	25	21	28	23	27	22	Wind Speed [mph]		190						200				
15	1	33	27	42	34	38	31	31	26	39	32	36	29	28	23	34	28	34	28							
	2	28	23	34	28	34	28	27	22	32	26	32	26	24	19	27	22	25	20							
	3	24	19	27	22	25	20	23	18	25	20	24	19	31	26	39	32	36	29							
20	1	33	27	42	34	38	31	31	26	39	32	36	29	27	22	32	26	32	26							
	2	28	23	34	28	34	28	27	22	32	26	32	26	23	18	25	20	24	19							
	3	24	19	27	22	25	20	23	18	25	20	24	19	31	26	39	32	36	29							
25	1	33	27	42	34	38	31	31	26	39	32	36	29	27	22	32	26	32	26							
	2	28	23	34	28	34	28	27	22	32	26	32	26	23	18	25	20	24	19							
	3	24	19	27	22	25	20	23	18	25	20	24	19													

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches														
Wind Speed [mph]	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																	
	30	1	59	48	65	60	68	55	56	45	65	57	65	52	54	43	65	55	62	50
2		50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45	
3		42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33	
35	1	59	48	63	60	67	55	56	45	63	57	65	52	54	43	63	55	62	50	
	2	50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45	
	3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33	
40	1	59	48	61	60	65	55	56	45	61	57	65	52	54	43	61	55	62	50	
	2	50	41	61	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45	
	3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33	
Wind Speed [mph]	110						115													
	30	1	52	42	65	52	59	48	49	40	62	50	57	46						
		2	44	36	53	43	53	43	42	34	51	41	51	41						
3		37	30	41	33	39	31	35	29	40	32	37	30							
35	1	52	42	63	52	59	48	49	40	62	50	57	46							
	2	44	36	53	43	53	43	42	34	51	41	51	41							
	3	37	30	41	33	39	31	35	29	40	32	37	30							
40	1	52	42	61	52	59	48	49	40	61	50	57	46							
	2	44	36	53	43	53	43	42	34	51	41	51	41							
	3	37	30	41	33	39	31	35	29	40	32	37	30							
Wind Speed [mph]	120						130													
	30	1	48	38	60	48	55	44	49	40	62	50	57	46						
		2	41	33	49	40	49	40	42	34	51	41	51	41						
3		34	28	38	31	36	29	35	29	40	32	37	30							
35	1	48	38	60	48	55	44	49	40	62	50	57	46							
	2	41	33	49	40	49	40	42	34	51	41	51	41							
	3	34	28	38	31	36	29	35	29	40	32	37	30							
40	1	48	38	60	48	55	44	49	40	61	50	57	46							
	2	41	33	49	40	49	40	42	34	51	41	51	41							
	3	34	28	38	31	36	29	35	29	40	32	37	30							

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
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 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37
30	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37
35	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37
40	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37
Wind Speed [mph]		170				180													
30	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
35	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
40	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
Wind Speed [mph]		190				200													
30	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						
35	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						
40	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																	
	45	1	59	48	59	59	64	55	56	45	59	57	64	52	54	43	59	55	62	50
2		50	41	59	49	61	49	48	39	58	47	58	47	46	37	56	45	55	45	
3		42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33	
50		1	57	48	57	57	62	55	56	45	57	57	62	52	54	43	57	55	62	50
		2	50	41	57	49	61	49	48	39	57	47	58	47	46	37	56	45	55	45
		3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
60		1	53	48	53	53	59	55	53	45	53	53	59	52	53	43	53	53	59	50
		2	50	41	53	49	59	49	48	39	53	47	58	47	46	37	53	45	55	45
		3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
45	Wind Speed [mph]		110						115											
	1	52	42	59	52	59	48	49	40	59	50	57	46							
	2	44	36	53	43	53	43	42	34	51	41	51	41							
	3	37	30	41	33	39	31	35	29	40	32	37	30							
	50	1	52	42	57	52	59	48	49	40	57	50	57	46						
		2	44	36	53	43	53	43	42	34	51	41	51	41						
		3	37	30	41	33	39	31	35	29	40	32	37	30						
	60	1	52	42	53	52	59	48	49	40	53	50	57	46						
		2	44	36	53	43	53	43	42	34	51	41	51	41						
3		37	30	41	33	39	31	35	29	40	32	37	30							
45	Wind Speed [mph]		120						130											
	1	48	38	59	48	55	44	49	40	59	50	57	46							
	2	41	33	49	40	49	40	42	34	51	41	51	41							
	3	34	28	38	31	36	29	35	29	40	32	37	30							
	50	1	48	38	57	48	55	44	49	40	57	50	57	46						
		2	41	33	49	40	49	40	42	34	51	41	51	41						
		3	34	28	38	31	36	29	35	29	40	32	37	30						
	60	1	48	38	53	48	55	44	49	40	53	50	57	46						
		2	41	33	49	40	49	40	42	34	51	41	51	41						
3		34	28	38	31	36	29	35	29	40	32	37	30							

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	45	1	46	37	58	46	53	42	43	34	54	43	49	39	40	32	50	40	46
2		39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
3		33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
50	1	46	37	57	46	53	42	43	34	54	43	49	39	40	32	50	40	46	37
	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
60	1	46	37	53	46	53	42	43	34	53	43	49	39	40	32	50	40	46	37
	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
Wind Speed [mph]		170						180											
45	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
50	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
60	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
Wind Speed [mph]		190						200											
45	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						
50	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						
60	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	49	48	50	50	56	55	49	45	50	50	56	52	49	43	50	50	56
2		49	41	50	49	56	49	48	39	50	47	56	47	46	37	50	45	55	45
3		42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
80	1	46	46	47	47	53	53	46	45	47	47	53	52	46	43	47	47	53	50
	2	46	41	47	47	53	49	46	39	47	47	53	47	46	37	47	45	53	45
	3	42	34	47	38	44	36	40	33	45	36	42	34	39	31	43	35	41	33
90	1	44	44	44	44	50	50	44	44	44	44	50	50	44	43	44	44	50	50
	2	44	41	44	44	50	49	44	39	44	44	50	47	44	37	44	44	50	45
	3	42	34	44	38	44	36	40	33	44	36	42	34	39	31	43	35	41	33
Wind Speed [mph]		110						115											
70	1	49	42	50	50	56	48	49	40	50	50	56	46	49	40	50	50	56	46
	2	44	36	50	43	53	43	42	34	50	41	51	41	42	34	50	41	51	41
	3	37	30	41	33	39	31	35	29	40	32	37	30	35	29	40	32	37	30
80	1	46	42	47	47	53	48	46	40	47	47	53	46	46	40	47	47	53	46
	2	44	36	47	43	53	43	42	34	47	41	51	41	42	34	47	41	51	41
	3	37	30	41	33	39	31	35	29	40	32	37	30	35	29	40	32	37	30
90	1	44	42	44	44	50	48	44	40	44	44	50	46	44	40	44	44	50	46
	2	44	36	44	43	50	43	42	34	44	41	50	41	42	34	44	41	50	41
	3	37	30	41	33	39	31	35	29	40	32	37	30	35	29	40	32	37	30
Wind Speed [mph]		120						130											
70	1	48	38	50	48	55	44	49	40	50	50	56	46	49	40	50	50	56	46
	2	41	33	49	40	49	40	42	34	50	41	51	41	42	34	50	41	51	41
	3	34	28	38	31	36	29	35	29	40	32	37	30	35	29	40	32	37	30
80	1	46	38	47	47	53	44	46	40	47	47	53	46	46	40	47	47	53	46
	2	41	33	47	40	49	40	42	34	47	41	51	41	42	34	47	41	51	41
	3	34	28	38	31	36	29	35	29	40	32	37	30	35	29	40	32	37	30
90	1	44	38	44	44	50	44	44	40	44	44	50	46	44	40	44	44	50	46
	2	41	33	44	40	49	40	42	34	44	41	50	41	42	34	44	41	50	41
	3	34	28	38	31	36	29	35	29	40	32	37	30	35	29	40	32	37	30

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	46	37	50	46	53	42	43	34	50	43	49	39	40	32	50	40	46
2		39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
3		33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
80	1	46	37	47	46	53	42	43	34	47	43	49	39	40	32	47	40	46	37
	2	39	32	47	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
90	1	44	37	44	44	50	42	43	34	44	43	49	39	40	32	44	40	46	37
	2	39	32	44	38	47	38	36	29	44	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
Wind Speed [mph]		170						180											
70	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
80	1	37	30	47	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
90	1	37	30	44	38	43	35	35	28	44	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
Wind Speed [mph]		190						200											
70	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						
80	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						
90	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches														
Exposure Category : C	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	100	1	41	41	42	42	48	48	41	41	42	42	48	48	41	41	42	42	48	48
		2	41	41	42	42	48	48	41	39	42	42	48	47	41	37	42	42	48	45
		3	41	34	42	38	44	36	40	33	42	36	42	34	39	31	42	35	41	33
	Wind Speed [mph]		110						115											
	100	1	41	41	42	42	48	48	41	40	42	42	48	46						
		2	41	36	42	42	48	43	41	34	42	41	48	41						
		3	37	30	41	33	39	31	35	29	40	32	37	30						
Wind Speed [mph]		120						130												
100	1	41	38	42	42	48	44	41	40	42	42	48	46							
	2	41	33	42	40	48	40	41	34	42	41	48	41							
	3	34	28	38	31	36	29	35	29	40	32	37	30							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	41	37	42	42	48	42	41	34	42	42	48	39	40	32	42	40	46
	2	39	32	42	38	47	38	36	29	42	35	44	35	34	28	41	33	41	33
	3	33	27	37	30	35	28	31	25	34	28	32	26	29	23	32	26	30	24
Wind Speed [mph]		170						180											
100	1	37	30	42	38	43	35	35	28	42	36	40	33						
	2	32	26	38	31	38	31	30	24	36	29	36	29						
	3	27	22	30	24	28	23	25	21	28	23	27	22						
Wind Speed [mph]		190						200											
100	1	33	27	42	34	38	31	31	26	39	32	36	29						
	2	28	23	34	28	34	28	27	22	32	26	32	26						
	3	24	19	27	22	25	20	23	18	25	20	24	19						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	0	1	54	44	68	55	62	50	52	42	65	52	59	48	49	40	62	50	57
2		46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
3		39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
5	1	54	44	68	55	62	50	52	42	65	52	59	48	49	40	62	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
10	1	54	44	68	55	62	50	52	42	65	52	59	48	49	40	62	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
0	1	47	38	59	48	54	44	45	37	57	46	52	42	45	37	49	39	49	39
	2	40	33	49	39	49	39	39	31	47	38	47	38	39	31	47	38	47	38
	3	34	27	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
5	1	47	38	59	48	54	44	45	37	57	46	52	42	45	37	49	39	49	39
	2	40	33	49	39	49	39	39	31	47	38	47	38	39	31	47	38	47	38
	3	34	27	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
10	1	47	38	59	48	54	44	45	37	57	46	52	42	45	37	49	39	49	39
	2	40	33	49	39	49	39	39	31	47	38	47	38	39	31	47	38	47	38
	3	34	27	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
0	1	43	35	55	44	50	40	45	37	57	46	52	42	45	37	49	39	49	39
	2	37	30	45	36	45	36	39	31	47	38	47	38	39	31	47	38	47	38
	3	31	25	35	28	33	27	32	26	36	29	34	28	32	26	36	29	34	28
5	1	43	35	55	44	50	40	45	37	57	46	52	42	45	37	49	39	49	39
	2	37	30	45	36	45	36	39	31	47	38	47	38	39	31	47	38	47	38
	3	31	25	35	28	33	27	32	26	36	29	34	28	32	26	36	29	34	28
10	1	43	35	55	44	50	40	45	37	57	46	52	42	45	37	49	39	49	39
	2	37	30	45	36	45	36	39	31	47	38	47	38	39	31	47	38	47	38
	3	31	25	35	28	33	27	32	26	36	29	34	28	32	26	36	29	34	28

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
0	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
5	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
10	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
Wind Speed [mph]		170				180													
0	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
5	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
10	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
Wind Speed [mph]		190				200													
0	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
5	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
10	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	15	1	54	44	68	55	62	50	52	42	65	52	59	48	49	40	62	50	57
2		46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
3		39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
20	1	54	44	66	55	62	50	52	42	65	52	59	48	49	40	62	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
25	1	54	44	66	55	62	50	52	42	65	52	59	48	49	40	62	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
15	Wind Speed [mph]		110						115										
	1	47	38	59	48	54	44	45	37	57	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
20	3	34	27	38	31	36	29	32	26	36	29	34	28						
	1	47	38	59	48	54	44	45	37	57	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
25	3	34	27	38	31	36	29	32	26	36	29	34	28						
	1	47	38	59	48	54	44	45	37	57	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
15	Wind Speed [mph]		120						130										
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
20	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
25	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
15	Wind Speed [mph]		120						130										
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
20	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
25	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
15	Wind Speed [mph]		120						130										
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
20	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
25	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
15	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
20	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
25	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
Wind Speed [mph]		170						180											
15	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
20	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
25	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
Wind Speed [mph]		190						200											
15	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
20	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
25	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	54	44	66	55	62	50	52	42	65	52	59	48	49	40	62	50	57
2		46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
3		39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
35	1	54	44	65	55	62	50	52	42	65	52	59	48	49	40	62	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
40	1	54	44	63	55	62	50	52	42	63	52	59	48	49	40	62	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
30	1	47	38	59	48	54	44	45	37	57	46	52	42	45	37	47	38	47	38
	2	40	33	49	39	49	39	39	31	47	38	47	38	39	31	47	38	47	38
	3	34	27	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
35	1	47	38	59	48	54	44	45	37	57	46	52	42	45	37	47	38	47	38
	2	40	33	49	39	49	39	39	31	47	38	47	38	39	31	47	38	47	38
	3	34	27	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
40	1	47	38	59	48	54	44	45	37	57	46	52	42	45	37	47	38	47	38
	2	40	33	49	39	49	39	39	31	47	38	47	38	39	31	47	38	47	38
	3	34	27	38	31	36	29	32	26	36	29	34	28	32	26	36	29	34	28
30	1	43	35	55	44	50	40	45	37	57	46	52	42	45	37	47	38	47	38
	2	37	30	45	36	45	36	39	31	47	38	47	38	39	31	47	38	47	38
	3	31	25	35	28	33	27	32	26	36	29	34	28	32	26	36	29	34	28
35	1	43	35	55	44	50	40	45	37	57	46	52	42	45	37	47	38	47	38
	2	37	30	45	36	45	36	39	31	47	38	47	38	39	31	47	38	47	38
	3	31	25	35	28	33	27	32	26	36	29	34	28	32	26	36	29	34	28
40	1	43	35	55	44	50	40	45	37	57	46	52	42	45	37	47	38	47	38
	2	37	30	45	36	45	36	39	31	47	38	47	38	39	31	47	38	47	38
	3	31	25	35	28	33	27	32	26	36	29	34	28	32	26	36	29	34	28

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42
2		36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
3		30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
35	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
40	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
Wind Speed [mph]		170						180											
30	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
35	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
40	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
Wind Speed [mph]		190						200											
30	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
35	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
40	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
45	1	54	44	61	55	62	50	52	42	61	52	59	48	49	40	61	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
50	1	54	44	59	55	62	50	52	42	59	52	59	48	49	40	59	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
60	1	54	44	56	55	61	50	52	42	56	52	59	48	49	40	56	50	57	46
	2	46	37	56	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
45	110						115												
	1	47	38	59	48	54	44	45	37	57	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
50	3	34	27	38	31	36	29	32	26	36	29	34	28						
	1	47	38	59	48	54	44	45	37	57	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
60	3	34	27	38	31	36	29	32	26	36	29	34	28						
	1	47	38	56	48	54	44	45	37	56	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
45	120						130												
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
50	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	57	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
60	3	31	25	35	28	33	27	32	26	36	29	34	28						
	1	43	35	55	44	50	40	45	37	56	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
60	3	31	25	35	28	33	27	32	26	36	29	34	28						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	140						150						160												
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge																						
	45	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34					
2		36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30						
3		30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22						
50	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34						
	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30						
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22						
60	1	42	34	53	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34						
	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30						
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22						
Wind Speed [mph]	170						180																		
45	1	34	28	43	35	39	32	32	26	40	33	37	30	29	24	35	29	35	29	28	22	33	27	33	27
	2	29	24	35	29	35	29	23	19	26	21	24	20	23	19	26	21	24	20						
	3	25	20	27	22	26	21	32	26	40	33	37	30	32	26	40	33	37	30						
50	1	34	28	43	35	39	32	32	26	40	33	37	30	29	24	35	29	35	29	28	22	33	27	33	27
	2	29	24	35	29	35	29	23	19	26	21	24	20	23	19	26	21	24	20						
	3	25	20	27	22	26	21	32	26	40	33	37	30	32	26	40	33	37	30						
60	1	34	28	43	35	39	32	32	26	40	33	37	30	29	24	35	29	35	29	28	22	33	27	33	27
	2	29	24	35	29	35	29	23	19	26	21	24	20	23	19	26	21	24	20						
	3	25	20	27	22	26	21	32	26	40	33	37	30	32	26	40	33	37	30						
Wind Speed [mph]	190						200																		
45	1	30	25	38	31	35	28	29	23	36	29	33	27	25	20	30	24	30	24	25	20	30	24	30	24
	2	26	21	31	25	31	25	21	17	23	19	22	18	21	17	23	19	22	18						
	3	22	18	24	20	23	19	30	25	31	25	25	20	30	24	30	24	30	24						
50	1	30	25	38	31	35	28	29	23	36	29	33	27	25	20	30	24	30	24	25	20	30	24	30	24
	2	26	21	31	25	31	25	21	17	23	19	22	18	21	17	23	19	22	18						
	3	22	18	24	20	23	19	30	25	31	25	25	20	30	24	30	24	30	24						
60	1	30	25	38	31	35	28	29	23	36	29	33	27	25	20	30	24	30	24	25	20	30	24	30	24
	2	26	21	31	25	31	25	21	17	23	19	22	18	21	17	23	19	22	18						
	3	22	18	24	20	23	19	30	25	31	25	25	20	30	24	30	24	30	24						

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	70	1	52	44	52	52	58	50	52	42	52	52	58	48	49	40	52	50	57
2		46	37	52	45	56	45	44	36	52	43	53	43	42	34	51	41	51	41
3		39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
80	1	49	44	49	49	56	50	49	42	49	49	56	48	49	40	49	49	56	46
	2	46	37	49	45	56	45	44	36	49	43	53	43	42	34	49	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
90	1	46	44	47	47	53	50	46	42	47	47	53	48	46	40	47	47	53	46
	2	46	37	47	45	53	45	44	36	47	43	53	43	42	34	47	41	51	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
70	Wind Speed [mph]		110						115										
	1	47	38	52	48	54	44	45	37	52	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
80	1	47	38	49	48	54	44	45	37	49	46	52	42						
	2	40	33	49	39	49	39	39	31	47	38	47	38						
	3	34	27	38	31	36	29	32	26	36	29	34	28						
90	1	46	38	47	47	53	44	45	37	47	46	52	42						
	2	40	33	47	39	49	39	39	31	47	38	47	38						
	3	34	27	38	31	36	29	32	26	36	29	34	28						
70	Wind Speed [mph]		120						130										
	1	43	35	52	44	50	40	45	37	52	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
80	1	43	35	49	44	50	40	45	37	49	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
	3	31	25	35	28	33	27	32	26	36	29	34	28						
90	1	43	35	47	44	50	40	45	37	47	46	52	42						
	2	37	30	45	36	45	36	39	31	47	38	47	38						
	3	31	25	35	28	33	27	32	26	36	29	34	28						

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	42	34	52	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
70	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	49	42	48	39	39	32	49	40	45	36	36	29	46	37	42	34
80	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	1	42	34	47	42	48	39	39	32	47	40	45	36	36	29	46	37	42	34
90	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22
	Wind Speed [mph]		170				180												
70	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
80	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
90	1	34	28	43	35	39	32	32	26	40	33	37	30						
	2	29	24	35	29	35	29	28	22	33	27	33	27						
	3	25	20	27	22	26	21	23	19	26	21	24	20						
Wind Speed [mph]		190				200													
70	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
80	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
90	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	25	20	30	24	30	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	44	44	44	44	50	50	44	42	44	44	50	48	44	40	44	44	50
	2	44	37	44	44	50	45	44	36	44	43	50	43	42	34	44	41	50	41
	3	39	31	43	35	41	33	37	30	41	33	39	31	35	29	39	32	37	30
Wind Speed [mph]		110				115													
100	1	44	38	44	44	50	44	44	37	44	44	50	42						
	2	40	33	44	39	49	39	39	31	44	38	47	38						
	3	34	27	38	31	36	29	32	26	36	29	34	28						
0	1																		
	2																		
	3																		
0	1																		
	2																		
	3																		
Wind Speed [mph]		120				130													
100	1	43	35	44	44	50	40	44	37	44	44	50	42						
	2	37	30	44	36	45	36	39	31	44	38	47	38						
	3	31	25	35	28	33	27	32	26	36	29	34	28						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	140						150						160											
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
Ground Snow	Group	Array Interior	Array Edge																					
100	1	42	34	44	42	48	39	39	32	44	40	45	36	36	29	44	37	42	34					
	2	36	29	43	35	43	35	33	27	40	33	40	32	31	25	38	30	37	30					
	3	30	24	34	27	32	26	28	23	31	25	29	24	26	21	29	24	28	22					
Wind Speed [mph]	170						180						190						200					
100	1	34	28	43	35	39	32	32	26	40	33	37	30	30	25	38	31	35	28					
	2	29	24	35	29	35	29	28	22	33	27	33	27	25	21	31	25	31	25					
	3	25	20	27	22	26	21	23	19	26	21	24	20	21	17	24	20	23	19					
100	1	30	25	38	31	35	28	29	23	36	29	33	27	29	23	36	29	33	27					
	2	26	21	31	25	31	25	25	20	30	24	30	24	25	20	30	24	30	24					
	3	22	18	24	20	23	19	21	17	23	19	22	18	21	17	23	19	22	18					

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches														
Exposure Category : B	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	64	51	77	65	72	59	61	49	75	62	70	56	58	47	72	59	67	54
		2	54	44	66	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
		3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
	5	1	64	51	77	65	72	59	61	49	75	62	70	56	58	47	72	59	67	54
		2	54	44	66	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
		3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
	10	1	64	51	73	65	72	59	61	49	73	62	70	56	58	47	72	59	67	54
		2	54	44	66	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
		3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
	Wind Speed [mph]	110						115												
	0	1	56	45	70	57	64	52	53	43	68	54	61	49						
		2	47	38	57	46	57	46	45	37	55	44	55	44						
		3	40	32	44	36	42	34	38	31	43	34	40	33						
	5	1	56	45	70	57	64	52	53	43	68	54	61	49						
		2	47	38	57	46	57	46	45	37	55	44	55	44						
		3	40	32	44	36	42	34	38	31	43	34	40	33						
	10	1	56	45	70	57	64	52	53	43	68	54	61	49						
	2	47	38	57	46	57	46	45	37	55	44	55	44							
	3	40	32	44	36	42	34	38	31	43	34	40	33							
Wind Speed [mph]	120						130													
0	1	51	41	65	52	59	47	53	43	68	54	61	49							
	2	44	35	53	43	53	43	45	37	55	44	55	44							
	3	37	30	41	33	39	31	38	31	43	34	40	33							
5	1	51	41	65	52	59	47	53	43	68	54	61	49							
	2	44	35	53	43	53	43	45	37	55	44	55	44							
	3	37	30	41	33	39	31	38	31	43	34	40	33							
10	1	51	41	65	52	59	47	53	43	68	54	61	49							
	2	44	35	53	43	53	43	45	37	55	44	55	44							
	3	37	30	41	33	39	31	38	31	43	34	40	33							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : B

Wind Speed [mph]	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																	
0	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40	
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36	
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26	
5	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40	
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36	
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26	
10	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40	
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36	
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26	
Wind Speed [mph]	170						180													
	0	1	40	33	51	41	46	37	38	31	48	38	43	35						
		2	34	28	41	34	41	34	32	26	39	32	39	32						
3		29	23	32	26	30	25	27	22	30	25	29	23							
5	1	40	33	51	41	46	37	38	31	48	38	43	35							
	2	34	28	41	34	41	34	32	26	39	32	39	32							
	3	29	23	32	26	30	25	27	22	30	25	29	23							
10	1	40	33	51	41	46	37	38	31	48	38	43	35							
	2	34	28	41	34	41	34	32	26	39	32	39	32							
	3	29	23	32	26	30	25	27	22	30	25	29	23							
Wind Speed [mph]	190						200													
	0	1	36	29	45	36	41	33	34	27	43	34	39	32						
		2	31	25	37	30	37	30	29	24	35	28	35	28						
3		26	21	29	23	27	22	24	20	27	22	26	21							
5	1	36	29	45	36	41	33	34	27	43	34	39	32							
	2	31	25	37	30	37	30	29	24	35	28	35	28							
	3	26	21	29	23	27	22	24	20	27	22	26	21							
10	1	36	29	45	36	41	33	34	27	43	34	39	32							
	2	31	25	37	30	37	30	29	24	35	28	35	28							
	3	26	21	29	23	27	22	24	20	27	22	26	21							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	15	1	64	51	69	65	72	59	61	49	69	62	70	56	58	47	69	59	67
2		54	44	66	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
3		46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
20	1	64	51	66	65	72	59	61	49	66	62	70	56	58	47	66	59	67	54
	2	54	44	66	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
	3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
25	1	64	51	66	65	70	59	61	49	66	62	70	56	58	47	66	59	67	54
	2	54	44	66	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
	3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
15	1	56	45	69	57	64	52	53	43	68	54	61	49	47	38	57	46	57	46
	2	47	38	57	46	57	46	45	37	55	44	55	44	40	32	44	36	42	34
	3	40	32	44	36	42	34	38	31	43	34	40	33	1	56	45	66	57	64
20	1	56	45	66	57	64	52	53	43	66	54	61	49	47	38	57	46	57	46
	2	47	38	57	46	57	46	45	37	55	44	55	44	40	32	44	36	42	34
	3	40	32	44	36	42	34	38	31	43	34	40	33	1	56	45	66	57	64
25	1	56	45	66	57	64	52	53	43	66	54	61	49	47	38	57	46	57	46
	2	47	38	57	46	57	46	45	37	55	44	55	44	40	32	44	36	42	34
	3	40	32	44	36	42	34	38	31	43	34	40	33						
15	1	51	41	65	52	59	47	53	43	68	54	61	49	44	35	53	43	53	43
	2	44	35	53	43	53	43	45	37	55	44	55	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33	1	51	41	65	52	59
20	1	51	41	65	52	59	47	53	43	66	54	61	49	44	35	53	43	53	43
	2	44	35	53	43	53	43	45	37	55	44	55	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33	1	51	41	65	52	59
25	1	51	41	65	52	59	47	53	43	66	54	61	49	44	35	53	43	53	43
	2	44	35	53	43	53	43	45	37	55	44	55	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : B

Wind Speed [mph]	140						150						160												
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																		
	15	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40					
2		42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36						
3		35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26						
20	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40						
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36						
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26						
25	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40						
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36						
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26						
Wind Speed [mph]	170						180																		
15	1	40	33	51	41	46	37	38	31	48	38	43	35	32	26	39	32	39	32						
	2	34	28	41	34	41	34	32	26	39	32	39	32	27	22	30	25	29	23						
	3	29	23	32	26	30	25	27	22	30	25	29	23	38	31	48	38	43	35						
20	1	40	33	51	41	46	37	38	31	48	38	43	35	32	26	39	32	39	32						
	2	34	28	41	34	41	34	32	26	39	32	39	32	27	22	30	25	29	23						
	3	29	23	32	26	30	25	27	22	30	25	29	23	38	31	48	38	43	35						
25	1	40	33	51	41	46	37	38	31	48	38	43	35	32	26	39	32	39	32						
	2	34	28	41	34	41	34	32	26	39	32	39	32	27	22	30	25	29	23						
	3	29	23	32	26	30	25	27	22	30	25	29	23	Wind Speed [mph]	190						200				
15	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28						
	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21						
	3	26	21	29	23	27	22	24	20	27	22	26	21	36	29	45	36	41	33						
20	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28						
	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21						
	3	26	21	29	23	27	22	24	20	27	22	26	21	36	29	45	36	41	33						
25	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28						
	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21						
	3	26	21	29	23	27	22	24	20	27	22	26	21												

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : B

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
30	1	64	51	65	65	68	59	61	49	65	62	68	56	58	47	65	59	67	54
	2	54	44	65	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
	3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
35	1	63	51	63	63	67	59	61	49	63	62	67	56	58	47	63	59	67	54
	2	54	44	63	53	66	53	52	42	63	51	63	50	49	40	60	48	60	48
	3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
40	1	61	51	61	61	65	59	61	49	61	61	65	56	58	47	61	59	65	54
	2	54	44	61	53	65	53	52	42	61	51	63	50	49	40	60	48	60	48
	3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
30	1	56	45	65	57	64	52	53	43	65	54	61	49	56	45	63	57	64	52
	2	47	38	57	46	57	46	45	37	55	44	55	44	47	38	57	46	57	46
	3	40	32	44	36	42	34	38	31	43	34	40	33	40	32	44	36	42	34
35	1	56	45	63	57	64	52	53	43	63	54	61	49	56	45	63	57	64	52
	2	47	38	57	46	57	46	45	37	55	44	55	44	47	38	57	46	57	46
	3	40	32	44	36	42	34	38	31	43	34	40	33	40	32	44	36	42	34
40	1	56	45	61	57	64	52	53	43	61	54	61	49	56	45	61	57	64	52
	2	47	38	57	46	57	46	45	37	55	44	55	44	47	38	57	46	57	46
	3	40	32	44	36	42	34	38	31	43	34	40	33	40	32	44	36	42	34
30	1	51	41	65	52	59	47	53	43	65	54	61	49	51	41	63	52	59	47
	2	44	35	53	43	53	43	45	37	55	44	55	44	44	35	53	43	53	43
	3	37	30	41	33	39	31	38	31	43	34	40	33	37	30	41	33	39	31
35	1	51	41	63	52	59	47	53	43	63	54	61	49	51	41	63	52	59	47
	2	44	35	53	43	53	43	45	37	55	44	55	44	44	35	53	43	53	43
	3	37	30	41	33	39	31	38	31	43	34	40	33	37	30	41	33	39	31
40	1	51	41	61	52	59	47	53	43	61	54	61	49	51	41	61	52	59	47
	2	44	35	53	43	53	43	45	37	55	44	55	44	44	35	53	43	53	43
	3	37	30	41	33	39	31	38	31	43	34	40	33	37	30	41	33	39	31

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : B

Wind Speed [mph]	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																	
	30	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40
2		42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36	
3		35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26	
35	1	49	40	62	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40	
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36	
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26	
40	1	49	40	61	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40	
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36	
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26	
Wind Speed [mph]	170						180													
	30	1	40	33	51	41	46	37	38	31	48	38	43	35						
		2	34	28	41	34	41	34	32	26	39	32	39	32						
3		29	23	32	26	30	25	27	22	30	25	29	23							
35	1	40	33	51	41	46	37	38	31	48	38	43	35							
	2	34	28	41	34	41	34	32	26	39	32	39	32							
	3	29	23	32	26	30	25	27	22	30	25	29	23							
40	1	40	33	51	41	46	37	38	31	48	38	43	35							
	2	34	28	41	34	41	34	32	26	39	32	39	32							
	3	29	23	32	26	30	25	27	22	30	25	29	23							
Wind Speed [mph]	190						200													
	30	1	36	29	45	36	41	33	34	27	43	34	39	32						
		2	31	25	37	30	37	30	29	24	35	28	35	28						
3		26	21	29	23	27	22	24	20	27	22	26	21							
35	1	36	29	45	36	41	33	34	27	43	34	39	32							
	2	31	25	37	30	37	30	29	24	35	28	35	28							
	3	26	21	29	23	27	22	24	20	27	22	26	21							
40	1	36	29	45	36	41	33	34	27	43	34	39	32							
	2	31	25	37	30	37	30	29	24	35	28	35	28							
	3	26	21	29	23	27	22	24	20	27	22	26	21							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches														
Exposure Category : B	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	59	51	59	59	64	59	59	49	59	59	64	56	58	47	59	59	64	54
		2	54	44	59	53	64	53	52	42	59	51	63	50	49	40	59	48	60	48
		3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
	50	1	57	51	57	57	62	59	57	49	57	57	62	56	57	47	57	57	62	54
		2	54	44	57	53	62	53	52	42	57	51	62	50	49	40	57	48	60	48
		3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
	60	1	53	51	53	53	59	59	53	49	53	53	59	56	53	47	53	53	59	54
		2	53	44	53	53	59	53	52	42	53	51	59	50	49	40	53	48	59	48
		3	46	37	51	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
	45	Wind Speed [mph]	110						115											
		1	56	45	59	57	64	52	53	43	59	54	61	49						
		2	47	38	57	46	57	46	45	37	55	44	55	44						
		3	40	32	44	36	42	34	38	31	43	34	40	33						
		50	1	56	45	57	57	62	52	53	43	57	54	61	49					
			2	47	38	57	46	57	46	45	37	55	44	55	44					
			3	40	32	44	36	42	34	38	31	43	34	40	33					
		60	1	53	45	53	53	59	52	53	43	53	53	59	49					
2			47	38	53	46	57	46	45	37	53	44	55	44						
3			40	32	44	36	42	34	38	31	43	34	40	33						
45		Wind Speed [mph]	120						130											
		1	51	41	59	52	59	47	53	43	59	54	61	49						
	2	44	35	53	43	53	43	45	37	55	44	55	44							
	3	37	30	41	33	39	31	38	31	43	34	40	33							
	50	1	51	41	57	52	59	47	53	43	57	54	61	49						
		2	44	35	53	43	53	43	45	37	55	44	55	44						
		3	37	30	41	33	39	31	38	31	43	34	40	33						
	60	1	51	41	53	52	59	47	53	43	53	53	59	49						
		2	44	35	53	43	53	43	45	37	53	44	55	44						
		3	37	30	41	33	39	31	38	31	43	34	40	33						

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																																																																																																																																																																																																																																																																																																																																										
Wind Speed [mph]		140						150						160																																																																																																																																																																																																																																																																																																																																		
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																																																																																																																																																																																																																																																																																																														
Ground Snow	Group	Array Interior	Array Edge																																																																																																																																																																																																																																																																																																																																													
	45	1	49	40	59	50	57	46	46	37	58	47	53	43	43	35	54	43	49	40																																																																																																																																																																																																																																																																																																																												
2		42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36																																																																																																																																																																																																																																																																																																																													
3		35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26																																																																																																																																																																																																																																																																																																																													
50	1	49	40	57	50	57	46	46	37	57	47	53	43	43	35	54	43	49	40																																																																																																																																																																																																																																																																																																																													
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36																																																																																																																																																																																																																																																																																																																													
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26																																																																																																																																																																																																																																																																																																																													
60	1	49	40	53	50	57	46	46	37	53	47	53	43	43	35	53	43	49	40																																																																																																																																																																																																																																																																																																																													
	2	42	34	51	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36																																																																																																																																																																																																																																																																																																																													
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26																																																																																																																																																																																																																																																																																																																													
45	1	40	33	51	41	46	37	38	31	48	38	43	35	38	26	39	32	39	32																																																																																																																																																																																																																																																																																																																													
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	3	29	23	32	26	30	25	27	22	30	25	29	23	45	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21	34	27	43	34	39	32	50	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21	34	27	43	34	39	32	60	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21	45	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21	50	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21	60	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26
45	1	36	29	45	36	41	33	34	27	43	34	39	32		29	24	35	28	35	28																																																																																																																																																																																																																																																																																																																												
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	3	26	21	29	23	27	22	24	20	27	22	26	21	50	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21	60	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21																																																																																																																																																																																																																											
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	3	26	21	29	23	27	22	24	20	27	22	26	21	60	1	36	29	45	36	41	33	34	27	43	34	39	32	29	24	35	28	35	28	2	31	25	37	30	37	30	29	24	35	28	35	28	24	20	27	22	26	21	3	26	21	29	23	27	22	24	20	27	22	26	21																																																																																																																																																																																																																																																																															
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	2	31	25	37	30	37	30	29	24	35	28	35	28		24	20	27	22	26	21																																																																																																																																																																																																																																																																																																																												
	3	26	21	29	23	27	22	24	20	27	22	26	21																																																																																																																																																																																																																																																																																																																																			

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]	95						100						105						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
	1	49	49	50	50	56	56	49	49	50	50	56	56	49	47	50	50	56	54
70	2	49	44	50	50	56	53	49	42	50	50	56	50	49	40	50	48	56	48
	3	46	37	50	41	48	39	43	35	48	39	46	37	42	34	46	37	44	35
	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53	53
80	2	46	44	47	47	53	53	46	42	47	47	53	50	46	40	47	47	53	48
	3	46	37	47	41	48	39	43	35	47	39	46	37	42	34	46	37	44	35
	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50
90	2	44	44	44	44	50	50	44	42	44	44	50	50	44	40	44	44	50	48
	3	44	37	44	41	48	39	43	35	44	39	46	37	42	34	44	37	44	35
	1	49	45	50	50	56	52	49	43	50	50	56	49	49	43	50	44	55	44
70	2	47	38	50	46	56	46	45	37	50	44	55	44	38	31	43	34	40	33
	3	40	32	44	36	42	34	38	31	43	34	40	33	46	45	47	47	53	49
	1	46	45	47	47	53	52	46	43	47	47	53	49	45	37	47	44	53	44
80	2	46	38	47	46	53	46	45	37	47	44	53	44	40	32	44	36	42	34
	3	40	32	44	36	42	34	38	31	43	34	40	33	44	44	44	50	50	49
	1	44	44	44	44	50	50	44	43	44	44	50	49	44	37	44	44	50	44
90	2	44	38	44	44	50	46	44	37	44	44	50	44	40	32	44	36	42	34
	3	40	32	44	36	42	34	38	31	43	34	40	33	49	41	50	50	56	47
	1	49	41	50	50	56	47	49	43	50	50	56	49	44	35	50	43	53	43
70	2	44	35	50	43	53	43	45	37	50	44	55	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33	46	41	47	47	53	47
	1	46	41	47	47	53	47	46	43	47	47	53	49	44	35	47	43	53	43
80	2	44	35	47	43	53	43	45	37	47	44	53	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33	44	41	44	44	50	47
	1	44	41	44	44	50	47	44	43	44	44	50	49	44	35	44	43	50	43
90	2	44	35	44	43	50	43	44	37	44	44	50	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33	49	41	44	44	50	44
	1	44	41	44	44	50	47	44	43	44	44	50	49	44	35	44	43	50	43
70	2	44	35	44	43	50	43	44	37	44	44	50	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33	49	41	44	44	50	44
	1	44	41	44	44	50	47	44	43	44	44	50	49	44	35	44	43	50	43
90	2	44	35	44	43	50	43	44	37	44	44	50	44	37	30	41	33	39	31
	3	37	30	41	33	39	31	38	31	43	34	40	33	49	41	44	44	50	44
	1	44	41	44	44	50	47	44	43	44	44	50	49	44	35	44	43	50	43

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : B

Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	49	40	50	50	56	46	46	37	50	47	53	43	43	35	50	43	49
2		42	34	50	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36
3		35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26
80	1	46	40	47	47	53	46	46	37	47	47	53	43	43	35	47	43	49	40
	2	42	34	47	41	51	41	39	32	47	38	47	38	37	30	44	36	44	36
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26
90	1	44	40	44	44	50	46	44	37	44	44	50	43	43	35	44	43	49	40
	2	42	34	44	41	50	41	39	32	44	38	47	38	37	30	44	36	44	36
	3	35	29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26
Wind Speed [mph]		170						180											
70	1	40	33	50	41	46	37	38	31	48	38	43	35						
	2	34	28	41	34	41	34	32	26	39	32	39	32						
	3	29	23	32	26	30	25	27	22	30	25	29	23						
80	1	40	33	47	41	46	37	38	31	47	38	43	35						
	2	34	28	41	34	41	34	32	26	39	32	39	32						
	3	29	23	32	26	30	25	27	22	30	25	29	23						
90	1	40	33	44	41	46	37	38	31	44	38	43	35						
	2	34	28	41	34	41	34	32	26	39	32	39	32						
	3	29	23	32	26	30	25	27	22	30	25	29	23						
Wind Speed [mph]		190						200											
70	1	36	29	45	36	41	33	34	27	43	34	39	32						
	2	31	25	37	30	37	30	29	24	35	28	35	28						
	3	26	21	29	23	27	22	24	20	27	22	26	21						
80	1	36	29	45	36	41	33	34	27	43	34	39	32						
	2	31	25	37	30	37	30	29	24	35	28	35	28						
	3	26	21	29	23	27	22	24	20	27	22	26	21						
90	1	36	29	44	36	41	33	34	27	43	34	39	32						
	2	31	25	37	30	37	30	29	24	35	28	35	28						
	3	26	21	29	23	27	22	24	20	27	22	26	21						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	41	41	42	42	48	48	41	41	42	42	48	48	41	41	42	42	48
2		41	41	42	42	48	48	41	41	42	42	48	48	41	40	42	42	48	48
3		41	37	42	41	48	39	41	35	42	39	46	37	41	34	42	37	44	35
Wind Speed [mph]		110						115											
100	1	41	41	42	42	48	48	41	41	42	42	48	48						
	2	41	38	42	42	48	46	41	37	42	42	48	44						
	3	40	32	42	36	42	34	38	31	42	34	40	33						
Wind Speed [mph]		120						130											
100	1	41	41	42	42	48	47	41	41	42	42	48	48						
	2	41	35	42	42	48	43	41	37	42	42	48	44						
	3	37	30	41	33	39	31	38	31	42	34	40	33						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]	Panal Angle	140						150						160					
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
		100	1	41	40	42	42	48	46	41	37	42	42	48	43	41	35	42	42
2	41		34	42	41	48	41	39	32	42	38	47	38	37	30	42	36	44	36
3	35		29	39	32	37	30	33	27	37	30	35	28	31	25	34	28	32	26
Wind Speed [mph]		170						180											
100	1	40	33	42	41	46	37	38	31	42	38	43	35						
	2	34	28	41	34	41	34	32	26	39	32	39	32						
	3	29	23	32	26	30	25	27	22	30	25	29	23						
Wind Speed [mph]		190						200											
100	1	36	29	42	36	41	33	34	27	42	34	39	32						
	2	31	25	37	30	37	30	29	24	35	28	35	28						
	3	26	21	29	23	27	22	24	20	27	22	26	21						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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Notation (ASCE 7-22)

$a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
0	1	55	44	69	55	63	50	52	42	66	53	60	48	50	40	63	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
5	1	55	44	69	55	63	50	52	42	66	53	60	48	50	40	63	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
10	1	55	44	69	55	63	50	52	42	66	53	60	48	50	40	63	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
Wind Speed [mph]	110						115												
	1	48	38	60	48	55	44	46	37	58	46	52	42						
	2	41	33	49	40	49	40	39	32	47	38	47	38						
0	3	34	28	38	31	36	29	33	27	37	30	34	28						
	1	48	38	60	48	55	44	46	37	58	46	52	42						
	2	41	33	49	40	49	40	39	32	47	38	47	38						
5	3	34	28	38	31	36	29	33	27	37	30	34	28						
	1	48	38	60	48	55	44	46	37	58	46	52	42						
	2	41	33	49	40	49	40	39	32	47	38	47	38						
10	3	34	28	38	31	36	29	33	27	37	30	34	28						
	1	48	38	60	48	55	44	46	37	58	46	52	42						
	2	41	33	49	40	49	40	39	32	47	38	47	38						
Wind Speed [mph]	120						130												
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
0	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
5	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
10	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
Wind Speed [mph]	120						130												
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
0	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
5	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
10	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]	140							150							160						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																		
0	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34		
	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31		
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23		
5	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34		
	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31		
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23		
10	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34		
	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31		
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23		
0	1	34	28	43	35	40	32	32	26	41	33	37	30	29	24	36	29	36	29		
	2	29	24	36	29	36	29	28	23	34	27	33	27	23	20	28	22	26	21		
	3	25	20	28	22	26	21	23	19	26	21	25	20	32	26	41	33	37	30		
5	1	34	28	43	35	40	32	32	26	41	33	37	30	29	24	36	29	36	29		
	2	29	24	36	29	36	29	28	23	34	27	33	27	23	20	28	22	26	21		
	3	25	20	28	22	26	21	23	19	26	21	25	20	32	26	41	33	37	30		
10	1	34	28	43	35	40	32	32	26	41	33	37	30	29	24	36	29	36	29		
	2	29	24	36	29	36	29	28	23	34	27	33	27	23	20	28	22	26	21		
	3	25	20	28	22	26	21	23	19	26	21	25	20	32	26	41	33	37	30		
0	1	31	25	39	31	35	29	29	24	37	30	33	27	25	20	30	24	30	24		
	2	26	21	32	26	32	26	25	20	30	24	30	24	21	17	23	19	22	18		
	3	22	18	25	20	23	19	21	17	23	19	22	18	29	24	37	30	33	27		
5	1	31	25	39	31	35	29	29	24	37	30	33	27	25	20	30	24	30	24		
	2	26	21	32	26	32	26	25	20	30	24	30	24	21	17	23	19	22	18		
	3	22	18	25	20	23	19	21	17	23	19	22	18	29	24	37	30	33	27		
10	1	31	25	39	31	35	29	29	24	37	30	33	27	25	20	30	24	30	24		
	2	26	21	32	26	32	26	25	20	30	24	30	24	21	17	23	19	22	18		
	3	22	18	25	20	23	19	21	17	23	19	22	18	29	24	37	30	33	27		

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
15	1	55	44	69	55	63	50	52	42	66	53	60	48	50	40	63	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
20	1	55	44	66	55	63	50	52	42	66	53	60	48	50	40	63	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
25	1	55	44	66	55	63	50	52	42	66	53	60	48	50	40	63	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
15	110						115												
	1	48	38	60	48	55	44	46	37	58	46	52	42						
	2	41	33	49	40	49	40	39	32	47	38	47	38						
20	3	34	28	38	31	36	29	33	27	37	30	34	28						
	1	48	38	60	48	55	44	46	37	58	46	52	42						
	2	41	33	49	40	49	40	39	32	47	38	47	38						
25	3	34	28	38	31	36	29	33	27	37	30	34	28						
	1	48	38	60	48	55	44	46	37	58	46	52	42						
	2	41	33	49	40	49	40	39	32	47	38	47	38						
15	120						130												
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
20	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
25	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
15	120						130												
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
20	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
25	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
15	120						130												
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
20	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						
25	3	32	26	35	28	33	27	33	27	37	30	34	28						
	1	44	35	55	45	50	41	46	37	58	46	52	42						
	2	37	30	45	37	45	37	39	32	47	38	47	38						

ASCE Group Zone

Panel Angle	Mono Slope
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	2 = 2
	3 = 3
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	2 = 2' / 2
	3 = 3' / 3
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]	140						150						160												
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge																						
	15	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34					
2		36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31						
3		30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23						
20	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34						
	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31						
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23						
25	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34						
	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31						
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23						
Wind Speed [mph]	170						180																		
15	1	34	28	43	35	40	32	32	26	41	33	37	30	29	24	36	29	36	29	28	23	34	27	33	27
	2	29	24	36	29	36	29	28	23	34	27	33	27	23	19	26	21	25	20						
	3	25	20	28	22	26	21	23	19	26	21	25	20	32	26	41	33	37	30						
20	1	34	28	43	35	40	32	32	26	41	33	37	30	29	24	36	29	36	29	28	23	34	27	33	27
	2	29	24	36	29	36	29	28	23	34	27	33	27	23	19	26	21	25	20						
	3	25	20	28	22	26	21	23	19	26	21	25	20	32	26	41	33	37	30						
25	1	34	28	43	35	40	32	32	26	41	33	37	30	29	24	36	29	36	29	28	23	34	27	33	27
	2	29	24	36	29	36	29	28	23	34	27	33	27	23	19	26	21	25	20						
	3	25	20	28	22	26	21	23	19	26	21	25	20	32	26	41	33	37	30						
Wind Speed [mph]	190						200																		
15	1	31	25	39	31	35	29	29	24	37	30	33	27	25	20	30	24	30	24	21	17	23	19	22	18
	2	26	21	32	26	32	26	25	20	30	24	30	24	21	17	23	19	22	18						
	3	22	18	25	20	23	19	21	17	23	19	22	18	29	24	37	30	33	27						
20	1	31	25	39	31	35	29	29	24	37	30	33	27	25	20	30	24	30	24	21	17	23	19	22	18
	2	26	21	32	26	32	26	25	20	30	24	30	24	21	17	23	19	22	18						
	3	22	18	25	20	23	19	21	17	23	19	22	18	29	24	37	30	33	27						
25	1	31	25	39	31	35	29	29	24	37	30	33	27	25	20	30	24	30	24	21	17	23	19	22	18
	2	26	21	32	26	32	26	25	20	30	24	30	24	21	17	23	19	22	18						
	3	22	18	25	20	23	19	21	17	23	19	22	18	29	24	37	30	33	27						

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																	
30	1	55	44	65	55	63	50	52	42	65	53	60	48	50	40	63	50	57	46	
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41	
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30	
35	1	55	44	63	55	63	50	52	42	63	53	60	48	50	40	63	50	57	46	
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41	
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30	
40	1	55	44	61	55	63	50	52	42	61	53	60	48	50	40	61	50	57	46	
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41	
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30	
Wind Speed [mph]	110						115													
	30	1	48	38	60	48	55	44	46	37	58	46	52	42						
		2	41	33	49	40	49	40	39	32	47	38	47	38						
3		34	28	38	31	36	29	33	27	37	30	34	28							
35	1	48	38	60	48	55	44	46	37	58	46	52	42							
	2	41	33	49	40	49	40	39	32	47	38	47	38							
	3	34	28	38	31	36	29	33	27	37	30	34	28							
40	1	48	38	60	48	55	44	46	37	58	46	52	42							
	2	41	33	49	40	49	40	39	32	47	38	47	38							
	3	34	28	38	31	36	29	33	27	37	30	34	28							
Wind Speed [mph]	120						130													
	30	1	44	35	55	45	50	41	46	37	58	46	52	42						
		2	37	30	45	37	45	37	39	32	47	38	47	38						
3		32	26	35	28	33	27	33	27	37	30	34	28							
35	1	44	35	55	45	50	41	46	37	58	46	52	42							
	2	37	30	45	37	45	37	39	32	47	38	47	38							
	3	32	26	35	28	33	27	33	27	37	30	34	28							
40	1	44	35	55	45	50	41	46	37	58	46	52	42							
	2	37	30	45	37	45	37	39	32	47	38	47	38							
	3	32	26	35	28	33	27	33	27	37	30	34	28							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
30	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
35	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
40	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
Wind Speed [mph]		170				180													
30	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
35	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
40	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
Wind Speed [mph]		190				200													
30	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						
35	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						
40	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
45	1	55	44	59	55	63	50	52	42	59	53	60	48	50	40	59	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
50	1	55	44	57	55	62	50	52	42	57	53	60	48	50	40	57	50	57	46
	2	46	38	56	45	56	45	44	36	54	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
60	1	53	44	53	53	59	50	52	42	53	53	59	48	50	40	53	50	57	46
	2	46	38	53	45	56	45	44	36	53	43	53	43	42	34	51	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
Wind Speed [mph]	110						115												
45	1	48	38	59	48	55	44	46	37	58	46	52	42	46	37	58	46	52	42
	2	41	33	49	40	49	40	39	32	47	38	47	38	39	32	47	38	47	38
	3	34	28	38	31	36	29	33	27	37	30	34	28	33	27	37	30	34	28
50	1	48	38	57	48	55	44	46	37	57	46	52	42	46	37	57	46	52	42
	2	41	33	49	40	49	40	39	32	47	38	47	38	39	32	47	38	47	38
	3	34	28	38	31	36	29	33	27	37	30	34	28	33	27	37	30	34	28
60	1	48	38	53	48	55	44	46	37	53	46	52	42	46	37	53	46	52	42
	2	41	33	49	40	49	40	39	32	47	38	47	38	39	32	47	38	47	38
	3	34	28	38	31	36	29	33	27	37	30	34	28	33	27	37	30	34	28
Wind Speed [mph]	120						130												
45	1	44	35	55	45	50	41	46	37	58	46	52	42	46	37	58	46	52	42
	2	37	30	45	37	45	37	39	32	47	38	47	38	39	32	47	38	47	38
	3	32	26	35	28	33	27	33	27	37	30	34	28	33	27	37	30	34	28
50	1	44	35	55	45	50	41	46	37	57	46	52	42	46	37	57	46	52	42
	2	37	30	45	37	45	37	39	32	47	38	47	38	39	32	47	38	47	38
	3	32	26	35	28	33	27	33	27	37	30	34	28	33	27	37	30	34	28
60	1	44	35	53	45	50	41	46	37	53	46	52	42	46	37	53	46	52	42
	2	37	30	45	37	45	37	39	32	47	38	47	38	39	32	47	38	47	38
	3	32	26	35	28	33	27	33	27	37	30	34	28	33	27	37	30	34	28

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
45	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
50	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
60	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
	1	42	34	53	43	48	39	39	32	49	40	45	36	37	30	46	37	42	34
Wind Speed [mph]		170				180													
45	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
50	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
60	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
Wind Speed [mph]		190				200													
45	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						
50	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						
60	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
70	1	49	44	50	50	56	50	49	42	50	50	56	48	49	40	50	50	56	46
	2	46	38	50	45	56	45	44	36	50	43	53	43	42	34	50	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
80	1	46	44	47	47	53	50	46	42	47	47	53	48	46	40	47	47	53	46
	2	46	38	47	45	53	45	44	36	47	43	53	43	42	34	47	41	51	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
90	1	44	44	44	44	50	50	44	42	44	44	50	48	44	40	44	44	50	46
	2	44	38	44	44	50	45	44	36	44	43	50	43	42	34	44	41	50	41
	3	39	32	44	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
70	1	48	38	50	48	55	44	46	37	50	46	52	42	46	37	47	38	47	38
	2	41	33	49	40	49	40	39	32	47	38	47	38	33	27	37	30	34	28
	3	34	28	38	31	36	29	33	27	37	30	34	28	33	27	37	30	34	28
80	1	46	38	47	47	53	44	46	37	47	46	52	42	46	37	47	38	47	38
	2	41	33	47	40	49	40	39	32	47	38	47	38	33	27	37	30	34	28
	3	34	28	38	31	36	29	33	27	37	30	34	28	33	27	37	30	34	28
90	1	44	38	44	44	50	44	44	37	44	44	50	42	44	37	44	38	47	38
	2	41	33	44	40	49	40	39	32	44	38	47	38	33	27	37	30	34	28
	3	34	28	38	31	36	29	33	27	37	30	34	28	33	27	37	30	34	28
70	1	44	35	50	45	50	41	46	37	50	46	52	42	46	37	47	38	47	38
	2	37	30	45	37	45	37	39	32	47	38	47	38	33	27	37	30	34	28
	3	32	26	35	28	33	27	33	27	37	30	34	28	33	27	37	30	34	28
80	1	44	35	47	45	50	41	46	37	47	46	52	42	46	37	47	38	47	38
	2	37	30	45	37	45	37	39	32	47	38	47	38	33	27	37	30	34	28
	3	32	26	35	28	33	27	33	27	37	30	34	28	33	27	37	30	34	28
90	1	44	35	44	44	50	41	44	37	44	44	50	42	44	37	44	38	47	38
	2	37	30	44	37	45	37	39	32	44	38	47	38	33	27	37	30	34	28
	3	32	26	35	28	33	27	33	27	37	30	34	28	33	27	37	30	34	28

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : C

Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	70	1	42	34	50	43	48	39	39	32	49	40	45	36	37	30	46	37	42
2		36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
3		30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
80	1	42	34	47	43	48	39	39	32	47	40	45	36	37	30	46	37	42	34
	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
90	1	42	34	44	43	48	39	39	32	44	40	45	36	37	30	44	37	42	34
	2	36	29	44	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
Wind Speed [mph]		170						180											
70	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
80	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
90	1	34	28	43	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
Wind Speed [mph]		190						200											
70	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						
80	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						
90	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	41	41	42	42	48	48	41	41	42	42	48	48	41	40	42	42	48
2		41	38	42	42	48	45	41	36	42	42	48	43	41	34	42	41	48	41
3		39	32	42	35	41	33	37	30	42	34	39	32	36	29	40	32	37	30
Wind Speed [mph]		110						115											
100	1	41	38	42	42	48	44	41	37	42	42	48	42	39	32	42	38	47	38
	2	41	33	42	40	48	40	39	32	42	38	47	38	33	27	37	30	34	28
	3	34	28	38	31	36	29	33	27	37	30	34	28						
Wind Speed [mph]		120						130											
100	1	41	35	42	42	48	41	41	37	42	42	48	42	39	32	42	38	47	38
	2	37	30	42	37	45	37	39	32	42	38	47	38	33	27	37	30	34	28
	3	32	26	35	28	33	27	33	27	37	30	34	28						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	41	34	42	42	48	39	39	32	42	40	45	36	37	30	42	37	42
	2	36	29	42	35	43	35	34	27	41	33	40	33	31	25	38	31	38	31
	3	30	25	34	27	32	26	28	23	31	26	30	24	26	21	29	24	28	23
Wind Speed [mph]		170						180											
100	1	34	28	42	35	40	32	32	26	41	33	37	30						
	2	29	24	36	29	36	29	28	23	34	27	33	27						
	3	25	20	28	22	26	21	23	19	26	21	25	20						
Wind Speed [mph]		190						200											
100	1	31	25	39	31	35	29	29	24	37	30	33	27						
	2	26	21	32	26	32	26	25	20	30	24	30	24						
	3	22	18	25	20	23	19	21	17	23	19	22	18						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	95							100							105												
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																		
0	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43								
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38								
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28								
5	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43								
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38								
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28								
10	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43								
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38								
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28								
Wind Speed [mph]	110							115																			
	1	44	36	56	45	51	41	42	34	53	43	49	39	36	29	44	35	44	35								
	2	38	31	46	37	46	37	36	29	44	35	44	35	31	25	34	28	32	26								
0	3	32	26	35	29	33	27	31	25	34	28	32	26	1	44	36	56	45	51	41							
	1	44	36	56	45	51	41	42	34	53	43	49	39	2	38	31	46	37	46	37							
	2	38	31	46	37	46	37	36	29	44	35	44	35	3	32	26	35	29	33	27							
5	1	44	36	56	45	51	41	42	34	53	43	49	39	1	44	36	56	45	51	41							
	2	38	31	46	37	46	37	36	29	44	35	44	35	2	38	31	46	37	46	37							
	3	32	26	35	29	33	27	31	25	34	28	32	26	10	1	44	36	56	45	51	41						
10	1	44	36	56	45	51	41	42	34	53	43	49	39	2	38	31	46	37	46	37							
	2	38	31	46	37	46	37	36	29	44	35	44	35	3	32	26	35	29	33	27							
	3	32	26	35	29	33	27	31	25	34	28	32	26	Wind Speed [mph]	120							130					
0	1	41	33	51	41	47	38	42	34	53	43	49	39	1	41	33	51	41	47	38							
	2	35	28	42	34	42	34	36	29	44	35	44	35	2	35	28	42	34	42	34							
	3	29	24	33	26	31	25	31	25	34	28	32	26	3	29	24	33	26	31	25							
5	1	41	33	51	41	47	38	42	34	53	43	49	39	1	41	33	51	41	47	38							
	2	35	28	42	34	42	34	36	29	44	35	44	35	2	35	28	42	34	42	34							
	3	29	24	33	26	31	25	31	25	34	28	32	26	10	1	41	33	51	41	47	38						
10	1	41	33	51	41	47	38	42	34	53	43	49	39	2	35	28	42	34	42	34							
	2	35	28	42	34	42	34	36	29	44	35	44	35	3	29	24	33	26	31	25							
	3	29	24	33	26	31	25	31	25	34	28	32	26														

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	0	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39
2		34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
3		28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
5	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
10	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
0	170						180												
	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
5	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
10	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
0	190						200												
	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
5	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
10	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
	15	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53
2		43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38
3		36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
20	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
25	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
15	110						115												
	1	44	36	56	45	51	41	42	34	53	43	49	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
20	1	44	36	56	45	51	41	42	34	53	43	49	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	35	29	33	27	31	25	34	28	32	26	31	25	34	28	32	26
25	1	44	36	56	45	51	41	42	34	53	43	49	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	35	29	33	27	31	25	34	28	32	26	31	25	34	28	32	26
15	120						130												
	1	41	33	51	41	47	38	42	34	53	43	49	39	42	34	44	35	44	35
	2	35	28	42	34	42	34	36	29	44	35	44	35	36	29	44	35	44	35
20	1	41	33	51	41	47	38	42	34	53	43	49	39	42	34	44	35	44	35
	2	35	28	42	34	42	34	36	29	44	35	44	35	36	29	44	35	44	35
	3	29	24	33	26	31	25	31	25	34	28	32	26	31	25	34	28	32	26
25	1	41	33	51	41	47	38	42	34	53	43	49	39	42	34	44	35	44	35
	2	35	28	42	34	42	34	36	29	44	35	44	35	36	29	44	35	44	35
	3	29	24	33	26	31	25	31	25	34	28	32	26	31	25	34	28	32	26

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
15	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
20	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
25	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
Wind Speed [mph]		170				180													
15	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
20	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
25	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
Wind Speed [mph]		190				200													
15	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
20	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
25	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	95							100							105						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																		
30	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43		
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38		
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28		
35	1	51	41	64	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43		
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38		
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28		
40	1	51	41	63	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43		
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38		
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28		
Wind Speed [mph]	110							115													
	30	1	44	36	56	45	51	41	42	34	53	43	49	39	36	29	44	35	44	35	
		2	38	31	46	37	46	37	36	29	44	35	44	35	31	25	34	28	32	26	
3		32	26	35	29	33	27	31	25	34	28	32	26	1	44	36	56	45	51	41	
35	1	44	36	56	45	51	41	42	34	53	43	49	39	36	29	44	35	44	35		
	2	38	31	46	37	46	37	36	29	44	35	44	35	31	25	34	28	32	26		
	3	32	26	35	29	33	27	31	25	34	28	32	26	1	44	36	56	45	51	41	
40	1	44	36	56	45	51	41	42	34	53	43	49	39	36	29	44	35	44	35		
	2	38	31	46	37	46	37	36	29	44	35	44	35	31	25	34	28	32	26		
	3	32	26	35	29	33	27	31	25	34	28	32	26	1	44	36	56	45	51	41	
Wind Speed [mph]	120							130													
	30	1	41	33	51	41	47	38	42	34	53	43	49	39	36	29	44	35	44	35	
		2	35	28	42	34	42	34	36	29	44	35	44	35	31	25	34	28	32	26	
3		29	24	33	26	31	25	31	25	34	28	32	26	1	41	33	51	41	47	38	
35	1	41	33	51	41	47	38	42	34	53	43	49	39	36	29	44	35	44	35		
	2	35	28	42	34	42	34	36	29	44	35	44	35	31	25	34	28	32	26		
	3	29	24	33	26	31	25	31	25	34	28	32	26	1	41	33	51	41	47	38	
40	1	41	33	51	41	47	38	42	34	53	43	49	39	36	29	44	35	44	35		
	2	35	28	42	34	42	34	36	29	44	35	44	35	31	25	34	28	32	26		
	3	29	24	33	26	31	25	31	25	34	28	32	26								

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	30	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39
2		34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
3		28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
35	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
40	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21
Wind Speed [mph]		170						180											
30	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
35	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
40	1	32	26	40	33	37	30	30	25	38	31	35	28						
	2	27	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
Wind Speed [mph]		190						200											
30	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
35	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
40	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	24	20	29	24	29	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
45	1	51	41	61	51	58	47	48	39	61	49	55	45	46	37	58	47	53	43
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
50	1	51	41	59	51	58	47	48	39	59	49	55	45	46	37	58	47	53	43
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
60	1	51	41	56	51	58	47	48	39	56	49	55	45	46	37	56	47	53	43
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
45	110						115												
	1	44	36	56	45	51	41	42	34	53	43	49	39						
	2	38	31	46	37	46	37	36	29	44	35	44	35						
50	1	44	36	56	45	51	41	42	34	53	43	49	39						
	2	38	31	46	37	46	37	36	29	44	35	44	35						
	3	32	26	35	29	33	27	31	25	34	28	32	26						
60	1	44	36	56	45	51	41	42	34	53	43	49	39						
	2	38	31	46	37	46	37	36	29	44	35	44	35						
	3	32	26	35	29	33	27	31	25	34	28	32	26						
45	120						130												
	1	41	33	51	41	47	38	42	34	53	43	49	39						
	2	35	28	42	34	42	34	36	29	44	35	44	35						
50	1	41	33	51	41	47	38	42	34	53	43	49	39						
	2	35	28	42	34	42	34	36	29	44	35	44	35						
	3	29	24	33	26	31	25	31	25	34	28	32	26						
60	1	41	33	51	41	47	38	42	34	53	43	49	39						
	2	35	28	42	34	42	34	36	29	44	35	44	35						
	3	29	24	33	26	31	25	31	25	34	28	32	26						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Ground Snow	140								150								160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
	Group	Array Interior	Array Edge																					
45	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32					
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29					
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21					
50	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32					
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29					
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21					
60	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32					
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29					
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21					
170								180																
45	1	32	26	40	33	37	30	30	25	38	31	35	28											
	2	27	22	33	27	33	27	26	21	31	25	31	25											
	3	23	19	26	21	24	20	22	18	24	20	23	19											
50	1	32	26	40	33	37	30	30	25	38	31	35	28											
	2	27	22	33	27	33	27	26	21	31	25	31	25											
	3	23	19	26	21	24	20	22	18	24	20	23	19											
60	1	32	26	40	33	37	30	30	25	38	31	35	28											
	2	27	22	33	27	33	27	26	21	31	25	31	25											
	3	23	19	26	21	24	20	22	18	24	20	23	19											
190								200																
45	1	29	23	36	29	33	27	27	22	34	28	31	25											
	2	24	20	29	24	29	24	23	19	28	23	28	23											
	3	21	17	23	19	22	18	20	16	22	18	21	17											
50	1	29	23	36	29	33	27	27	22	34	28	31	25											
	2	24	20	29	24	29	24	23	19	28	23	28	23											
	3	21	17	23	19	22	18	20	16	22	18	21	17											
60	1	29	23	36	29	33	27	27	22	34	28	31	25											
	2	24	20	29	24	29	24	23	19	28	23	28	23											
	3	21	17	23	19	22	18	20	16	22	18	21	17											

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge																
70	1	51	41	52	51	58	47	48	39	52	49	55	45	46	37	52	47	53	43
	2	43	35	52	42	52	42	41	33	50	40	50	40	39	32	48	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
80	1	49	41	49	49	56	47	48	39	49	49	55	45	46	37	49	47	53	43
	2	43	35	49	42	52	42	41	33	49	40	50	40	39	32	48	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
90	1	46	41	47	47	53	47	46	39	47	47	53	45	46	37	47	47	53	43
	2	43	35	47	42	52	42	41	33	47	40	50	40	39	32	47	39	48	38
	3	36	29	40	33	38	31	35	28	39	31	36	30	33	27	37	30	35	28
70	110						115												
	1	44	36	52	45	51	41	42	34	52	43	49	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
80	1	44	36	49	45	51	41	42	34	49	43	49	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	35	29	33	27	31	25	34	28	32	26	31	25	34	28	32	26
90	1	44	36	47	45	51	41	42	34	47	43	49	39	42	34	44	35	44	35
	2	38	31	46	37	46	37	36	29	44	35	44	35	36	29	44	35	44	35
	3	32	26	35	29	33	27	31	25	34	28	32	26	31	25	34	28	32	26
70	120						130												
	1	41	33	51	41	47	38	42	34	52	43	49	39	42	34	44	35	44	35
	2	35	28	42	34	42	34	36	29	44	35	44	35	36	29	44	35	44	35
80	1	41	33	49	41	47	38	42	34	49	43	49	39	42	34	44	35	44	35
	2	35	28	42	34	42	34	36	29	44	35	44	35	36	29	44	35	44	35
	3	29	24	33	26	31	25	31	25	34	28	32	26	31	25	34	28	32	26
90	1	41	33	47	41	47	38	42	34	47	43	49	39	42	34	44	35	44	35
	2	35	28	42	34	42	34	36	29	44	35	44	35	36	29	44	35	44	35
	3	29	24	33	26	31	25	31	25	34	28	32	26	31	25	34	28	32	26

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Span, inches

Exposure Category : D

Wind Speed [mph]	140						150						160												
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge																						
	70	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32					
2		34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29						
3		28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21						
80	1	39	32	49	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32						
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29						
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21						
90	1	39	32	47	40	45	36	37	30	46	37	42	34	34	28	43	35	39	32						
	2	34	27	41	33	40	33	31	25	38	31	38	30	29	24	35	29	35	29						
	3	28	23	31	26	30	24	26	21	29	24	28	22	25	20	27	22	26	21						
Wind Speed [mph]	170						180																		
70	1	32	26	40	33	37	30	30	25	38	31	35	28	27	22	33	27	33	27	26	21	31	25	31	25
	2	27	22	33	27	33	27	26	21	31	25	31	25	22	18	24	20	23	19						
	3	23	19	26	21	24	20	22	18	24	20	23	19												
80	1	32	26	40	33	37	30	30	25	38	31	35	28	27	22	33	27	33	27	26	21	31	25	31	25
	2	27	22	33	27	33	27	26	21	31	25	31	25	22	18	24	20	23	19						
	3	23	19	26	21	24	20	22	18	24	20	23	19												
90	1	32	26	40	33	37	30	30	25	38	31	35	28	27	22	33	27	33	27	26	21	31	25	31	25
	2	27	22	33	27	33	27	26	21	31	25	31	25	22	18	24	20	23	19						
	3	23	19	26	21	24	20	22	18	24	20	23	19												
Wind Speed [mph]	190						200																		
70	1	29	23	36	29	33	27	27	22	34	28	31	25	27	22	29	24	29	24	23	19	28	23	28	23
	2	24	20	29	24	29	24	23	19	28	23	28	23	20	16	22	18	21	17						
	3	21	17	23	19	22	18	20	16	22	18	21	17												
80	1	29	23	36	29	33	27	27	22	34	28	31	25	27	22	29	24	29	24	23	19	28	23	28	23
	2	24	20	29	24	29	24	23	19	28	23	28	23	20	16	22	18	21	17						
	3	21	17	23	19	22	18	20	16	22	18	21	17												
90	1	29	23	36	29	33	27	27	22	34	28	31	25	27	22	29	24	29	24	23	19	28	23	28	23
	2	24	20	29	24	29	24	23	19	28	23	28	23	20	16	22	18	21	17						
	3	21	17	23	19	22	18	20	16	22	18	21	17												

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches														
Exposure Category : B	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	67	54	75	68	75	62	64	51	75	65	72	59	61	49	75	62	70	56
		2	57	46	70	56	69	55	54	44	66	53	66	53	52	42	63	51	63	51
		3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
	5	1	67	54	75	68	75	62	64	51	75	65	72	59	61	49	75	62	70	56
		2	57	46	70	56	69	55	54	44	66	53	66	53	52	42	63	51	63	51
		3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
	10	1	67	54	71	68	75	62	64	51	71	65	72	59	61	49	71	62	70	56
		2	57	46	70	56	69	55	54	44	66	53	66	53	52	42	63	51	63	51
		3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
	0	1	59	47	73	59	67	54	56	45	71	57	65	52	59	47	60	49	60	48
		2	50	40	60	49	60	48	48	38	58	47	58	46	42	34	47	38	44	35
		3	42	34	47	38	44	35	40	32	45	36	42	34	56	45	71	57	65	52
	5	1	59	47	73	59	67	54	56	45	71	57	65	52	59	47	60	49	60	48
		2	50	40	60	49	60	48	48	38	58	47	58	46	42	34	47	38	44	35
		3	42	34	47	38	44	35	40	32	45	36	42	34	56	45	71	57	65	52
	10	1	59	47	71	59	67	54	56	45	71	57	65	52	59	47	60	49	60	48
		2	50	40	60	49	60	48	48	38	58	47	58	46	42	34	47	38	44	35
3		42	34	47	38	44	35	40	32	45	36	42	34	56	45	71	57	65	52	
0	1	54	43	68	55	62	50	56	45	71	57	65	52	54	43	68	55	62	50	
	2	46	37	56	45	55	45	48	38	58	47	58	46	40	32	45	36	42	34	
	3	38	31	43	35	40	33	40	32	45	36	42	34	54	43	68	55	62	50	
5	1	54	43	68	55	62	50	56	45	71	57	65	52	54	43	68	55	62	50	
	2	46	37	56	45	55	45	48	38	58	47	58	46	40	32	45	36	42	34	
	3	38	31	43	35	40	33	40	32	45	36	42	34	54	43	68	55	62	50	
10	1	54	43	68	55	62	50	56	45	71	57	65	52	54	43	68	55	62	50	
	2	46	37	56	45	55	45	48	38	58	47	58	46	40	32	45	36	42	34	
	3	38	31	43	35	40	33	40	32	45	36	42	34	54	43	68	55	62	50	

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	52	42	66	53	60	48	48	39	61	49	55	45	45	36	57	46	52	42
0	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	1	52	42	66	53	60	48	48	39	61	49	55	45	45	36	57	46	52	42
5	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	1	52	42	66	53	60	48	48	39	61	49	55	45	45	36	57	46	52	42
10	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	1	52	42	66	53	60	48	48	39	61	49	55	45	45	36	57	46	52	42
Wind Speed [mph]		170				180				190				200					
0	1	42	34	53	43	48	39	40	32	50	40	46	37	34	27	41	33	41	33
	2	36	29	43	35	43	35	34	27	41	33	41	33	29	23	32	26	30	24
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
5	1	42	34	53	43	48	39	40	32	50	40	46	37	34	27	41	33	41	33
	2	36	29	43	35	43	35	34	27	41	33	41	33	29	23	32	26	30	24
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
10	1	42	34	53	43	48	39	40	32	50	40	46	37	34	27	41	33	41	33
	2	36	29	43	35	43	35	34	27	41	33	41	33	29	23	32	26	30	24
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
Wind Speed [mph]		190				200				210				220					
0	1	37	30	47	38	43	35	36	29	45	36	41	33	30	25	37	30	37	30
	2	32	26	39	31	39	31	30	25	37	30	37	30	26	21	28	23	27	22
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
5	1	37	30	47	38	43	35	36	29	45	36	41	33	30	25	37	30	37	30
	2	32	26	39	31	39	31	30	25	37	30	37	30	26	21	28	23	27	22
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
10	1	37	30	47	38	43	35	36	29	45	36	41	33	30	25	37	30	37	30
	2	32	26	39	31	39	31	30	25	37	30	37	30	26	21	28	23	27	22
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	67	54	67	67	72	62	64	51	67	65	72	59	61	49	67	62	70
2		57	46	67	56	69	55	54	44	66	53	66	53	52	42	63	51	63	51
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
20	1	64	54	64	64	70	62	64	51	64	64	70	59	61	49	64	62	70	56
	2	57	46	64	56	69	55	54	44	64	53	66	53	52	42	63	51	63	51
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
25	1	64	54	64	64	68	62	64	51	64	64	68	59	61	49	64	62	68	56
	2	57	46	64	56	68	55	54	44	64	53	66	53	52	42	63	51	63	51
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
Wind Speed [mph]		110						115											
15	1	59	47	67	59	67	54	56	45	67	57	65	52						
	2	50	40	60	49	60	48	48	38	58	47	58	46						
	3	42	34	47	38	44	35	40	32	45	36	42	34						
20	1	59	47	64	59	67	54	56	45	64	57	65	52						
	2	50	40	60	49	60	48	48	38	58	47	58	46						
	3	42	34	47	38	44	35	40	32	45	36	42	34						
25	1	59	47	64	59	67	54	56	45	64	57	65	52						
	2	50	40	60	49	60	48	48	38	58	47	58	46						
	3	42	34	47	38	44	35	40	32	45	36	42	34						
Wind Speed [mph]		120						130											
15	1	54	43	67	55	62	50	56	45	67	57	65	52						
	2	46	37	56	45	55	45	48	38	58	47	58	46						
	3	38	31	43	35	40	33	40	32	45	36	42	34						
20	1	54	43	64	55	62	50	56	45	64	57	65	52						
	2	46	37	56	45	55	45	48	38	58	47	58	46						
	3	38	31	43	35	40	33	40	32	45	36	42	34						
25	1	54	43	64	55	62	50	56	45	64	57	65	52						
	2	46	37	56	45	55	45	48	38	58	47	58	46						
	3	38	31	43	35	40	33	40	32	45	36	42	34						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	52	42	66	53	60	48	48	39	61	49	55	45	45	36	57	46	52
2		44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
3		37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
20	1	52	42	64	53	60	48	48	39	61	49	55	45	45	36	57	46	52	42
	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
25	1	52	42	64	53	60	48	48	39	61	49	55	45	45	36	57	46	52	42
	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
15	170						180												
	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
20	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
25	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
15	190						200												
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
20	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
25	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	62	54	63	63	66	62	62	51	63	63	66	59	61	49	63	62	66
2		57	46	63	56	66	55	54	44	63	53	66	53	52	42	63	51	63	51
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
35	1	60	54	60	60	64	62	60	51	60	60	64	59	60	49	60	60	64	56
	2	57	46	60	56	64	55	54	44	60	53	64	53	52	42	60	51	63	51
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
40	1	58	54	58	58	63	62	58	51	58	58	63	59	58	49	58	58	63	56
	2	57	46	58	56	63	55	54	44	58	53	63	53	52	42	58	51	63	51
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
Wind Speed [mph]		110						115											
30	1	59	47	63	59	66	54	56	45	63	57	65	52	59	47	63	59	66	54
	2	50	40	60	49	60	48	48	38	58	47	58	46	50	40	60	49	60	48
	3	42	34	47	38	44	35	40	32	45	36	42	34	42	34	47	38	44	35
35	1	59	47	60	59	64	54	56	45	60	57	64	52	59	47	60	59	64	54
	2	50	40	60	49	60	48	48	38	58	47	58	46	50	40	60	49	60	48
	3	42	34	47	38	44	35	40	32	45	36	42	34	42	34	47	38	44	35
40	1	58	47	58	58	63	54	56	45	58	57	63	52	58	47	58	58	63	54
	2	50	40	58	49	60	48	48	38	58	47	58	46	50	40	58	49	60	48
	3	42	34	47	38	44	35	40	32	45	36	42	34	42	34	47	38	44	35
Wind Speed [mph]		120						130											
30	1	54	43	63	55	62	50	56	45	63	57	65	52	54	43	63	55	62	50
	2	46	37	56	45	55	45	48	38	58	47	58	46	46	37	56	45	55	45
	3	38	31	43	35	40	33	40	32	45	36	42	34	38	31	43	35	40	33
35	1	54	43	60	55	62	50	56	45	60	57	64	52	54	43	60	55	62	50
	2	46	37	56	45	55	45	48	38	58	47	58	46	46	37	56	45	55	45
	3	38	31	43	35	40	33	40	32	45	36	42	34	38	31	43	35	40	33
40	1	54	43	58	55	62	50	56	45	58	57	63	52	54	43	58	55	62	50
	2	46	37	56	45	55	45	48	38	58	47	58	46	46	37	56	45	55	45
	3	38	31	43	35	40	33	40	32	45	36	42	34	38	31	43	35	40	33

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	52	42	63	53	60	48	48	39	61	49	55	45	45	36	57	46	52
2		44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
3		37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
35	1	52	42	60	53	60	48	48	39	60	49	55	45	45	36	57	46	52	42
	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
40	1	52	42	58	53	60	48	48	39	58	49	55	45	45	36	57	46	52	42
	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
30	170						180												
	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
35	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
40	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
30	190						200												
	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
35	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
40	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22

Exposure Category : B

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	55	54	56	56	61	61	55	51	56	56	61	59	55	49	56	56	61
2		55	46	56	56	61	55	54	44	56	53	61	53	52	42	56	51	61	51
3		48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
50	1	54	54	54	54	59	59	54	51	54	54	59	59	54	49	54	54	59	56
	2	54	46	54	54	59	55	54	44	54	53	59	53	52	42	54	51	59	51
	3	48	39	53	43	50	41	46	37	51	41	48	39	44	35	49	39	46	37
60	1	50	50	50	50	56	56	50	50	50	50	56	56	50	49	50	50	56	56
	2	50	46	50	50	56	55	50	44	50	50	56	53	50	42	50	50	56	51
	3	48	39	50	43	50	41	46	37	50	41	48	39	44	35	49	39	46	37
Wind Speed [mph]		110						115											
45	1	55	47	56	56	61	54	55	45	56	56	61	52	55	40	56	49	60	48
	2	50	40	56	49	60	48	48	38	56	47	58	46	40	32	45	36	42	34
	3	42	34	47	38	44	35	40	32	45	36	42	34	40	32	45	36	42	34
50	1	54	47	54	54	59	54	54	45	54	54	59	52	48	38	54	47	58	46
	2	50	40	54	49	59	48	48	38	54	47	58	46	40	32	45	36	42	34
	3	42	34	47	38	44	35	40	32	45	36	42	34	40	32	45	36	42	34
60	1	50	47	50	50	56	54	50	45	50	50	56	52	48	38	50	47	56	46
	2	50	40	50	49	56	48	48	38	50	47	56	46	40	32	45	36	42	34
	3	42	34	47	38	44	35	40	32	45	36	42	34	40	32	45	36	42	34
Wind Speed [mph]		120						130											
45	1	54	43	56	55	61	50	55	45	56	56	61	52	46	37	56	45	55	45
	2	46	37	56	45	55	45	48	38	56	47	58	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	40	32	45	36	42	34
50	1	54	43	54	54	59	50	54	45	54	54	59	52	48	38	54	47	58	46
	2	46	37	54	45	55	45	48	38	54	47	58	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	40	32	45	36	42	34
60	1	50	43	50	50	56	50	50	45	50	50	56	52	46	37	50	45	55	45
	2	46	37	50	45	55	45	48	38	50	47	56	46	40	32	45	36	42	34
	3	38	31	43	35	40	33	40	32	45	36	42	34	40	32	45	36	42	34

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	52	42	56	53	60	48	48	39	56	49	55	45	45	36	56	46	52	42
45	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	1	52	42	54	53	59	48	48	39	54	49	55	45	45	36	54	46	52	42
50	2	44	36	53	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	1	50	42	50	50	56	48	48	39	50	49	55	45	45	36	50	46	52	42
60	2	44	36	50	43	53	43	41	33	50	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	Wind Speed [mph]																		
170																			
45	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
50	1	42	34	53	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
60	1	42	34	50	43	48	39	40	32	50	40	46	37	40	32	50	40	46	37
	2	36	29	43	35	43	35	34	27	41	33	41	33	34	27	41	33	41	33
	3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24
Wind Speed [mph]																			
180																			
190																			
45	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
50	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
60	1	37	30	47	38	43	35	36	29	45	36	41	33	36	29	45	36	41	33
	2	32	26	39	31	39	31	30	25	37	30	37	30	30	25	37	30	37	30
	3	27	22	30	24	28	23	26	21	28	23	27	22	26	21	28	23	27	22
Wind Speed [mph]																			
200																			

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	46	46	47	47	53	53	46	46	47	47	53	53	46	46	47	47	53
2		46	46	47	47	53	53	46	44	47	47	53	53	46	42	47	47	53	51
3		46	39	47	43	50	41	46	37	47	41	48	39	44	35	47	39	46	37
80	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50
	2	44	44	44	44	50	50	44	44	44	44	50	50	44	42	44	44	50	50
	3	44	39	44	43	50	41	44	37	44	41	48	39	44	35	44	39	46	37
90	1	41	41	42	42	47	47	41	41	42	42	47	47	41	41	42	42	47	47
	2	41	41	42	42	47	47	41	41	42	42	47	47	41	41	42	42	47	47
	3	41	39	42	42	47	41	41	37	42	41	47	39	41	35	42	39	46	37
Wind Speed [mph]		110						115											
70	1	46	46	47	47	53	53	46	45	47	47	53	52						
	2	46	40	47	47	53	48	46	38	47	47	53	46						
	3	42	34	47	38	44	35	40	32	45	36	42	34						
80	1	44	44	44	44	50	50	44	44	44	44	50	50						
	2	44	40	44	44	50	48	44	38	44	44	50	46						
	3	42	34	44	38	44	35	40	32	44	36	42	34						
90	1	41	41	42	42	47	47	41	41	42	42	47	47						
	2	41	40	42	42	47	47	41	38	42	42	47	46						
	3	41	34	42	38	44	35	40	32	42	36	42	34						
Wind Speed [mph]		120						130											
70	1	46	43	47	47	53	50	46	45	47	47	53	52						
	2	46	37	47	45	53	45	46	38	47	47	53	46						
	3	38	31	43	35	40	33	40	32	45	36	42	34						
80	1	44	43	44	44	50	50	44	44	44	44	50	50						
	2	44	37	44	44	50	45	44	38	44	44	50	46						
	3	38	31	43	35	40	33	40	32	44	36	42	34						
90	1	41	41	42	42	47	47	41	41	42	42	47	47						
	2	41	37	42	42	47	45	41	38	42	42	47	46						
	3	38	31	42	35	40	33	40	32	42	36	42	34						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	46	42	47	47	53	48	46	39	47	47	53	45	45	36	47	46	52	42
70	2	44	36	47	43	53	43	41	33	47	40	49	40	38	31	46	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	1	44	42	44	44	50	48	44	39	44	44	50	45	44	36	44	44	50	42
80	2	44	36	44	43	50	43	41	33	44	40	49	40	38	31	44	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	1	41	41	42	42	47	47	41	39	42	42	47	45	41	36	42	42	47	42
90	2	41	36	42	42	47	43	41	33	42	40	47	40	38	31	42	37	46	37
	3	37	30	41	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
	Wind Speed [mph]		170				180												
70	1	42	34	47	43	48	39	40	32	47	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
80	1	42	34	44	43	48	39	40	32	44	40	46	37						
	2	36	29	43	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
90	1	41	34	42	42	47	39	40	32	42	40	46	37						
	2	36	29	42	35	43	35	34	27	41	33	41	33						
	3	30	25	34	27	32	26	29	23	32	26	30	24						
Wind Speed [mph]		190				200													
70	1	37	30	47	38	43	35	36	29	45	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	28	23	27	22						
80	1	37	30	44	38	43	35	36	29	44	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	28	23	27	22						
90	1	37	30	42	38	43	35	36	29	42	36	41	33						
	2	32	26	39	31	39	31	30	25	37	30	37	30						
	3	27	22	30	24	28	23	26	21	28	23	27	22						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches														
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Exposure Category : B	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	100	1		39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45
2			39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45	45
3			39	39	40	40	45	41	39	37	40	40	45	39	39	35	40	39	45	37
100	1		39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45	45
	2		39	39	40	40	45	45	39	38	40	40	45	45	39	38	40	40	45	45
	3		39	34	40	38	44	35	39	32	40	36	42	34	39	32	40	36	42	34
100	1		39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45	45
	2		39	39	40	40	45	45	39	38	40	40	45	45	39	38	40	40	45	45
	3		39	34	40	38	44	35	39	32	40	36	42	34	39	32	40	36	42	34
100	1		39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45	45
	2		39	37	40	40	45	45	39	38	40	40	45	45	39	38	40	40	45	45
	3		38	31	40	35	40	33	39	32	40	36	42	34	39	32	40	36	42	34
100	1		39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45	45
	2		39	37	40	40	45	45	39	38	40	40	45	45	39	38	40	40	45	45
	3		38	31	40	35	40	33	39	32	40	36	42	34	39	32	40	36	42	34

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches														
Ground Snow	Wind Speed [mph]	140				150				160										
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	100	1	39	39	40	40	45	45	39	39	40	40	45	45	39	36	40	40	45	42
		2	39	36	40	40	45	43	39	33	40	40	45	40	38	31	40	37	45	37
		3	37	30	40	33	39	32	34	28	38	31	36	29	32	26	36	29	34	27
Exposure Category : B	Wind Speed [mph]	170				180				190				200						
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	100	1	39	34	40	40	45	39	39	32	40	40	45	37	39	32	40	40	45	37
		2	36	29	40	35	43	35	34	27	40	33	41	33	34	27	40	33	41	33
		3	30	25	34	27	32	26	29	23	32	26	30	24	29	23	32	26	30	24

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	56	45	71	57	64	52	53	43	68	54	61	49	51	41	65	52	59
2		48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
3		40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
5	1	56	45	71	57	64	52	53	43	68	54	61	49	51	41	65	52	59	47
	2	48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
10	1	56	45	71	57	64	52	53	43	68	54	61	49	51	41	65	52	59	47
	2	48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
Wind Speed [mph]		110						115											
0	1	49	39	62	50	56	45	47	38	59	48	54	43	49	39	62	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
5	1	49	39	62	50	56	45	47	38	59	48	54	43	49	39	62	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
10	1	49	39	62	50	56	45	47	38	59	48	54	43	49	39	62	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
Wind Speed [mph]		120						130											
0	1	45	36	57	46	52	42	47	38	59	48	54	43	45	36	57	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27
5	1	45	36	57	46	52	42	47	38	59	48	54	43	45	36	57	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27
10	1	45	36	57	46	52	42	47	38	59	48	54	43	45	36	57	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
0	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
5	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
10	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
Wind Speed [mph]		170				180													
0	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
5	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
10	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
Wind Speed [mph]		190				200													
0	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
5	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
10	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	56	45	67	57	64	52	53	43	67	54	61	49	51	41	65	52	59
2		48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
3		40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
20	1	56	45	64	57	64	52	53	43	64	54	61	49	51	41	64	52	59	47
	2	48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
25	1	56	45	64	57	64	52	53	43	64	54	61	49	51	41	64	52	59	47
	2	48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
15	Wind Speed [mph]		110						115										
	1	49	39	62	50	56	45	47	38	59	48	54	43						
	2	42	34	50	41	50	41	40	32	48	39	48	39						
20	3	35	28	39	32	37	30	34	27	37	30	35	29						
	1	49	39	62	50	56	45	47	38	59	48	54	43						
	2	42	34	50	41	50	41	40	32	48	39	48	39						
25	3	35	28	39	32	37	30	34	27	37	30	35	29						
	1	49	39	62	50	56	45	47	38	59	48	54	43						
	2	42	34	50	41	50	41	40	32	48	39	48	39						
15	Wind Speed [mph]		120						130										
	1	45	36	57	46	52	42	47	38	59	48	54	43						
	2	38	31	46	38	46	37	40	32	48	39	48	39						
20	3	32	26	36	29	34	27	34	27	37	30	35	29						
	1	45	36	57	46	52	42	47	38	59	48	54	43						
	2	38	31	46	38	46	37	40	32	48	39	48	39						
25	3	32	26	36	29	34	27	34	27	37	30	35	29						
	1	45	36	57	46	52	42	47	38	59	48	54	43						
	2	38	31	46	38	46	37	40	32	48	39	48	39						
15	Wind Speed [mph]		120						130										
	1	45	36	57	46	52	42	47	38	59	48	54	43						
	2	38	31	46	38	46	37	40	32	48	39	48	39						
20	3	32	26	36	29	34	27	34	27	37	30	35	29						
	1	45	36	57	46	52	42	47	38	59	48	54	43						
	2	38	31	46	38	46	37	40	32	48	39	48	39						
25	3	32	26	36	29	34	27	34	27	37	30	35	29						
	1	45	36	57	46	52	42	47	38	59	48	54	43						
	2	38	31	46	38	46	37	40	32	48	39	48	39						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
15	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
20	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
25	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
Wind Speed [mph]		170				180													
15	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
20	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
25	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
Wind Speed [mph]		190				200													
15	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
20	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
25	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	56	45	63	57	64	52	53	43	63	54	61	49	51	41	63	52	59
2		48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
3		40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
35	1	56	45	60	57	64	52	53	43	60	54	61	49	51	41	60	52	59	47
	2	48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
40	1	56	45	58	57	63	52	53	43	58	54	61	49	51	41	58	52	59	47
	2	48	38	58	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
Wind Speed [mph]		110						115											
30	1	49	39	62	50	56	45	47	38	59	48	54	43	49	39	62	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
35	1	49	39	60	50	56	45	47	38	59	48	54	43	49	39	60	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
40	1	49	39	58	50	56	45	47	38	58	48	54	43	49	39	58	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
Wind Speed [mph]		120						130											
30	1	45	36	57	46	52	42	47	38	59	48	54	43	45	36	57	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27
35	1	45	36	57	46	52	42	47	38	59	48	54	43	45	36	57	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27
40	1	45	36	57	46	52	42	47	38	58	48	54	43	45	36	57	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
30	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
35	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
40	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35
Wind Speed [mph]		170				180													
30	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
35	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
40	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
Wind Speed [mph]		190				200													
30	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
35	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
40	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	55	45	56	56	61	52	53	43	56	54	61	49	51	41	56	52	59
2		48	38	56	47	58	46	45	37	55	44	55	44	43	35	53	42	52	42
3		40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
50	1	54	45	54	54	59	52	53	43	54	54	59	49	51	41	54	52	59	47
	2	48	38	54	47	58	46	45	37	54	44	55	44	43	35	53	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
60	1	50	45	50	50	56	52	50	43	50	50	56	49	50	41	50	50	56	47
	2	48	38	50	47	56	46	45	37	50	44	55	44	43	35	50	42	52	42
	3	40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
Wind Speed [mph]		110						115											
45	1	49	39	56	50	56	45	47	38	56	48	54	43	49	39	56	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
50	1	49	39	54	50	56	45	47	38	54	48	54	43	49	39	54	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
60	1	49	39	50	50	56	45	47	38	50	48	54	43	49	39	50	50	56	45
	2	42	34	50	41	50	41	40	32	48	39	48	39	42	34	50	41	50	41
	3	35	28	39	32	37	30	34	27	37	30	35	29	35	28	39	32	37	30
Wind Speed [mph]		120						130											
45	1	45	36	56	46	52	42	47	38	56	48	54	43	45	36	56	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27
50	1	45	36	54	46	52	42	47	38	54	48	54	43	45	36	54	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27
60	1	45	36	50	46	52	42	47	38	50	48	54	43	45	36	50	46	52	42
	2	38	31	46	38	46	37	40	32	48	39	48	39	38	31	46	38	46	37
	3	32	26	36	29	34	27	34	27	37	30	35	29	32	26	36	29	34	27

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																										
Wind Speed [mph]		140				150				160																						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30														
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge													
	1	43	35	55	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35													
45	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31													
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23													
	1	43	35	54	44	50	40	40	33	51	41	46	37	38	30	47	38	43	35													
50	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31													
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23													
	1	43	35	50	44	50	40	40	33	50	41	46	37	38	30	47	38	43	35													
60	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31													
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23													
	Wind Speed [mph]																															
170																																
45	1	35	29	44	36	41	33	33	27	42	34	38	31	28	23	34	28	34	28													
	2	30	24	36	29	36	29	28	23	34	28	34	28	24	19	27	22	25	20													
	3	25	21	28	23	27	22	24	19	27	22	25	20	33	27	42	34	38	31													
50	1	35	29	44	36	41	33	33	27	42	34	38	31	28	23	34	28	34	28													
	2	30	24	36	29	36	29	28	23	34	28	34	28	24	19	27	22	25	20													
	3	25	21	28	23	27	22	24	19	27	22	25	20	33	27	42	34	38	31													
60	1	35	29	44	36	41	33	33	27	42	34	38	31	28	23	34	28	34	28													
	2	30	24	36	29	36	29	28	23	34	28	34	28	24	19	27	22	25	20													
	3	25	21	28	23	27	22	24	19	27	22	25	20	Wind Speed [mph]																		
190																																
45	1	31	25	39	32	36	29	30	24	37	30	34	28	25	21	31	25	31	25													
	2	27	22	32	26	32	26	25	21	31	25	31	25	21	17	24	19	23	18													
	3	23	18	25	20	24	19	21	17	24	19	23	18	30	24	37	30	34	28													
50	1	31	25	39	32	36	29	30	24	37	30	34	28	25	21	31	25	31	25													
	2	27	22	32	26	32	26	25	21	31	25	31	25	21	17	24	19	23	18													
	3	23	18	25	20	24	19	21	17	24	19	23	18	30	24	37	30	34	28													
60	1	31	25	39	32	36	29	30	24	37	30	34	28	25	21	31	25	31	25													
	2	27	22	32	26	32	26	25	21	31	25	31	25	21	17	24	19	23	18													
	3	23	18	25	20	24	19	21	17	24	19	23	18	Wind Speed [mph]																		
200																																

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	46	45	47	47	53	52	46	43	47	47	53	49	46	41	47	47	53
2		46	38	47	47	53	46	45	37	47	44	53	44	43	35	47	42	52	42
3		40	32	45	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
80	1	44	44	44	44	50	50	44	43	44	44	50	49	44	41	44	44	50	47
	2	44	38	44	44	50	46	44	37	44	44	50	44	43	35	44	42	50	42
	3	40	32	44	36	42	34	38	31	43	34	40	32	37	30	41	33	38	31
90	1	41	41	42	42	47	47	41	41	42	42	47	47	41	41	42	42	47	47
	2	41	38	42	42	47	46	41	37	42	42	47	44	41	35	42	42	47	42
	3	40	32	42	36	42	34	38	31	42	34	40	32	37	30	41	33	38	31
Wind Speed [mph]		110						115											
70	1	46	39	47	47	53	45	46	38	47	47	53	43	46	38	47	47	53	43
	2	42	34	47	41	50	41	40	32	47	39	48	39	40	32	47	39	48	39
	3	35	28	39	32	37	30	34	27	37	30	35	29	34	27	37	30	35	29
80	1	44	39	44	44	50	45	44	38	44	44	50	43	44	38	44	44	50	43
	2	42	34	44	41	50	41	40	32	44	39	48	39	40	32	44	39	48	39
	3	35	28	39	32	37	30	34	27	37	30	35	29	34	27	37	30	35	29
90	1	41	39	42	42	47	45	41	38	42	42	47	43	41	38	42	42	47	43
	2	41	34	42	41	47	41	40	32	42	39	47	39	40	32	42	39	47	39
	3	35	28	39	32	37	30	34	27	37	30	35	29	34	27	37	30	35	29
Wind Speed [mph]		120						130											
70	1	45	36	47	46	52	42	46	38	47	47	53	43	46	38	47	47	53	43
	2	38	31	46	38	46	37	40	32	47	39	48	39	40	32	47	39	48	39
	3	32	26	36	29	34	27	34	27	37	30	35	29	34	27	37	30	35	29
80	1	44	36	44	44	50	42	44	38	44	44	50	43	44	38	44	44	50	43
	2	38	31	44	38	46	37	40	32	44	39	48	39	40	32	44	39	48	39
	3	32	26	36	29	34	27	34	27	37	30	35	29	34	27	37	30	35	29
90	1	41	36	42	42	47	42	41	38	42	42	47	43	41	38	42	42	47	43
	2	38	31	42	38	46	37	40	32	42	39	47	39	40	32	42	39	47	39
	3	32	26	36	29	34	27	34	27	37	30	35	29	34	27	37	30	35	29

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	43	35	47	44	50	40	40	33	47	41	46	37	38	30	47	38	43	35
70	2	37	30	45	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	43	35	44	44	50	40	40	33	44	41	46	37	38	30	44	38	43	35
80	2	37	30	44	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	1	41	35	42	42	47	40	40	33	42	41	46	37	38	30	42	38	43	35
90	2	37	30	42	36	45	36	34	28	42	34	41	34	32	26	39	31	39	31
	3	31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
	Wind Speed [mph]		170				180												
70	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
80	1	35	29	44	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
90	1	35	29	42	36	41	33	33	27	42	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
Wind Speed [mph]		190				200													
70	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
80	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						
90	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	100	1	39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45
2		39	38	40	40	45	45	39	37	40	40	45	44	39	35	40	40	45	42
3		39	32	40	36	42	34	38	31	40	34	40	32	37	30	40	33	38	31
Wind Speed [mph]		110						115											
100	1	39	39	40	40	45	45	39	38	40	40	45	43						
	2	39	34	40	40	45	41	39	32	40	39	45	39						
	3	35	28	39	32	37	30	34	27	37	30	35	29						
Wind Speed [mph]		120						130											
100	1	39	36	40	40	45	42	39	38	40	40	45	43						
	2	38	31	40	38	45	37	39	32	40	39	45	39						
	3	32	26	36	29	34	27	34	27	37	30	35	29						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						92.5in x 45.9in						Span, inches					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	100	1	39	35	40	40	45	40	39	33	40	40	45	37	38	30	40	38	43
2		37	30	40	36	45	36	34	28	40	34	41	34	32	26	39	31	39	31
3		31	25	35	28	33	26	29	23	32	26	30	25	27	22	30	24	28	23
Wind Speed [mph]		170						180											
100	1	35	29	40	36	41	33	33	27	40	34	38	31						
	2	30	24	36	29	36	29	28	23	34	28	34	28						
	3	25	21	28	23	27	22	24	19	27	22	25	20						
Wind Speed [mph]		190						200											
100	1	31	25	39	32	36	29	30	24	37	30	34	28						
	2	27	22	32	26	32	26	25	21	31	25	31	25						
	3	23	18	25	20	24	19	21	17	24	19	23	18						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	51	41	65	52	59	47	49	39	62	50	56	45	47	38	59	47	54
2		44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
3		37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
5	1	51	41	65	52	59	47	49	39	62	50	56	45	47	38	59	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
10	1	51	41	65	52	59	47	49	39	62	50	56	45	47	38	59	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
Wind Speed [mph]		110						115											
0	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
5	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
10	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
Wind Speed [mph]		120						130											
0	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
5	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
10	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches														
Exposure Category : D	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
		2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
		3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	5	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
		2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
		3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	10	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
		2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
		3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	0	1	32	26	41	33	37	30	30	25	38	31	35	28	30	25	31	25		
		2	28	22	33	27	33	27	26	21	31	25	31	25						
	5	1	32	26	41	33	37	30	30	25	38	31	35	28						
		2	28	22	33	27	33	27	26	21	31	25	31	25						
		3	23	19	26	21	24	20	22	18	24	20	23	19						
	10	1	32	26	41	33	37	30	30	25	38	31	35	28						
		2	28	22	33	27	33	27	26	21	31	25	31	25						
		3	23	19	26	21	24	20	22	18	24	20	23	19						
0	1	29	23	36	29	33	27	27	22	34	28	31	25							
	2	25	20	30	24	30	24	23	19	28	23	28	23							
5	1	29	23	36	29	33	27	27	22	34	28	31	25							
	2	25	20	30	24	30	24	23	19	28	23	28	23							
	3	21	17	23	19	22	18	20	16	22	18	21	17							
10	1	29	23	36	29	33	27	27	22	34	28	31	25							
	2	25	20	30	24	30	24	23	19	28	23	28	23							
	3	21	17	23	19	22	18	20	16	22	18	21	17							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	51	41	65	52	59	47	49	39	62	50	56	45	47	38	59	47	54
2		44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
3		37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
20	1	51	41	64	52	59	47	49	39	62	50	56	45	47	38	59	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
25	1	51	41	64	52	59	47	49	39	62	50	56	45	47	38	59	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
Wind Speed [mph]		110						115											
15	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
20	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
25	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
Wind Speed [mph]		120						130											
15	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
20	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
25	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
15	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
20	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
25	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
Wind Speed [mph]		170				180													
15	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
20	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
25	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
Wind Speed [mph]		190				200													
15	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
20	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
25	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	51	41	64	52	59	47	49	39	62	50	56	45	47	38	59	47	54
2		44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
3		37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
35	1	51	41	62	52	59	47	49	39	62	50	56	45	47	38	59	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
40	1	51	41	60	52	59	47	49	39	60	50	56	45	47	38	59	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
30	Wind Speed [mph]		110						115										
	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
35	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
40	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
30	Wind Speed [mph]		120						130										
	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
35	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
40	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
30	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
35	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
40	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
Wind Speed [mph]		170						180											
30	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
35	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
40	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
Wind Speed [mph]		190						200											
30	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
35	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
40	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	51	41	58	52	59	47	49	39	58	50	56	45	47	38	58	47	54
2		44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
3		37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
50	1	51	41	56	52	59	47	49	39	56	50	56	45	47	38	56	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
60	1	51	41	53	52	58	47	49	39	53	50	56	45	47	38	53	47	54	43
	2	44	35	53	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
Wind Speed [mph]		110						115											
45	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
50	1	45	36	56	45	51	41	43	35	54	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
60	1	45	36	53	45	51	41	43	35	53	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
Wind Speed [mph]		120						130											
45	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
50	1	41	33	52	42	47	38	43	35	54	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
60	1	41	33	52	42	47	38	43	35	53	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
45	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
50	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
60	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32
Wind Speed [mph]		170				180													
45	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
50	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
60	1	32	26	41	33	37	30	30	25	38	31	35	28						
	2	28	22	33	27	33	27	26	21	31	25	31	25						
	3	23	19	26	21	24	20	22	18	24	20	23	19						
Wind Speed [mph]		190				200													
45	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
50	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
60	1	29	23	36	29	33	27	27	22	34	28	31	25						
	2	25	20	30	24	30	24	23	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	49	41	50	50	55	47	49	39	50	50	55	45	47	38	50	47	54
2		44	35	50	43	53	42	42	34	50	41	50	41	40	32	48	39	48	39
3		37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
80	1	46	41	47	47	53	47	46	39	47	47	53	45	46	38	47	47	53	43
	2	44	35	47	43	53	42	42	34	47	41	50	41	40	32	47	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
90	1	44	41	44	44	50	47	44	39	44	44	50	45	44	38	44	44	50	43
	2	44	35	44	43	50	42	42	34	44	41	50	41	40	32	44	39	48	39
	3	37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
Wind Speed [mph]		110						115											
70	1	45	36	50	45	51	41	43	35	50	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
80	1	45	36	47	45	51	41	43	35	47	43	49	40	37	30	44	36	44	36
	2	38	31	46	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
90	1	44	36	44	44	50	41	43	35	44	43	49	40	37	30	44	36	44	36
	2	38	31	44	37	46	37	37	30	44	36	44	36	31	25	34	28	32	26
	3	32	26	36	29	34	27	31	25	34	28	32	26	31	25	34	28	32	26
Wind Speed [mph]		120						130											
70	1	41	33	50	42	47	38	43	35	50	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
80	1	41	33	47	42	47	38	43	35	47	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26
90	1	41	33	44	42	47	38	43	35	44	43	49	40	37	30	44	36	44	36
	2	35	28	42	34	42	34	37	30	44	36	44	36	31	25	34	28	32	26
	3	30	24	33	27	31	25	31	25	34	28	32	26	31	25	34	28	32	26

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140						150						160												
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
	1	40	32	50	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32							
70	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29							
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21							
	1	40	32	47	40	45	37	37	30	46	37	42	34	34	28	43	35	40	32							
80	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29							
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21							
	1	40	32	44	40	45	37	37	30	44	37	42	34	34	28	43	35	40	32							
90	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29							
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21							
	Wind Speed [mph]		170						180																	
70	1	32	26	41	33	37	30	30	25	38	31	35	28	28	22	33	27	33	27							
	2	28	22	33	27	33	27	26	21	31	25	31	25	22	19	26	21	24	20							
	3	23	19	26	21	24	20	22	18	24	20	23	19	30	25	38	31	35	28							
80	1	32	26	41	33	37	30	30	25	38	31	35	28	26	21	31	25	31	25							
	2	28	22	33	27	33	27	26	21	31	25	31	25	22	18	24	20	23	19							
	3	23	19	26	21	24	20	22	18	24	20	23	19	30	25	38	31	35	28							
90	1	32	26	41	33	37	30	30	25	38	31	35	28	26	21	31	25	31	25							
	2	28	22	33	27	33	27	26	21	31	25	31	25	22	18	24	20	23	19							
	3	23	19	26	21	24	20	22	18	24	20	23	19	Wind Speed [mph]		190						200				
70	1	29	23	36	29	33	27	27	22	34	28	31	25	27	22	34	28	31	25							
	2	25	20	30	24	30	24	23	19	28	23	28	23	20	16	22	18	21	17							
	3	21	17	23	19	22	18	20	16	22	18	21	17	27	22	34	28	31	25							
80	1	29	23	36	29	33	27	27	22	34	28	31	25	23	19	28	23	28	23							
	2	25	20	30	24	30	24	23	19	28	23	28	23	20	16	22	18	21	17							
	3	21	17	23	19	22	18	20	16	22	18	21	17	27	22	34	28	31	25							
90	1	29	23	36	29	33	27	27	22	34	28	31	25	23	19	28	23	28	23							
	2	25	20	30	24	30	24	23	19	28	23	28	23	20	16	22	18	21	17							
	3	21	17	23	19	22	18	20	16	22	18	21	17													

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	100	1	41	41	42	42	48	47	41	39	42	42	48	45	41	38	42	42	48
2		41	35	42	42	48	42	41	34	42	41	48	41	40	32	42	39	48	39
3		37	30	41	33	38	31	35	28	39	32	37	30	33	27	37	30	35	28
Wind Speed [mph]		110						115											
100	1	41	36	42	42	48	41	41	35	42	42	48	40						
	2	38	31	42	37	46	37	37	30	42	36	44	36						
	3	32	26	36	29	34	27	31	25	34	28	32	26						
0	1																		
	2																		
	3																		
0	1																		
	2																		
	3																		
Wind Speed [mph]		120						130											
100	1	41	33	42	42	47	38	41	35	42	42	48	40						
	2	35	28	42	34	42	34	37	30	42	36	44	36						
	3	30	24	33	27	31	25	31	25	34	28	32	26						

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches														
Wind Speed [mph]		140				150				160										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	100	1	40	32	42	40	45	37	37	30	42	37	42	34	34	28	42	35	40	32
	2	34	27	41	33	41	33	31	26	38	31	38	31	29	24	36	29	35	29	
	3	28	23	32	26	30	24	27	21	30	24	28	23	25	20	28	22	26	21	
Wind Speed [mph]		170				180														
100	1	32	26	41	33	37	30	30	25	38	31	35	28							
	2	28	22	33	27	33	27	26	21	31	25	31	25							
	3	23	19	26	21	24	20	22	18	24	20	23	19							
Wind Speed [mph]		190				200														
100	1	29	23	36	29	33	27	27	22	34	28	31	25							
	2	25	20	30	24	30	24	23	19	28	23	28	23							
	3	21	17	23	19	22	18	20	16	22	18	21	17							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches														
Exposure Category : B	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	61	49	74	61	70	56	58	46	72	59	66	53	55	44	70	56	63	51
		2	51	41	63	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
		3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
	5	1	61	49	74	61	70	56	58	46	72	59	66	53	55	44	70	56	63	51
		2	51	41	63	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
		3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
	10	1	61	49	71	61	70	56	58	46	71	59	66	53	55	44	70	56	63	51
		2	51	41	63	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
		3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
	Wind Speed [mph]	110						115												
	0	1	53	42	67	54	61	49	51	41	64	51	58	47						
		2	45	36	54	44	54	44	43	35	52	42	52	42						
		3	38	31	42	34	40	32	36	29	40	33	38	31						
	5	1	53	42	67	54	61	49	51	41	64	51	58	47						
		2	45	36	54	44	54	44	43	35	52	42	52	42						
		3	38	31	42	34	40	32	36	29	40	33	38	31						
	10	1	53	42	67	54	61	49	51	41	64	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42							
	3	38	31	42	34	40	32	36	29	40	33	38	31							
Wind Speed [mph]	120						130													
0	1	49	39	61	49	56	45	51	41	64	51	58	47							
	2	41	33	50	40	50	40	43	35	52	42	52	42							
	3	35	28	39	31	37	30	36	29	40	33	38	31							
5	1	49	39	61	49	56	45	51	41	64	51	58	47							
	2	41	33	50	40	50	40	43	35	52	42	52	42							
	3	35	28	39	31	37	30	36	29	40	33	38	31							
10	1	49	39	61	49	56	45	51	41	64	51	58	47							
	2	41	33	50	40	50	40	43	35	52	42	52	42							
	3	35	28	39	31	37	30	36	29	40	33	38	31							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
0	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
5	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
10	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
Wind Speed [mph]		170				180													
0	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
5	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
10	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
Wind Speed [mph]		190				200													
0	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
5	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
10	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	61	49	67	61	70	56	58	46	67	59	66	53	55	44	67	56	63
2		51	41	63	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
3		43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
20	1	61	49	64	61	70	56	58	46	64	59	66	53	55	44	64	56	63	51
	2	51	41	63	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
	3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
25	1	61	49	64	61	68	56	58	46	64	59	66	53	55	44	64	56	63	51
	2	51	41	63	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
	3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
15	Wind Speed [mph]		110						115										
	1	53	42	67	54	61	49	51	41	64	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
20	3	38	31	42	34	40	32	36	29	40	33	38	31						
	1	53	42	64	54	61	49	51	41	64	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
25	3	38	31	42	34	40	32	36	29	40	33	38	31						
	1	53	42	64	54	61	49	51	41	64	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
15	Wind Speed [mph]		120						130										
	1	49	39	61	49	56	45	51	41	64	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
20	3	35	28	39	31	37	30	36	29	40	33	38	31						
	1	49	39	61	49	56	45	51	41	64	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
25	3	35	28	39	31	37	30	36	29	40	33	38	31						
	1	49	39	61	49	56	45	51	41	64	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
15	Wind Speed [mph]		120						130										
	1	49	39	61	49	56	45	51	41	64	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
20	3	35	28	39	31	37	30	36	29	40	33	38	31						
	1	49	39	61	49	56	45	51	41	64	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
25	3	35	28	39	31	37	30	36	29	40	33	38	31						
	1	49	39	61	49	56	45	51	41	64	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
15	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
20	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
25	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
Wind Speed [mph]		170				180													
15	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
20	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
25	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
Wind Speed [mph]		190				200													
15	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
20	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
25	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	61	49	63	61	66	56	58	46	63	59	66	53	55	44	63	56	63
2		51	41	63	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
3		43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
35	1	60	49	60	60	64	56	58	46	60	59	64	53	55	44	60	56	63	51
	2	51	41	60	50	62	50	49	40	60	48	59	48	47	38	57	46	57	46
	3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
40	1	58	49	58	58	63	56	58	46	58	58	63	53	55	44	58	56	63	51
	2	51	41	58	50	62	50	49	40	58	48	59	48	47	38	57	46	57	46
	3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
30	110						115												
	1	53	42	63	54	61	49	51	41	63	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
35	1	53	42	60	54	61	49	51	41	60	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
	3	38	31	42	34	40	32	36	29	40	33	38	31						
40	1	53	42	58	54	61	49	51	41	58	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
	3	38	31	42	34	40	32	36	29	40	33	38	31						
30	120						130												
	1	49	39	61	49	56	45	51	41	63	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
35	1	49	39	60	49	56	45	51	41	60	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
	3	35	28	39	31	37	30	36	29	40	33	38	31						
40	1	49	39	58	49	56	45	51	41	58	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
	3	35	28	39	31	37	30	36	29	40	33	38	31						

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches														
Exposure Category : B	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
		2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
		3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	35	1	47	38	59	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
		2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
		3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	40	1	47	38	58	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
		2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
		3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	Wind Speed [mph]	170						180												
		30	1	38	31	48	39	44	35	36	29	45	36	41	33					
	2		32	26	39	32	39	32	31	25	37	30	37	30						
	3		27	22	30	25	29	23	26	21	29	23	27	22						
	35	1	38	31	48	39	44	35	36	29	45	36	41	33						
		2	32	26	39	32	39	32	31	25	37	30	37	30						
		3	27	22	30	25	29	23	26	21	29	23	27	22						
	40	1	38	31	48	39	44	35	36	29	45	36	41	33						
2		32	26	39	32	39	32	31	25	37	30	37	30							
3		27	22	30	25	29	23	26	21	29	23	27	22							
Wind Speed [mph]	190						200													
	30	1	34	27	43	34	39	31	32	26	40	33	37	30						
2		29	23	35	28	35	28	27	22	33	27	33	27							
3		24	20	27	22	26	21	23	19	26	21	24	20							
35	1	34	27	43	34	39	31	32	26	40	33	37	30							
	2	29	23	35	28	35	28	27	22	33	27	33	27							
	3	24	20	27	22	26	21	23	19	26	21	24	20							
40	1	34	27	43	34	39	31	32	26	40	33	37	30							
	2	29	23	35	28	35	28	27	22	33	27	33	27							
	3	24	20	27	22	26	21	23	19	26	21	24	20							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	55	49	56	56	61	56	55	46	56	56	61	53	55	44	56	56	61
2		51	41	56	50	61	50	49	40	56	48	59	48	47	38	56	46	57	46
3		43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
50	1	54	49	54	54	59	56	54	46	54	54	59	53	54	44	54	54	59	51
	2	51	41	54	50	59	50	49	40	54	48	59	48	47	38	54	46	57	46
	3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
60	1	50	49	50	50	56	56	50	46	50	50	56	53	50	44	50	50	56	51
	2	50	41	50	50	56	50	49	40	50	48	56	48	47	38	50	46	56	46
	3	43	35	48	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
Wind Speed [mph]		110						115											
45	1	53	42	56	54	61	49	51	41	56	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
	3	38	31	42	34	40	32	36	29	40	33	38	31						
50	1	53	42	54	54	59	49	51	41	54	51	58	47						
	2	45	36	54	44	54	44	43	35	52	42	52	42						
	3	38	31	42	34	40	32	36	29	40	33	38	31						
60	1	50	42	50	50	56	49	50	41	50	50	56	47						
	2	45	36	50	44	54	44	43	35	50	42	52	42						
	3	38	31	42	34	40	32	36	29	40	33	38	31						
Wind Speed [mph]		120						130											
45	1	49	39	56	49	56	45	51	41	56	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
	3	35	28	39	31	37	30	36	29	40	33	38	31						
50	1	49	39	54	49	56	45	51	41	54	51	58	47						
	2	41	33	50	40	50	40	43	35	52	42	52	42						
	3	35	28	39	31	37	30	36	29	40	33	38	31						
60	1	49	39	50	49	56	45	50	41	50	50	56	47						
	2	41	33	50	40	50	40	43	35	50	42	52	42						
	3	35	28	39	31	37	30	36	29	40	33	38	31						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	47	38	56	47	54	43	43	35	55	44	50	40	41	33	51	41	47	38
45	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	54	47	54	43	43	35	54	44	50	40	41	33	51	41	47	38
50	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	1	47	38	50	47	54	43	43	35	50	44	50	40	41	33	50	41	47	38
60	2	40	32	48	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	Wind Speed [mph]		170				180												
45	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
50	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
60	1	38	31	48	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
Wind Speed [mph]		190				200													
45	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
50	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
60	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	46	46	47	47	53	53	46	46	47	47	53	53	46	44	47	47	53
2		46	41	47	47	53	50	46	40	47	47	53	48	46	38	47	46	53	46
3		43	35	47	39	45	37	41	33	46	37	43	35	39	32	44	35	41	33
80	1	44	44	44	44	50	50	44	44	44	44	50	50	44	44	44	44	50	50
	2	44	41	44	44	50	50	44	40	44	44	50	48	44	38	44	44	50	46
	3	43	35	44	39	45	37	41	33	44	37	43	35	39	32	44	35	41	33
90	1	41	41	42	42	47	47	41	41	42	42	47	47	41	41	42	42	47	47
	2	41	41	42	42	47	47	41	40	42	42	47	47	41	38	42	42	47	46
	3	41	35	42	39	45	37	41	33	42	37	43	35	39	32	42	35	41	33
70	Wind Speed [mph]		110						115										
	1	46	42	47	47	53	49	46	41	47	47	53	47	46	41	47	47	53	47
	2	45	36	47	44	53	44	43	35	47	42	52	42	43	35	47	42	52	42
80	3	38	31	42	34	40	32	36	29	40	33	38	31	36	29	40	33	38	31
	1	44	42	44	44	50	49	44	41	44	44	50	47	44	41	44	44	50	47
	2	44	36	44	44	50	44	43	35	44	42	50	42	43	35	44	42	50	42
90	3	38	31	42	34	40	32	36	29	40	33	38	31	36	29	40	33	38	31
	1	41	41	42	42	47	47	41	41	42	42	47	47	41	41	42	42	47	47
	2	41	36	42	42	47	44	41	35	42	42	47	42	41	35	42	42	47	42
70	Wind Speed [mph]		120						130										
	1	46	39	47	47	53	45	46	41	47	47	53	47	46	41	47	47	53	47
	2	41	33	47	40	50	40	43	35	47	42	52	42	43	35	47	42	52	42
80	3	35	28	39	31	37	30	36	29	40	33	38	31	36	29	40	33	38	31
	1	44	39	44	44	50	45	44	41	44	44	50	47	44	41	44	44	50	47
	2	41	33	44	40	50	40	43	35	44	42	50	42	43	35	44	42	50	42
90	3	35	28	39	31	37	30	36	29	40	33	38	31	36	29	40	33	38	31
	1	41	39	42	42	47	45	41	41	42	42	47	47	41	41	42	42	47	47
	2	41	33	42	40	47	40	41	35	42	42	47	42	41	35	42	42	47	42
90	3	35	28	39	31	37	30	36	29	40	33	38	31	36	29	40	33	38	31

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	46	38	47	47	53	43	43	35	47	44	50	40	41	33	47	41	47
2		40	32	47	39	48	39	37	30	45	36	45	36	35	28	42	34	42	34
3		33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
80	1	44	38	44	44	50	43	43	35	44	44	50	40	41	33	44	41	47	38
	2	40	32	44	39	48	39	37	30	44	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
90	1	41	38	42	42	47	43	41	35	42	42	47	40	41	33	42	41	47	38
	2	40	32	42	39	47	39	37	30	42	36	45	36	35	28	42	34	42	34
	3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
Wind Speed [mph]		170						180											
70	1	38	31	47	39	44	35	36	29	45	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
80	1	38	31	44	39	44	35	36	29	44	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
90	1	38	31	42	39	44	35	36	29	42	36	41	33						
	2	32	26	39	32	39	32	31	25	37	30	37	30						
	3	27	22	30	25	29	23	26	21	29	23	27	22						
Wind Speed [mph]		190						200											
70	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
80	1	34	27	43	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						
90	1	34	27	42	34	39	31	32	26	40	33	37	30						
	2	29	23	35	28	35	28	27	22	33	27	33	27						
	3	24	20	27	22	26	21	23	19	26	21	24	20						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	100	1	39	39	40	40	45	45	39	39	40	40	45	45	39	39	40	40	45
	2	39	39	40	40	45	45	39	39	40	40	45	45	39	38	40	40	45	45
	3	39	35	40	39	45	37	39	33	40	37	43	35	39	32	40	35	41	33
Wind Speed [mph]		110						115											
100	1	39	39	40	40	45	45	39	39	40	40	45	45						
	2	39	36	40	40	45	44	39	35	40	40	45	42						
	3	38	31	40	34	40	32	36	29	40	33	38	31						
Wind Speed [mph]		120						130											
100	1	39	39	40	40	45	45	39	39	40	40	45	45						
	2	39	33	40	40	45	40	39	35	40	40	45	42						
	3	35	28	39	31	37	30	36	29	40	33	38	31						

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches														
Exposure Category : B	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	100	1	39	38	40	40	45	43	39	35	40	40	45	40	39	33	40	40	45	38
		2	39	32	40	39	45	39	37	30	40	36	45	36	35	28	40	34	42	34
		3	33	27	37	30	35	29	31	25	35	28	33	27	29	24	32	26	31	25
	100	1	38	31	40	39	44	35	36	29	40	36	41	33						
	100	2	32	26	39	32	39	32	31	25	37	30	37	30						
	100	3	27	22	30	25	29	23	26	21	29	23	27	22						
	100	1	34	27	40	34	39	31	32	26	40	33	37	30						
100	2	29	23	35	28	35	28	27	22	33	27	33	27							
100	3	24	20	27	22	26	21	23	19	26	21	24	20							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	52	42	65	52	59	48	49	40	62	50	57	46	47	38	59	48	54
2		44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
3		37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
5	1	52	42	65	52	59	48	49	40	62	50	57	46	47	38	59	48	54	44
	2	44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
10	1	52	42	65	52	59	48	49	40	62	50	57	46	47	38	59	48	54	44
	2	44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
Wind Speed [mph]		110						115											
0	1	45	36	57	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
	3	32	26	36	29	34	28	31	25	35	28	33	26						
5	1	45	36	57	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
	3	32	26	36	29	34	28	31	25	35	28	33	26						
10	1	45	36	57	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
	3	32	26	36	29	34	28	31	25	35	28	33	26						
Wind Speed [mph]		120						130											
0	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
	3	30	24	33	27	31	25	31	25	35	28	33	26						
5	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
	3	30	24	33	27	31	25	31	25	35	28	33	26						
10	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
	3	30	24	33	27	31	25	31	25	35	28	33	26						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
0	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
5	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
10	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
Wind Speed [mph]		170				180													
0	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
5	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
10	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
Wind Speed [mph]		190				200													
0	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
5	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
10	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	15	1	52	42	65	52	59	48	49	40	62	50	57	46	47	38	59	48	54
2		44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
3		37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
20	1	52	42	64	52	59	48	49	40	62	50	57	46	47	38	59	48	54	44
	2	44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
25	1	52	42	64	52	59	48	49	40	62	50	57	46	47	38	59	48	54	44
	2	44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
15	Wind Speed [mph]		110						115										
	1	45	36	57	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
20	3	32	26	36	29	34	28	31	25	35	28	33	26						
	1	45	36	57	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
25	3	32	26	36	29	34	28	31	25	35	28	33	26						
	1	45	36	57	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
15	Wind Speed [mph]		120						130										
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
20	3	30	24	33	27	31	25	31	25	35	28	33	26						
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
25	3	30	24	33	27	31	25	31	25	35	28	33	26						
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
15	Wind Speed [mph]		120						130										
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
20	3	30	24	33	27	31	25	31	25	35	28	33	26						
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
25	3	30	24	33	27	31	25	31	25	35	28	33	26						
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
15	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
20	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
25	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
Wind Speed [mph]		170				180													
15	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
20	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
25	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
Wind Speed [mph]		190				200													
15	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
20	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
25	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches														
Wind Speed [mph]	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	52	42	63	52	59	48	49	40	62	50	57	46	47	38	59	48	54	44
2		44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39	
3		37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29	
35	1	52	42	60	52	59	48	49	40	60	50	57	46	47	38	59	48	54	44	
	2	44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39	
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29	
40	1	52	42	58	52	59	48	49	40	58	50	57	46	47	38	58	48	54	44	
	2	44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39	
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29	
Wind Speed [mph]	110						115													
	30	1	45	36	57	46	52	42	43	35	54	44	50	40						
		2	38	31	46	38	46	37	37	30	45	36	44	36						
3		32	26	36	29	34	28	31	25	35	28	33	26							
35	1	45	36	57	46	52	42	43	35	54	44	50	40							
	2	38	31	46	38	46	37	37	30	45	36	44	36							
	3	32	26	36	29	34	28	31	25	35	28	33	26							
40	1	45	36	57	46	52	42	43	35	54	44	50	40							
	2	38	31	46	38	46	37	37	30	45	36	44	36							
	3	32	26	36	29	34	28	31	25	35	28	33	26							
Wind Speed [mph]	120						130													
	30	1	42	34	52	42	48	39	43	35	54	44	50	40						
		2	35	29	43	35	43	35	37	30	45	36	44	36						
3		30	24	33	27	31	25	31	25	35	28	33	26							
35	1	42	34	52	42	48	39	43	35	54	44	50	40							
	2	35	29	43	35	43	35	37	30	45	36	44	36							
	3	30	24	33	27	31	25	31	25	35	28	33	26							
40	1	42	34	52	42	48	39	43	35	54	44	50	40							
	2	35	29	43	35	43	35	37	30	45	36	44	36							
	3	30	24	33	27	31	25	31	25	35	28	33	26							

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
30	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
35	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
40	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
Wind Speed [mph]		170				180													
30	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
35	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
40	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
Wind Speed [mph]		190				200													
30	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
35	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
40	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	52	42	56	52	59	48	49	40	56	50	57	46	47	38	56	48	54
2		44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
3		37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
50	1	52	42	54	52	59	48	49	40	54	50	57	46	47	38	54	48	54	44
	2	44	36	53	43	53	43	42	34	51	41	51	41	40	32	49	39	48	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
60	1	50	42	50	50	56	48	49	40	50	50	56	46	47	38	50	48	54	44
	2	44	36	50	43	53	43	42	34	50	41	51	41	40	32	49	39	48	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
45	Wind Speed [mph]		110						115										
	1	45	36	56	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
50	3	32	26	36	29	34	28	31	25	35	28	33	26						
	1	45	36	54	46	52	42	43	35	54	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
60	3	32	26	36	29	34	28	31	25	35	28	33	26						
	1	45	36	50	46	52	42	43	35	50	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
45	Wind Speed [mph]		120						130										
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
50	3	30	24	33	27	31	25	31	25	35	28	33	26						
	1	42	34	52	42	48	39	43	35	54	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
60	3	30	24	33	27	31	25	31	25	35	28	33	26						
	1	42	34	50	42	48	39	43	35	50	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
60	3	30	24	33	27	31	25	31	25	35	28	33	26						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
45	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
50	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
60	2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
	3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	1	40	32	50	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
Wind Speed [mph]		170				180													
45	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
50	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
60	1	33	26	41	33	37	30	31	25	39	31	35	29						
	2	28	23	34	27	34	27	26	21	32	26	32	26						
	3	24	19	26	21	25	20	22	18	25	20	23	19						
Wind Speed [mph]		190				200													
45	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
50	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						
60	1	29	24	36	30	33	27	28	22	35	28	32	26						
	2	25	20	30	24	30	24	24	19	28	23	28	23						
	3	21	17	23	19	22	18	20	16	22	18	21	17						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	46	42	47	47	53	48	46	40	47	47	53	46	46	38	47	47	53
2		44	36	47	43	53	43	42	34	47	41	51	41	40	32	47	39	48	39
3		37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
80	1	44	42	44	44	50	48	44	40	44	44	50	46	44	38	44	44	50	44
	2	44	36	44	43	50	43	42	34	44	41	50	41	40	32	44	39	48	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
90	1	41	41	42	42	47	47	41	40	42	42	47	46	41	38	42	42	47	44
	2	41	36	42	42	47	43	41	34	42	41	47	41	40	32	42	39	47	39
	3	37	30	41	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
70	Wind Speed [mph]		110						115										
	1	45	36	47	46	52	42	43	35	47	44	50	40						
	2	38	31	46	38	46	37	37	30	45	36	44	36						
80	1	44	36	44	44	50	42	43	35	44	44	50	40						
	2	38	31	44	38	46	37	37	30	44	36	44	36						
	3	32	26	36	29	34	28	31	25	35	28	33	26						
90	1	41	36	42	42	47	42	41	35	42	42	47	40						
	2	38	31	42	38	46	37	37	30	42	36	44	36						
	3	32	26	36	29	34	28	31	25	35	28	33	26						
70	Wind Speed [mph]		120						130										
	1	42	34	47	42	48	39	43	35	47	44	50	40						
	2	35	29	43	35	43	35	37	30	45	36	44	36						
80	1	42	34	44	42	48	39	43	35	44	44	50	40						
	2	35	29	43	35	43	35	37	30	44	36	44	36						
	3	30	24	33	27	31	25	31	25	35	28	33	26						
90	1	41	34	42	42	47	39	41	35	42	42	47	40						
	2	35	29	42	35	43	35	37	30	42	36	44	36						
	3	30	24	33	27	31	25	31	25	35	28	33	26						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches														
Exposure Category : C	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	40	32	47	41	46	37	37	30	47	38	43	35	35	28	44	35	40	32
		2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
		3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	80	1	40	32	44	41	46	37	37	30	44	38	43	35	35	28	44	35	40	32
		2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
		3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	90	1	40	32	42	41	46	37	37	30	42	38	43	35	35	28	42	35	40	32
		2	34	28	41	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29
		3	29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21
	70	Wind Speed [mph]	170						180											
		1	33	26	41	33	37	30	31	25	39	31	35	29						
		2	28	23	34	27	34	27	26	21	32	26	32	26						
		3	24	19	26	21	25	20	22	18	25	20	23	19						
		80	1	33	26	41	33	37	30	31	25	39	31	35	29					
			2	28	23	34	27	34	27	26	21	32	26	32	26					
			3	24	19	26	21	25	20	22	18	25	20	23	19					
		90	1	33	26	41	33	37	30	31	25	39	31	35	29					
2			28	23	34	27	34	27	26	21	32	26	32	26						
3			24	19	26	21	25	20	22	18	25	20	23	19						
70		Wind Speed [mph]	190						200											
		1	29	24	36	30	33	27	28	22	35	28	32	26						
		2	25	20	30	24	30	24	24	19	28	23	28	23						
		3	21	17	23	19	22	18	20	16	22	18	21	17						
		80	1	29	24	36	30	33	27	28	22	35	28	32	26					
			2	25	20	30	24	30	24	24	19	28	23	28	23					
			3	21	17	23	19	22	18	20	16	22	18	21	17					
		90	1	29	24	36	30	33	27	28	22	35	28	32	26					
	2		25	20	30	24	30	24	24	19	28	23	28	23						
	3		21	17	23	19	22	18	20	16	22	18	21	17						

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	100	1	39	39	40	40	45	45	39	39	40	40	45	45	39	38	40	40	45
	2	39	36	40	40	45	43	39	34	40	40	45	41	39	32	40	39	45	39
	3	37	30	40	33	39	31	35	29	39	32	37	30	34	27	38	30	35	29
Wind Speed [mph]		110						115											
100	1	39	36	40	40	45	42	39	35	40	40	45	40						
	2	38	31	40	38	45	37	37	30	40	36	44	36						
	3	32	26	36	29	34	28	31	25	35	28	33	26						
Wind Speed [mph]		120						130											
100	1	39	34	40	40	45	39	39	35	40	40	45	40						
	2	35	29	40	35	43	35	37	30	40	36	44	36						
	3	30	24	33	27	31	25	31	25	35	28	33	26						

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches															
Wind Speed [mph]		140						150						160							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	100	1	39	32	40	40	45	37	37	30	40	38	43	35	35	28	40	35	40	32	
2		34	28	40	33	41	33	32	26	38	31	38	31	30	24	36	29	36	29		
3		29	23	32	26	30	24	27	22	30	24	28	23	25	20	28	23	26	21		
Wind Speed [mph]		170						180													
100	1	33	26	40	33	37	30	31	25	39	31	35	29								
	2	28	23	34	27	34	27	26	21	32	26	32	26								
	3	24	19	26	21	25	20	22	18	25	20	23	19								
Wind Speed [mph]		190						200													
100	1	29	24	36	30	33	27	28	22	35	28	32	26								
	2	25	20	30	24	30	24	24	19	28	23	28	23								
	3	21	17	23	19	22	18	20	16	22	18	21	17								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ASCE 7-22)
 $a = 0.4h$, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	0	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50
2		41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
3		34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
5	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50	41
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
10	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50	41
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
Wind Speed [mph]	110						115												
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge				
0	1	42	34	53	43	48	39	40	32	51	41	46	37	34	28	41	34	41	33
	2	36	29	43	35	43	35	34	28	41	34	41	33	29	23	32	26	30	25
	3	30	24	34	27	32	26	29	23	32	26	30	25	1	1	1	1	1	1
5	1	42	34	53	43	48	39	40	32	51	41	46	37	34	28	41	34	41	33
	2	36	29	43	35	43	35	34	28	41	34	41	33	29	23	32	26	30	25
	3	30	24	34	27	32	26	29	23	32	26	30	25	1	1	1	1	1	1
10	1	42	34	53	43	48	39	40	32	51	41	46	37	34	28	41	34	41	33
	2	36	29	43	35	43	35	34	28	41	34	41	33	29	23	32	26	30	25
	3	30	24	34	27	32	26	29	23	32	26	30	25	1	1	1	1	1	1
Wind Speed [mph]	120						130												
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge				
0	1	39	31	49	39	44	36	40	32	51	41	46	37	34	28	41	34	41	33
	2	33	27	40	32	40	32	34	28	41	34	41	33	29	23	32	26	30	25
	3	28	23	31	25	29	24	29	23	32	26	30	25	1	1	1	1	1	1
5	1	39	31	49	39	44	36	40	32	51	41	46	37	34	28	41	34	41	33
	2	33	27	40	32	40	32	34	28	41	34	41	33	29	23	32	26	30	25
	3	28	23	31	25	29	24	29	23	32	26	30	25	1	1	1	1	1	1
10	1	39	31	49	39	44	36	40	32	51	41	46	37	34	28	41	34	41	33
	2	33	27	40	32	40	32	34	28	41	34	41	33	29	23	32	26	30	25
	3	28	23	31	25	29	24	29	23	32	26	30	25	1	1	1	1	1	1

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37
2		32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
3		27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
5	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
10	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
Wind Speed [mph]		170						180											
0	1	30	25	38	31	35	28	29	23	36	29	33	27	24	20	30	24	29	24
	2	26	21	31	25	31	25	24	20	30	24	29	24	21	17	23	19	22	18
	3	22	18	24	20	23	19	21	17	23	19	22	18	29	23	36	29	33	27
5	1	30	25	38	31	35	28	29	23	36	29	33	27	24	20	30	24	29	24
	2	26	21	31	25	31	25	24	20	30	24	29	24	21	17	23	19	22	18
	3	22	18	24	20	23	19	21	17	23	19	22	18	29	23	36	29	33	27
10	1	30	25	38	31	35	28	29	23	36	29	33	27	24	20	30	24	29	24
	2	26	21	31	25	31	25	24	20	30	24	29	24	21	17	23	19	22	18
	3	22	18	24	20	23	19	21	17	23	19	22	18	27	23	28	23	28	23
Wind Speed [mph]		190						200											
0	1	27	22	34	27	31	25	26	21	32	26	29	24	22	18	26	21	26	21
	2	23	19	28	23	28	23	22	18	26	21	26	21	18	16	22	18	20	17
	3	19	16	22	18	20	17	18	16	22	18	20	17	26	21	32	26	29	24
5	1	27	22	34	27	31	25	26	21	32	26	29	24	22	18	26	21	26	21
	2	23	19	28	23	28	23	22	18	26	21	26	21	18	16	22	18	20	17
	3	19	16	22	18	20	17	18	16	22	18	20	17	26	21	32	26	29	24
10	1	27	22	34	27	31	25	26	21	32	26	29	24	22	18	26	21	26	21
	2	23	19	28	23	28	23	22	18	26	21	26	21	18	16	22	18	20	17
	3	19	16	22	18	20	17	18	16	22	18	20	17	26	21	32	26	29	24

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Notation (ASCE 7-22)

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50
2		41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
3		34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
20	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50	41
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
25	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50	41
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
15	110						115												
	1	42	34	53	43	48	39	40	32	51	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
20	1	42	34	53	43	48	39	40	32	51	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
	3	30	24	34	27	32	26	29	23	32	26	30	25						
25	1	42	34	53	43	48	39	40	32	51	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
	3	30	24	34	27	32	26	29	23	32	26	30	25						
15	120						130												
	1	39	31	49	39	44	36	40	32	51	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
20	1	39	31	49	39	44	36	40	32	51	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
	3	28	23	31	25	29	24	29	23	32	26	30	25						
25	1	39	31	49	39	44	36	40	32	51	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
	3	28	23	31	25	29	24	29	23	32	26	30	25						

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
15	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
20	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
25	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
Wind Speed [mph]		170				180													
15	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
20	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
25	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
Wind Speed [mph]		190				200													
15	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18		21	17	19	16						
20	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18		21	17	19	16						
25	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18		21	17	19	16						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Span, inches

Exposure Category : D

Wind Speed [mph]	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																	
30	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50	41	
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36	
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27	
35	1	48	39	61	49	55	44	46	37	58	46	53	42	44	35	55	44	50	41	
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36	
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27	
40	1	48	39	60	49	55	44	46	37	58	46	53	42	44	35	55	44	50	41	
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36	
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27	
Wind Speed [mph]	110						115													
	30	1	42	34	53	43	48	39	40	32	51	41	46	37						
		2	36	29	43	35	43	35	34	28	41	34	41	33						
3		30	24	34	27	32	26	29	23	32	26	30	25							
35	1	42	34	53	43	48	39	40	32	51	41	46	37							
	2	36	29	43	35	43	35	34	28	41	34	41	33							
	3	30	24	34	27	32	26	29	23	32	26	30	25							
40	1	42	34	53	43	48	39	40	32	51	41	46	37							
	2	36	29	43	35	43	35	34	28	41	34	41	33							
	3	30	24	34	27	32	26	29	23	32	26	30	25							
Wind Speed [mph]	120						130													
	30	1	39	31	49	39	44	36	40	32	51	41	46	37						
		2	33	27	40	32	40	32	34	28	41	34	41	33						
3		28	23	31	25	29	24	29	23	32	26	30	25							
35	1	39	31	49	39	44	36	40	32	51	41	46	37							
	2	33	27	40	32	40	32	34	28	41	34	41	33							
	3	28	23	31	25	29	24	29	23	32	26	30	25							
40	1	39	31	49	39	44	36	40	32	51	41	46	37							
	2	33	27	40	32	40	32	34	28	41	34	41	33							
	3	28	23	31	25	29	24	29	23	32	26	30	25							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches														
Exposure Category : D	Wind Speed [mph]	140						150						160						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	30	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
		2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
		3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	35	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
		2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
		3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	40	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
		2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
		3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	30	Wind Speed [mph]	170						180											
		1	30	25	38	31	35	28	29	23	36	29	33	27						
		2	26	21	31	25	31	25	24	20	30	24	29	24						
		3	22	18	24	20	23	19	21	17	23	19	22	18						
		35	1	30	25	38	31	35	28	29	23	36	29	33	27					
			2	26	21	31	25	31	25	24	20	30	24	29	24					
			3	22	18	24	20	23	19	21	17	23	19	22	18					
		40	1	30	25	38	31	35	28	29	23	36	29	33	27					
2			26	21	31	25	31	25	24	20	30	24	29	24						
3			22	18	24	20	23	19	21	17	23	19	22	18						
30		Wind Speed [mph]	190						200											
		1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21							
	3	19	16	22	18	20	17	18	█	21	17	19	16							
	35	1	27	22	34	27	31	25	26	21	32	26	29	24						
		2	23	19	28	23	28	23	22	18	26	21	26	21						
		3	19	16	22	18	20	17	18	█	21	17	19	16						
	40	1	27	22	34	27	31	25	26	21	32	26	29	24						
		2	23	19	28	23	28	23	22	18	26	21	26	21						
		3	19	16	22	18	20	17	18	█	21	17	19	16						

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	48	39	58	49	55	44	46	37	58	46	53	42	44	35	55	44	50
2		41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
3		34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
50	1	48	39	56	49	55	44	46	37	56	46	53	42	44	35	55	44	50	41
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
60	1	48	39	53	49	55	44	46	37	53	46	53	42	44	35	53	44	50	41
	2	41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
45	110						115												
	1	42	34	53	43	48	39	40	32	51	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
50	1	42	34	53	43	48	39	40	32	51	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
	3	30	24	34	27	32	26	29	23	32	26	30	25						
60	1	42	34	53	43	48	39	40	32	51	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
	3	30	24	34	27	32	26	29	23	32	26	30	25						
45	120						130												
	1	39	31	49	39	44	36	40	32	51	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
50	1	39	31	49	39	44	36	40	32	51	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
	3	28	23	31	25	29	24	29	23	32	26	30	25						
60	1	39	31	49	39	44	36	40	32	51	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
	3	28	23	31	25	29	24	29	23	32	26	30	25						

Exposure Category : D

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
45	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
50	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
60	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
Wind Speed [mph]		170				180													
45	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
50	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
60	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
Wind Speed [mph]		190				200													
45	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18		21	17	19	16						
50	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18		21	17	19	16						
60	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18		21	17	19	16						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	48	39	50	49	55	44	46	37	50	46	53	42	44	35	50	44	50
2		41	33	49	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
3		34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
80	1	46	39	47	47	53	44	46	37	47	46	53	42	44	35	47	44	50	41
	2	41	33	47	40	49	40	39	32	47	38	47	38	37	30	45	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
90	1	44	39	44	44	50	44	44	37	44	44	50	42	44	35	44	44	50	41
	2	41	33	44	40	49	40	39	32	44	38	47	38	37	30	44	36	45	36
	3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
70	Wind Speed [mph]		110						115										
	1	42	34	50	43	48	39	40	32	50	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
80	1	42	34	47	43	48	39	40	32	47	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
	3	30	24	34	27	32	26	29	23	32	26	30	25						
90	1	42	34	44	43	48	39	40	32	44	41	46	37						
	2	36	29	43	35	43	35	34	28	41	34	41	33						
	3	30	24	34	27	32	26	29	23	32	26	30	25						
70	Wind Speed [mph]		120						130										
	1	39	31	49	39	44	36	40	32	50	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
80	1	39	31	47	39	44	36	40	32	47	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
	3	28	23	31	25	29	24	29	23	32	26	30	25						
90	1	39	31	44	39	44	36	40	32	44	41	46	37						
	2	33	27	40	32	40	32	34	28	41	34	41	33						
	3	28	23	31	25	29	24	29	23	32	26	30	25						

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
70	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	47	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
80	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	1	37	30	44	38	43	35	35	28	43	35	40	32	32	26	41	33	37	30
90	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
	Wind Speed [mph]																		
170																			
70	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
80	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
90	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
Wind Speed [mph]																			
180																			
70	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
80	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
90	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
Wind Speed [mph]																			
190																			
70	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18	█	21	17	19	16						
80	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18	█	21	17	19	16						
90	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18	█	21	17	19	16						
Wind Speed [mph]																			
200																			
70	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18	█	21	17	19	16						
80	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18	█	21	17	19	16						
90	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18	█	21	17	19	16						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches														
Exposure Category : D	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	100	1	41	39	42	42	48	44	41	37	42	42	48	42	41	35	42	42	48	41
		2	41	33	42	40	48	40	39	32	42	38	47	38	37	30	42	36	45	36
		3	34	28	38	31	36	29	33	27	37	30	34	28	31	25	35	28	33	27
	Wind Speed [mph]		110						115											
	100	1	41	34	42	42	48	39	40	32	42	41	46	37						
		2	36	29	42	35	43	35	34	28	41	34	41	33						
		3	30	24	34	27	32	26	29	23	32	26	30	25						
0	1																			
	2																			
	3																			
0	1																			
	2																			
	3																			
Wind Speed [mph]		120						130												
100	1	39	31	42	39	44	36	40	32	42	41	46	37							
	2	33	27	40	32	40	32	34	28	41	34	41	33							
	3	28	23	31	25	29	24	29	23	32	26	30	25							
Wind Speed [mph]		120						130												
100	1	39	31	42	39	44	36	40	32	42	41	46	37							
	2	33	27	40	32	40	32	34	28	41	34	41	33							
	3	28	23	31	25	29	24	29	23	32	26	30	25							

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches													
Ground Snow	Wind Speed [mph]	140						150						160					
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	37	30	42	38	43	35	35	28	42	35	40	32	32	26	41	33	37	30
	2	32	26	38	31	38	31	30	24	36	29	36	29	28	22	33	27	33	27
	3	27	22	30	24	28	23	25	20	28	22	26	21	23	19	26	21	24	20
100	1	30	25	38	31	35	28	29	23	36	29	33	27						
	2	26	21	31	25	31	25	24	20	30	24	29	24						
	3	22	18	24	20	23	19	21	17	23	19	22	18						
100	1	27	22	34	27	31	25	26	21	32	26	29	24						
	2	23	19	28	23	28	23	22	18	26	21	26	21						
	3	19	16	22	18	20	17	18		21	17	19	16						

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	77	69	75	67	68	59	68	59	75	67	73	65	66	57	66	57	74	66	71	63	64	54	65	55	
	2	69	61	67	56	59	49	59	49	67	58	65	54	57	47	57	47	66	56	63	51	54	45	55	45	
	3	58	46	61	49	52	42	52	43	55	44	58	47	49	40	50	41	52	42	55	45	47	39	48	39	
	5	1	77	69	75	67	68	59	68	59	75	67	73	65	66	57	66	57	74	66	71	63	64	54	65	55
		2	69	61	67	56	59	49	59	49	67	58	65	54	57	47	57	47	66	56	63	51	54	45	55	45
		3	58	46	61	49	52	42	52	43	55	44	58	47	49	40	50	41	52	42	55	45	47	39	48	39
	10	1	74	68	73	67	68	59	68	59	73	67	72	65	66	57	66	57	72	66	70	63	64	54	65	55
		2	68	61	67	56	59	49	59	49	67	58	65	54	57	47	57	47	66	56	63	51	54	45	55	45
		3	58	46	61	49	52	42	52	43	55	44	58	47	49	40	50	41	52	42	55	45	47	39	48	39
0	1	72	64	70	62	63	52	63	53	70	63	68	59	61	50	61	51	70	63	68	59	61	50	61	51	
	2	64	54	61	49	52	43	53	43	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42	
	3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36	
	5	1	72	64	70	62	63	52	63	53	70	63	68	59	61	50	61	51	70	63	68	59	61	50	61	51
		2	64	54	61	49	52	43	53	43	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
	10	1	71	64	69	62	63	52	63	53	69	63	68	59	61	50	61	51	69	63	68	59	61	50	61	51
		2	64	54	61	49	52	43	53	43	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
0	1	69	61	67	57	59	49	59	49	70	63	68	59	61	50	61	51	70	63	68	59	61	50	61	51	
	2	61	50	56	45	49	39	49	40	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42	
	3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36	
	5	1	69	61	67	57	59	49	59	49	70	63	68	59	61	50	61	51	70	63	68	59	61	50	61	51
		2	61	50	56	45	49	39	49	40	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42
		3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
	10	1	68	61	67	57	59	49	59	49	69	63	68	59	61	50	61	51	69	63	68	59	61	50	61	51
		2	61	50	56	45	49	39	49	40	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42
		3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
0	1	69	61	67	57	59	49	59	49	70	63	68	59	61	50	61	51	70	63	68	59	61	50	61	51	
	2	61	50	56	45	49	39	49	40	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42	
	3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36	
	5	1	69	61	67	57	59	49	59	49	70	63	68	59	61	50	61	51	70	63	68	59	61	50	61	51
		2	61	50	56	45	49	39	49	40	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42
		3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
	10	1	68	61	67	57	59	49	59	49	69	63	68	59	61	50	61	51	69	63	68	59	61	50	61	51
		2	61	50	56	45	49	39	49	40	63	52	59	47	50	41	51	42	63	52	59	47	50	41	51	42
		3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	67	59	65	55	57	47	57	47	65	55	63	51	53	44	54	44	62	52	59	47	50	41	50	41
	2	59	49	54	44	47	38	47	39	55	45	50	41	44	35	44	36	52	43	47	38	41	33	41	34
	3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
5	1	67	59	65	55	57	47	57	47	65	55	63	51	53	44	54	44	62	52	59	47	50	41	50	41
	2	59	49	54	44	47	38	47	39	55	45	50	41	44	35	44	36	52	43	47	38	41	33	41	34
	3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
10	1	67	59	65	55	57	47	57	47	65	55	63	51	53	44	54	44	62	52	59	47	50	41	50	41
	2	59	49	54	44	47	38	47	39	55	45	50	41	44	35	44	36	52	43	47	38	41	33	41	34
	3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
0	1	59	49	55	45	47	39	48	39	56	46	52	42	45	36	45	37								
	2	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
5	1	59	49	55	45	47	39	48	39	56	46	52	42	45	36	45	37								
	2	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
10	1	59	49	55	45	47	39	48	39	56	46	52	42	45	36	45	37								
	2	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
0	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
5	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
10	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
0	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
5	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
10	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	71	66	70	65	68	59	68	59	70	65	69	64	66	57	66	57	69	64	68	63	64	54	65	55	
	2	66	60	65	56	59	49	59	49	65	58	64	54	57	47	57	47	64	56	63	51	54	45	55	45	
	3	58	46	61	49	52	42	52	43	55	44	58	47	49	40	50	41	52	42	55	45	47	39	48	39	
	20	1	68	64	67	63	67	59	68	59	67	63	66	62	66	57	66	57	66	62	66	60	64	54	65	55
		2	64	58	63	56	59	49	59	49	63	56	62	54	57	47	57	47	62	55	60	51	54	45	55	45
		3	58	46	58	49	52	42	52	43	55	44	57	47	49	40	50	41	52	42	55	45	47	39	48	39
	25	1	68	64	67	63	66	59	68	59	67	63	66	62	64	57	66	57	66	62	66	60	63	54	65	55
		2	64	58	63	56	59	49	59	49	63	56	62	54	57	47	57	47	62	55	60	51	54	45	55	45
		3	58	46	58	49	52	42	52	43	55	44	57	47	49	40	50	41	52	42	55	45	47	39	48	39
15	1	68	63	67	61	63	52	63	53	67	61	66	59	61	50	61	51	67	61	66	59	61	50	61	51	
	2	63	54	61	49	52	43	53	43	61	52	59	47	50	41	51	42	61	52	59	47	50	41	51	42	
	3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36	
	20	1	65	60	65	59	63	52	63	53	65	59	64	57	61	50	61	51	65	59	64	57	61	50	61	51
		2	60	53	59	49	52	43	53	43	59	52	57	47	50	41	51	42	59	52	57	47	50	41	51	42
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
	25	1	65	60	65	59	62	52	63	53	65	59	64	57	61	50	61	51	65	59	64	57	61	50	61	51
		2	60	53	59	49	52	43	53	43	59	52	57	47	50	41	51	42	59	52	57	47	50	41	51	42
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
15	1	66	60	65	57	59	49	59	49	67	61	66	59	61	50	61	51	67	61	66	59	61	50	61	51	
	2	60	50	56	45	49	39	49	40	61	52	59	47	50	41	51	42	61	52	59	47	50	41	51	42	
	3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36	
	20	1	64	58	63	56	59	49	59	49	65	59	64	57	61	50	61	51	65	59	64	57	61	50	61	51
		2	58	50	56	45	49	39	49	40	59	52	57	47	50	41	51	42	59	52	57	47	50	41	51	42
		3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36
	25	1	64	58	63	56	59	49	59	49	65	59	64	57	61	50	61	51	65	59	64	57	61	50	61	51
		2	58	50	56	45	49	39	49	40	59	52	57	47	50	41	51	42	59	52	57	47	50	41	51	42
		3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36	48	39	51	41	44	36	44	36

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	65	59	64	55	57	47	57	47	63	55	62	51	53	44	54	44	61	52	59	47	50	41	50	41
	2	59	49	54	44	47	38	47	39	55	45	50	41	44	35	44	36	52	43	47	38	41	33	41	34
	3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
20	1	63	56	62	55	57	47	57	47	61	54	60	51	53	44	54	44	59	52	57	47	50	41	50	41
	2	56	49	54	44	47	38	47	39	54	45	50	41	44	35	44	36	52	43	47	38	41	33	41	34
	3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
25	1	63	56	62	55	57	47	57	47	61	54	60	51	53	44	54	44	59	52	57	47	50	41	50	41
	2	56	49	54	44	47	38	47	39	54	45	50	41	44	35	44	36	52	43	47	38	41	33	41	34
	3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
15	1	59	49	55	45	47	39	48	39	56	46	52	42	45	36	45	37								
	2	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
20	1	57	49	55	45	47	39	48	39	55	46	52	42	45	36	45	37								
	2	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
25	1	57	49	55	45	47	39	48	39	55	46	52	42	45	36	45	37								
	2	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
15	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
20	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
25	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
15	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
20	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
25	1	53	44	49	40	42	34	43	35	51	42	46	38	40	33	41	33								
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	67	63	66	62	64	58	68	59	66	62	65	61	63	56	66	57	65	60	64	59	62	54	65	55	
	2	63	57	62	55	58	49	59	49	62	55	61	54	56	47	57	47	60	54	59	51	54	45	55	45	
	3	58	46	57	49	52	42	52	43	55	44	56	47	49	40	50	41	52	42	54	45	47	39	48	39	
	35	1	65	61	65	60	63	57	68	59	64	60	64	59	62	55	66	57	63	59	63	57	61	53	65	55
		2	61	55	60	54	57	49	59	49	60	54	59	52	55	47	57	47	59	52	57	51	53	45	55	45
		3	57	46	56	49	51	42	52	43	55	44	54	47	49	40	50	41	52	42	53	45	47	39	48	39
	40	1	63	59	63	58	62	55	68	59	63	58	62	57	61	54	66	57	62	57	62	56	59	52	65	55
		2	59	54	58	53	55	48	59	49	58	52	57	51	54	47	57	47	57	51	56	50	52	45	55	45
		3	55	46	54	48	50	42	52	43	54	44	53	47	49	40	50	41	52	42	52	45	47	39	48	39
Wind Speed [mph]		110								115																
30	1	64	59	64	58	61	52	63	53	63	58	63	56	59	50	61	51									
	2	59	52	58	49	52	43	53	43	58	51	56	47	50	41	51	42									
	3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36									
	35	1	63	57	62	56	59	52	63	53	62	56	61	55	58	50	61	51								
		2	57	51	56	49	52	43	53	43	56	50	55	47	50	41	51	42								
		3	50	41	52	43	46	37	46	38	48	39	50	41	44	36	44	36								
	40	1	61	56	60	55	58	51	63	53	60	55	59	54	57	50	61	51								
		2	56	50	55	49	51	43	53	43	55	49	54	47	50	41	51	42								
		3	50	41	50	43	46	37	46	38	48	39	49	41	44	36	44	36								
Wind Speed [mph]		120								130																
30	1	63	57	62	55	58	49	59	49	63	58	63	56	59	50	61	51									
	2	57	50	55	45	49	39	49	40	58	51	56	47	50	41	51	42									
	3	46	37	49	39	42	34	42	35	48	39	51	41	44	36	44	36									
	35	1	61	55	60	54	56	49	59	49	62	56	61	55	58	50	61	51								
		2	55	49	54	45	49	39	49	40	56	50	55	47	50	41	51	42								
		3	46	37	49	39	42	34	42	35	48	39	50	41	44	36	44	36								
	40	1	59	54	58	52	55	48	59	49	60	55	59	54	57	50	61	51								
		2	54	48	52	45	48	39	49	40	55	49	54	47	50	41	51	42								
		3	46	37	48	39	42	34	42	35	48	39	49	41	44	36	44	36								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	62	55	61	54	56	47	57	47	60	53	58	51	53	44	54	44	58	51	56	47	50	41	50	41	
	2	55	48	54	44	47	38	47	39	53	45	50	41	44	35	44	36	51	43	47	38	41	33	41	34	
	3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29	
	35	1	60	54	59	53	55	47	57	47	58	52	57	50	53	44	54	44	56	50	55	47	50	41	50	41
		2	54	47	53	44	47	38	47	39	52	45	50	41	44	35	44	36	50	43	47	38	41	33	41	34
		3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
	40	1	58	53	57	51	54	47	57	47	56	51	55	49	52	44	54	44	55	49	53	47	49	41	50	41
		2	53	47	51	44	47	38	47	39	51	44	49	41	44	35	44	36	49	42	47	38	41	33	41	34
		3	45	36	47	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
Wind Speed [mph]		170								180																
30	1	56	49	54	45	47	39	48	39	54	46	52	42	45	36	45	37									
	2	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30									
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26									
35	1	54	48	53	45	47	39	48	39	52	46	51	42	45	36	45	37									
	2	48	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30									
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26									
40	1	53	47	52	45	47	39	48	39	51	45	50	42	45	36	45	37									
	2	47	40	44	36	38	31	39	32	45	38	42	34	36	29	37	30									
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26									
Wind Speed [mph]		190								200																
30	1	52	44	49	40	42	34	43	35	50	42	46	38	40	33	41	33									
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27									
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23									
35	1	51	44	49	40	42	34	43	35	49	42	46	38	40	33	41	33									
	2	44	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27									
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23									
40	1	50	43	48	40	42	34	43	35	48	42	46	38	40	33	41	33									
	2	43	36	39	32	34	28	35	29	42	34	37	30	32	26	33	27									
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	62	57	62	57	61	54	68	59	61	56	61	56	59	53	66	57	60	55	60	55	58	51	65	55
	2	57	52	57	51	54	48	59	49	56	51	56	50	53	46	57	47	55	50	55	49	51	45	55	45
	3	54	46	53	47	50	42	52	43	53	44	52	46	48	40	50	41	52	42	51	45	47	39	48	39
50	1	60	56	60	55	59	53	67	59	59	55	59	54	58	52	66	57	58	54	58	53	57	51	65	55
	2	56	51	55	50	53	47	59	49	55	50	54	49	52	46	57	47	54	49	53	48	51	44	55	45
	3	53	46	52	46	49	42	52	43	52	44	51	45	47	40	50	41	50	42	50	44	46	39	48	39
60	1	57	53	57	53	57	51	66	59	56	52	56	52	56	50	65	57	55	51	55	51	54	49	64	55
	2	53	49	53	48	51	46	59	49	52	48	52	47	50	44	57	47	51	47	51	46	49	43	55	45
	3	50	46	50	45	47	41	52	43	49	44	49	44	46	40	50	41	48	42	48	43	45	39	48	39
45	1	59	54	59	53	57	50	63	53	58	53	58	52	55	49	61	51								
	2	54	49	53	48	50	43	53	43	53	48	52	47	49	41	51	42								
	3	50	41	49	43	45	37	46	38	48	39	48	41	44	36	44	36								
50	1	57	53	57	52	55	49	63	53	57	52	56	51	54	48	61	51								
	2	53	48	52	47	49	43	53	43	52	47	51	46	48	41	51	42								
	3	49	41	48	43	45	37	46	38	48	39	47	41	44	36	44	36								
60	1	54	51	54	50	53	48	62	53	54	50	54	49	52	47	61	51								
	2	51	46	50	45	48	42	53	43	50	45	49	44	47	41	51	42								
	3	47	41	47	42	44	37	46	38	47	39	46	41	43	36	44	36								
45	1	59	54	59	53	57	50	63	53	58	53	58	52	55	49	61	51								
	2	54	49	53	48	50	43	53	43	53	48	52	47	49	41	51	42								
	3	50	41	49	43	45	37	46	38	48	39	48	41	44	36	44	36								
50	1	57	53	57	52	55	49	63	53	57	52	56	51	54	48	61	51								
	2	53	48	52	47	49	43	53	43	52	47	51	46	48	41	51	42								
	3	49	41	48	43	45	37	46	38	48	39	47	41	44	36	44	36								
60	1	54	51	54	50	53	48	62	53	54	50	54	49	52	47	61	51								
	2	51	46	50	45	48	42	53	43	50	45	49	44	47	41	51	42								
	3	47	41	47	42	44	37	46	38	47	39	46	41	43	36	44	36								
45	1	57	52	57	51	54	48	59	49	58	53	58	52	55	49	61	51								
	2	52	47	51	45	48	39	49	40	53	48	52	47	49	41	51	42								
	3	46	37	47	39	42	34	42	35	48	39	48	41	44	36	44	36								
50	1	56	51	55	50	53	47	59	49	57	52	56	51	54	48	61	51								
	2	51	46	50	45	47	39	49	40	52	47	51	46	48	41	51	42								
	3	46	37	46	39	42	34	42	35	48	39	47	41	44	36	44	36								
60	1	53	49	53	48	51	46	59	49	54	50	54	49	52	47	61	51								
	2	49	44	48	43	46	39	49	40	50	45	49	44	47	41	51	42								
	3	46	37	45	39	41	34	42	35	47	39	46	41	43	36	44	36								
45	1	57	52	57	51	54	48	59	49	58	53	58	52	55	49	61	51								
	2	52	47	51	45	48	39	49	40	53	48	52	47	49	41	51	42								
	3	46	37	47	39	42	34	42	35	48	39	48	41	44	36	44	36								
50	1	56	51	55	50	53	47	59	49	57	52	56	51	54	48	61	51								
	2	51	46	50	45	47	39	49	40	52	47	51	46	48	41	51	42								
	3	46	37	46	39	42	34	42	35	48	39	47	41	44	36	44	36								
60	1	53	49	53	48	51	46	59	49	54	50	54	49	52	47	61	51								
	2	49	44	48	43	46	39	49	40	50	45	49	44	47	41	51	42								
	3	46	37	45	39	41	34	42	35	47	39	46	41	43	36	44	36								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	57	51	56	50	53	46	57	47	55	49	54	48	51	44	54	44	53	48	52	46	49	41	50	41
	2	51	46	50	44	46	38	47	39	49	44	48	41	44	35	44	36	48	42	46	38	41	33	41	34
	3	45	36	46	38	41	33	41	34	41	34	44	35	38	31	38	31	39	31	41	33	35	29	36	29
50	1	55	50	54	49	52	46	57	47	54	48	53	47	50	44	54	44	52	47	51	46	48	41	50	41
	2	50	45	49	44	46	38	47	39	48	43	47	41	44	35	44	36	47	41	46	38	41	33	41	34
	3	45	36	45	38	41	33	41	34	41	34	43	35	38	31	38	31	39	31	41	33	35	29	36	29
60	1	52	48	52	47	50	45	57	47	51	47	51	46	48	43	54	44	50	45	49	44	47	41	50	41
	2	48	43	47	42	45	38	47	39	47	42	46	41	43	35	44	36	45	40	44	38	41	33	41	34
	3	45	36	44	38	40	33	41	34	41	34	42	35	38	31	38	31	39	31	40	33	35	29	36	29
45	1	52	46	51	45	47	39	48	39	50	44	49	42	45	36	45	37								
	2	46	40	44	36	38	31	39	32	44	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
50	1	50	45	49	44	46	39	48	39	49	44	48	42	44	36	45	37								
	2	45	40	44	36	38	31	39	32	44	38	42	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
60	1	48	44	48	43	45	39	48	39	47	42	46	41	43	36	45	37								
	2	44	38	43	36	38	31	39	32	42	37	41	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
45	1	49	43	47	40	42	34	43	35	47	41	46	38	40	33	41	33								
	2	43	36	39	32	34	28	35	29	41	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
50	1	48	42	46	40	42	34	43	35	46	41	45	38	40	33	41	33								
	2	42	36	39	32	34	28	35	29	41	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
60	1	46	41	45	40	42	34	43	35	45	40	44	38	40	33	41	33								
	2	41	36	39	32	34	28	35	29	40	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
45	1	49	43	47	40	42	34	43	35	47	41	46	38	40	33	41	33								
	2	43	36	39	32	34	28	35	29	41	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
50	1	48	42	46	40	42	34	43	35	46	41	45	38	40	33	41	33								
	2	42	36	39	32	34	28	35	29	41	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
60	1	46	41	45	40	42	34	43	35	45	40	44	38	40	33	41	33								
	2	41	36	39	32	34	28	35	29	40	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
45	1	49	43	47	40	42	34	43	35	47	41	46	38	40	33	41	33								
	2	43	36	39	32	34	28	35	29	41	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
50	1	48	42	46	40	42	34	43	35	46	41	45	38	40	33	41	33								
	2	42	36	39	32	34	28	35	29	41	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
60	1	46	41	45	40	42	34	43	35	45	40	44	38	40	33	41	33								
	2	41	36	39	32	34	28	35	29	40	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	54	51	54	51	54	50	65	58	53	50	53	50	53	49	64	57	52	49	53	49	52	47	63	55
	2	51	47	51	47	50	44	58	49	50	46	50	46	49	43	57	47	49	45	49	45	47	42	55	45
	3	48	44	48	43	46	41	52	43	47	43	47	42	45	39	50	41	47	42	46	41	44	38	48	39
80	1	50	49	51	49	52	48	64	57	50	48	51	48	51	47	63	56	50	47	50	47	51	46	62	54
	2	49	45	49	45	48	43	57	49	48	45	48	44	47	42	56	47	47	44	47	43	46	41	54	45
	3	46	43	46	42	45	40	52	43	46	42	45	41	44	39	50	41	45	41	44	40	43	37	48	39
90	1	48	47	49	47	51	47	63	56	48	46	49	46	50	46	62	55	48	46	48	45	49	45	60	53
	2	47	44	47	44	47	42	56	49	46	43	46	43	46	41	55	47	46	42	45	42	45	40	53	45
	3	45	41	45	41	44	39	51	43	44	41	44	40	43	38	50	41	43	40	43	39	42	37	48	39
70	1	52	49	52	48	51	46	61	53	51	48	51	47	51	45	60	51								
	2	49	44	48	44	46	41	53	43	48	44	47	43	45	40	51	42								
	3	46	41	45	40	43	37	46	38	45	39	44	39	42	36	44	36								
80	1	50	47	50	46	50	45	60	52	49	46	49	46	49	44	59	51								
	2	47	43	46	42	45	40	52	43	46	42	46	42	44	39	51	42								
	3	44	40	44	39	42	36	46	38	43	39	43	38	41	35	44	36								
90	1	48	45	48	45	48	44	59	52	47	44	47	44	47	43	58	50								
	2	45	42	45	41	44	39	52	43	44	41	44	40	43	38	50	42								
	3	43	39	42	38	41	36	46	38	42	38	42	38	40	35	44	36								
70	1	52	49	52	48	51	46	61	53	51	48	51	47	51	45	60	51								
	2	49	44	48	44	46	41	53	43	48	44	47	43	45	40	51	42								
	3	46	41	45	40	43	37	46	38	45	39	44	39	42	36	44	36								
80	1	50	47	50	46	50	45	60	52	49	46	49	46	49	44	59	51								
	2	47	43	46	42	45	40	52	43	46	42	46	42	44	39	51	42								
	3	44	40	44	39	42	36	46	38	43	39	43	38	41	35	44	36								
90	1	48	45	48	45	48	44	59	52	47	44	47	44	47	43	58	50								
	2	45	42	45	41	44	39	52	43	44	41	44	40	43	38	50	42								
	3	43	39	42	38	41	36	46	38	42	38	42	38	40	35	44	36								
70	1	51	47	51	47	50	44	58	49	51	48	51	47	51	45	60	51								
	2	47	43	47	42	44	39	49	40	48	44	47	43	45	40	51	42								
	3	44	37	43	39	41	34	42	35	45	39	44	39	42	36	44	36								
80	1	49	45	49	45	48	43	57	49	49	46	49	46	49	44	59	51								
	2	45	42	45	41	43	38	49	40	46	42	46	42	44	39	51	42								
	3	43	37	42	38	40	34	42	35	43	39	43	38	41	35	44	36								
90	1	47	44	47	44	47	42	56	49	47	44	47	44	47	43	58	50								
	2	44	40	44	40	42	37	49	40	44	41	44	40	43	38	50	42								
	3	41	37	41	37	39	34	42	35	42	38	42	38	40	35	44	36								
70	1	51	47	51	47	50	44	58	49	51	48	51	47	51	45	60	51								
	2	47	43	47	42	44	39	49	40	48	44	47	43	45	40	51	42								
	3	44	37	43	39	41	34	42	35	45	39	44	39	42	36	44	36								
80	1	49	45	49	45	48	43	57	49	49	46	49	46	49	44	59	51								
	2	45	42	45	41	43	38	49	40	46	42	46	42	44	39	51	42								
	3	43	37	42	38	40	34	42	35	43	39	43	38	41	35	44	36								
90	1	47	44	47	44	47	42	56	49	47	44	47	44	47	43	58	50								
	2	44	40	44	40	42	37	49	40	44	41	44	40	43	38	50	42								
	3	41	37	41	37	39	34	42	35	42	38	42	38	40	35	44	36								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	50	46	50	46	49	43	57	47	49	45	49	44	47	42	54	44	48	44	47	43	45	40	50	41
	2	46	42	46	41	43	38	47	39	45	40	44	39	42	35	44	36	44	39	43	38	40	33	41	34
	3	43	36	43	38	40	33	41	34	41	34	41	35	38	31	38	31	39	31	39	33	35	29	36	29
80	1	48	45	48	44	47	42	56	47	47	43	47	43	46	41	53	44	46	42	46	42	44	39	50	41
	2	45	41	44	40	42	37	47	39	43	39	43	38	41	35	44	36	42	38	42	37	39	33	41	34
	3	42	36	41	37	39	33	41	34	41	34	40	35	37	31	38	31	39	31	38	33	35	29	36	29
90	1	46	43	46	43	46	41	55	47	45	42	45	42	44	40	52	44	44	41	44	40	43	38	50	41
	2	43	40	43	39	41	37	47	39	42	38	42	38	40	35	44	36	41	37	40	36	38	33	41	34
	3	41	36	40	36	38	33	41	34	39	34	39	35	36	31	38	31	38	31	37	33	35	29	36	29
Wind Speed [mph]		170								180															
70	1	47	42	46	41	44	38	48	39	45	41	45	40	42	36	45	37								
	2	42	38	41	36	38	31	39	32	41	36	40	34	36	29	37	30								
	3	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26								
80	1	45	41	44	40	43	37	48	39	44	40	43	39	41	36	45	37								
	2	41	37	40	36	37	31	39	32	40	35	39	34	36	29	37	30								
	3	36	30	37	31	33	27	34	28	34	28	36	29	31	25	32	26								
90	1	43	40	43	39	42	37	48	39	42	39	42	38	40	35	45	37								
	2	40	36	39	35	37	31	39	32	39	35	38	34	35	29	37	30								
	3	36	30	36	31	33	27	34	28	34	28	35	29	31	25	32	26								
Wind Speed [mph]		190								200															
70	1	44	40	43	39	41	34	43	35	43	38	42	37	39	33	41	33								
	2	40	35	39	32	34	28	35	29	38	34	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
80	1	43	39	42	38	40	34	43	35	42	38	41	37	38	33	41	33								
	2	39	34	38	32	34	28	35	29	38	33	37	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								
90	1	41	38	41	37	39	34	43	35	41	37	40	36	38	33	41	33								
	2	38	33	37	32	34	28	35	29	37	32	36	30	32	26	33	27								
	3	32	26	34	28	30	24	30	25	31	25	32	26	28	23	29	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	45	45	47	45	49	45	62	55	45	45	47	45	48	45	61	54	45	44	47	44	47	44	59	52
	2	45	42	45	42	45	41	55	48	45	42	45	42	45	40	54	47	44	41	44	41	44	39	52	45
	3	43	40	43	40	43	38	50	43	43	40	42	39	42	37	49	41	42	39	42	38	41	36	47	39
Wind Speed [mph]		110								115															
100	1	45	43	46	43	47	43	58	51	45	43	46	43	46	42	57	50								
	2	43	40	43	40	43	38	51	43	43	40	43	39	42	38	50	42								
	3	41	38	41	37	40	35	46	38	41	37	40	37	39	34	44	36								
Wind Speed [mph]		120								130															
100	1	45	42	45	42	45	41	55	48	45	43	46	43	46	42	57	50								
	2	42	39	42	39	41	37	48	40	43	40	43	39	42	38	50	42								
	3	40	37	40	36	38	33	42	35	41	37	40	37	39	34	44	36								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	45	42	45	42	45	40	54	47	44	41	44	40	43	39	52	44	43	40	43	39	42	38	49	41
	2	42	39	42	38	40	36	47	39	41	37	40	37	39	34	44	36	40	36	39	35	38	33	41	34
	3	40	36	39	35	37	33	41	34	38	34	38	34	36	31	38	31	37	31	37	33	34	29	36	29
Wind Speed [mph]		170								180															
100	1	42	39	42	38	41	36	47	39	41	38	41	37	39	35	45	37								
	2	39	35	38	34	36	31	39	32	38	34	37	33	35	29	37	30								
	3	36	30	35	31	33	27	34	28	34	28	34	29	31	25	32	26								
Wind Speed [mph]		190								200															
100	1	40	37	40	36	38	34	43	35	39	36	39	35	37	32	41	33								
	2	37	33	36	32	34	28	35	29	36	32	35	30	32	26	33	27								
	3	32	26	33	28	30	24	30	25	31	25	32	26	28	23	29	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	70	62	68	59	61	50	61	51	69	60	66	56	58	48	59	48	67	58	65	54	56	46	57	47
	2	62	52	59	47	50	41	51	42	60	50	56	45	48	39	48	40	58	48	53	43	46	37	47	38
	3	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
5	1	70	62	68	59	61	50	61	51	69	60	66	56	58	48	59	48	67	58	65	54	56	46	57	47
	2	62	52	59	47	50	41	51	42	60	50	56	45	48	39	48	40	58	48	53	43	46	37	47	38
	3	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
10	1	69	62	68	59	61	50	61	51	68	60	66	56	58	48	59	48	67	58	65	54	56	46	57	47
	2	62	52	59	47	50	41	51	42	60	50	56	45	48	39	48	40	58	48	53	43	46	37	47	38
	3	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
0	1	65	56	63	52	54	45	54	45	64	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
5	1	65	56	63	52	54	45	54	45	64	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
10	1	65	56	63	52	54	45	54	45	64	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
0	1	65	56	63	52	54	45	54	45	64	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
5	1	65	56	63	52	54	45	54	45	64	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
10	1	65	56	63	52	54	45	54	45	64	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
0	1	62	52	59	48	50	41	51	41	64	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
5	1	62	52	59	48	50	41	51	41	64	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
10	1	62	52	59	48	50	41	51	41	64	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
0	1	62	52	59	48	50	41	51	41	64	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
5	1	62	52	59	48	50	41	51	41	64	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
10	1	62	52	59	48	50	41	51	41	64	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Gable
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	61	50	57	46	49	40	49	40	57	47	53	43	45	37	46	37	54	44	49	40	43	35	43	35
	2	50	41	45	37	39	32	40	33	47	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
5	1	61	50	57	46	49	40	49	40	57	47	53	43	45	37	46	37	54	44	49	40	43	35	43	35
	2	50	41	45	37	39	32	40	33	47	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
10	1	61	50	57	46	49	40	49	40	57	47	53	43	45	37	46	37	54	44	49	40	43	35	43	35
	2	50	41	45	37	39	32	40	33	47	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
0	1	51	42	46	37	40	32	40	33	48	39	44	35	38	31	38	31								
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
5	1	51	42	46	37	40	32	40	33	48	39	44	35	38	31	38	31								
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
10	1	51	42	46	37	40	32	40	33	48	39	44	35	38	31	38	31								
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
0	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
5	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
10	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	67	61	66	59	61	50	61	51	66	60	65	56	58	48	59	48	65	58	63	54	56	46	57	47
	2	61	52	59	47	50	41	51	42	60	50	56	45	48	39	48	40	58	48	53	43	46	37	47	38
	3	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
20	1	65	59	64	57	61	50	61	51	64	57	63	56	58	48	59	48	63	56	62	54	56	46	57	47
	2	59	52	57	47	50	41	51	42	57	50	56	45	48	39	48	40	56	48	53	43	46	37	47	38
	3	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
25	1	65	59	64	57	60	50	61	51	64	57	63	56	58	48	59	48	63	56	62	54	56	46	57	47
	2	59	52	57	47	50	41	51	42	57	50	56	45	48	39	48	40	56	48	53	43	46	37	47	38
	3	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
15	1	64	56	62	52	54	45	54	45	63	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
20	1	62	54	60	52	54	45	54	45	60	53	59	49	52	43	52	43								
	2	54	46	51	41	44	36	45	37	53	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
25	1	62	54	60	52	54	45	54	45	60	53	59	49	52	43	52	43								
	2	54	46	51	41	44	36	45	37	53	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
15	1	64	56	62	52	54	45	54	45	63	54	61	49	52	43	52	43								
	2	56	46	51	41	44	36	45	37	54	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
20	1	62	54	60	52	54	45	54	45	60	53	59	49	52	43	52	43								
	2	54	46	51	41	44	36	45	37	53	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
25	1	62	54	60	52	54	45	54	45	60	53	59	49	52	43	52	43								
	2	54	46	51	41	44	36	45	37	53	44	49	40	42	34	43	35								
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
15	1	61	52	59	48	50	41	51	41	63	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
20	1	59	52	57	48	50	41	51	41	60	53	59	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	53	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
25	1	59	52	57	48	50	41	51	41	60	53	59	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	53	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
15	1	61	52	59	48	50	41	51	41	63	54	61	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	54	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
20	1	59	52	57	48	50	41	51	41	60	53	59	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	53	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
25	1	59	52	57	48	50	41	51	41	60	53	59	49	52	43	52	43								
	2	52	43	47	38	41	33	41	34	53	44	49	40	42	34	43	35								
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	60	50	57	46	49	40	49	40	57	47	53	43	45	37	46	37	54	44	49	40	43	35	43	35
	2	50	41	45	37	39	32	40	33	47	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
20	1	58	50	56	46	49	40	49	40	55	47	53	43	45	37	46	37	53	44	49	40	43	35	43	35
	2	50	41	45	37	39	32	40	33	47	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
25	1	58	50	56	46	49	40	49	40	55	47	53	43	45	37	46	37	53	44	49	40	43	35	43	35
	2	50	41	45	37	39	32	40	33	47	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
15	1	51	42	46	37	40	32	40	33	48	39	44	35	38	31	38	31								
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
20	1	51	42	46	37	40	32	40	33	48	39	44	35	38	31	38	31								
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
25	1	51	42	46	37	40	32	40	33	48	39	44	35	38	31	38	31								
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
15	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
20	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
25	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
15	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
20	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
25	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	63	58	63	56	59	50	61	51	63	56	62	55	57	48	59	48	62	55	60	53	56	46	57	47	
	2	58	51	56	47	50	41	51	42	56	49	55	45	48	39	48	40	55	48	53	43	46	37	47	38	
	3	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33	
	35	1	62	56	61	55	58	50	61	51	61	55	60	53	56	48	59	48	60	53	59	52	55	46	57	47
		2	56	50	55	47	50	41	51	42	55	48	53	45	48	39	48	40	53	47	52	43	46	37	47	38
		3	48	39	50	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
	40	1	60	55	59	54	57	50	61	51	59	53	58	52	55	48	59	48	58	52	57	51	54	46	57	47
		2	55	49	54	47	50	41	51	42	53	47	52	45	48	39	48	40	52	46	51	43	46	37	47	38
		3	48	39	49	41	44	36	44	36	46	37	48	39	42	34	42	35	44	36	46	37	40	32	40	33
30	1	60	53	59	52	54	45	54	45	59	52	58	49	52	43	52	43									
	2	53	46	51	41	44	36	45	37	52	44	49	40	42	34	43	35									
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31									
	35	1	58	52	57	51	53	45	54	45	57	51	56	49	52	43	52	43								
		2	52	46	51	41	44	36	45	37	51	44	49	40	42	34	43	35								
		3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
	40	1	57	51	56	50	52	45	54	45	56	50	55	48	51	43	52	43								
		2	51	45	50	41	44	36	45	37	50	44	48	40	42	34	43	35								
		3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
30	1	60	53	59	52	54	45	54	45	59	52	58	49	52	43	52	43									
	2	53	46	51	41	44	36	45	37	52	44	49	40	42	34	43	35									
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31									
	35	1	58	52	57	51	53	45	54	45	57	51	56	49	52	43	52	43								
		2	52	46	51	41	44	36	45	37	51	44	49	40	42	34	43	35								
		3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
	40	1	57	51	56	50	52	45	54	45	56	50	55	48	51	43	52	43								
		2	51	45	50	41	44	36	45	37	50	44	48	40	42	34	43	35								
		3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31								
30	1	58	51	56	48	50	41	51	41	59	52	58	49	52	43	52	43									
	2	51	43	47	38	41	33	41	34	52	44	49	40	42	34	43	35									
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31									
	35	1	56	50	55	48	50	41	51	41	57	51	56	49	52	43	52	43								
		2	50	43	47	38	41	33	41	34	51	44	49	40	42	34	43	35								
		3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
	40	1	55	49	54	47	50	41	51	41	56	50	55	48	51	43	52	43								
		2	49	43	47	38	41	33	41	34	50	44	48	40	42	34	43	35								
		3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
30	1	58	51	56	48	50	41	51	41	59	52	58	49	52	43	52	43									
	2	51	43	47	38	41	33	41	34	52	44	49	40	42	34	43	35									
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31									
	35	1	56	50	55	48	50	41	51	41	57	51	56	49	52	43	52	43								
		2	50	43	47	38	41	33	41	34	51	44	49	40	42	34	43	35								
		3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								
	40	1	55	49	54	47	50	41	51	41	56	50	55	48	51	43	52	43								
		2	49	43	47	38	41	33	41	34	50	44	48	40	42	34	43	35								
		3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	56	50	55	46	49	40	49	40	54	47	53	43	45	37	46	37	52	44	49	40	43	35	43	35	
	2	50	41	45	37	39	32	40	33	47	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29	
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25	
	35	1	55	49	54	46	49	40	49	40	53	46	51	43	45	37	46	37	51	44	49	40	43	35	43	35
		2	49	41	45	37	39	32	40	33	46	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
		3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
	40	1	54	48	52	46	48	40	49	40	52	45	50	43	45	37	46	37	50	44	48	40	43	35	43	35
		2	48	41	45	37	39	32	40	33	45	39	42	34	37	30	37	31	44	36	39	32	34	28	35	29
		3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
Wind Speed [mph]		170								180																
30	1	50	42	46	37	40	32	40	33	48	39	44	35	38	31	38	31									
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25									
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22									
35	1	49	42	46	37	40	32	40	33	47	39	44	35	38	31	38	31									
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25									
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22									
40	1	48	42	46	37	40	32	40	33	46	39	44	35	38	31	38	31									
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25									
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22									
Wind Speed [mph]		190								200																
30	1	46	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28									
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23									
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20									
35	1	45	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28									
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23									
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20									
40	1	44	37	41	33	36	29	36	30	43	36	39	32	34	27	34	28									
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23									
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	58	53	58	52	55	49	61	51	57	52	57	51	54	47	59	48	56	51	55	50	53	46	57	47
	2	53	48	52	47	49	41	51	42	52	46	51	45	47	39	48	40	51	45	50	43	46	37	47	38
	3	48	39	48	41	44	36	44	36	46	37	47	39	42	34	42	35	44	36	46	37	40	32	40	33
50	1	57	52	56	51	54	48	61	51	56	51	55	50	53	47	59	48	55	50	54	49	52	45	57	47
	2	52	47	51	46	48	41	51	42	51	46	50	44	47	39	48	40	50	44	49	43	45	37	47	38
	3	48	39	47	41	44	36	44	36	46	37	46	39	42	34	42	35	44	36	45	37	40	32	40	33
60	1	54	50	54	49	52	47	61	51	53	49	53	48	51	45	59	48	52	48	52	47	50	44	57	47
	2	50	45	49	44	47	41	51	42	49	44	48	43	45	39	48	40	48	43	47	42	44	37	47	38
	3	47	39	46	40	42	36	44	36	45	37	45	39	41	34	42	35	44	36	43	37	40	32	40	33
45	1	55	50	54	49	51	45	54	45	54	49	53	48	50	43	52	43	54	49	53	48	50	43	52	43
	2	50	44	49	41	44	36	45	37	49	43	48	40	42	34	43	35	49	43	48	40	42	34	43	35
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31	40	33	43	34	37	30	37	31
50	1	54	49	53	48	50	44	54	45	53	48	52	47	49	43	52	43	53	48	52	47	49	43	52	43
	2	49	43	48	41	44	36	45	37	48	42	47	40	42	34	43	35	48	42	47	40	42	34	43	35
	3	42	34	44	36	38	31	39	32	40	33	43	34	37	30	37	31	40	33	43	34	37	30	37	31
60	1	51	47	51	46	49	43	54	45	51	46	50	45	48	42	52	43	51	46	50	45	48	42	52	43
	2	47	42	46	41	43	36	45	37	46	41	45	40	42	34	43	35	46	41	45	40	42	34	43	35
	3	42	34	42	36	38	31	39	32	40	33	41	34	37	30	37	31	40	33	41	34	37	30	37	31
45	1	53	48	52	46	49	41	51	41	54	49	53	48	50	43	52	43	54	49	53	48	50	43	52	43
	2	48	42	46	38	41	33	41	34	49	43	48	40	42	34	43	35	49	43	48	40	42	34	43	35
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31	40	33	43	34	37	30	37	31
50	1	52	47	51	46	48	41	51	41	53	48	52	47	49	43	52	43	53	48	52	47	49	43	52	43
	2	47	41	46	38	41	33	41	34	48	42	47	40	42	34	43	35	48	42	47	40	42	34	43	35
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31	40	33	43	34	37	30	37	31
60	1	50	45	49	44	47	41	51	41	51	46	50	45	48	42	52	43	51	46	50	45	48	42	52	43
	2	45	40	44	38	41	33	41	34	46	41	45	40	42	34	43	35	46	41	45	40	42	34	43	35
	3	39	31	40	33	35	29	36	29	40	33	41	34	37	30	37	31	40	33	41	34	37	30	37	31
45	1	53	48	52	46	49	41	51	41	54	49	53	48	50	43	52	43	54	49	53	48	50	43	52	43
	2	48	42	46	38	41	33	41	34	49	43	48	40	42	34	43	35	49	43	48	40	42	34	43	35
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31	40	33	43	34	37	30	37	31
50	1	52	47	51	46	48	41	51	41	53	48	52	47	49	43	52	43	53	48	52	47	49	43	52	43
	2	47	41	46	38	41	33	41	34	48	42	47	40	42	34	43	35	48	42	47	40	42	34	43	35
	3	39	31	41	33	35	29	36	29	40	33	43	34	37	30	37	31	40	33	43	34	37	30	37	31
60	1	50	45	49	44	47	41	51	41	51	46	50	45	48	42	52	43	51	46	50	45	48	42	52	43
	2	45	40	44	38	41	33	41	34	46	41	45	40	42	34	43	35	46	41	45	40	42	34	43	35
	3	39	31	40	33	35	29	36	29	40	33	41	34	37	30	37	31	40	33	41	34	37	30	37	31

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
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	2 = 2
	3 = 3
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	52	47	51	45	48	40	49	40	50	45	49	43	45	37	46	37	49	43	47	40	43	35	43	35
	2	47	41	45	37	39	32	40	33	45	39	42	34	37	30	37	31	43	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
50	1	51	46	50	45	47	40	49	40	49	44	48	43	45	37	46	37	48	42	47	40	43	35	43	35
	2	46	40	45	37	39	32	40	33	44	38	42	34	37	30	37	31	42	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
60	1	49	44	48	43	46	40	49	40	47	43	47	41	44	37	46	37	46	41	45	40	42	35	43	35
	2	44	39	43	37	39	32	40	33	43	37	41	34	37	30	37	31	41	36	39	32	34	28	35	29
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25
Wind Speed [mph]		170								180															
45	1	47	41	46	37	40	32	40	33	45	39	44	35	38	31	38	31								
	2	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
50	1	46	40	45	37	40	32	40	33	44	39	43	35	38	31	38	31								
	2	40	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
60	1	44	39	43	37	40	32	40	33	43	38	42	35	38	31	38	31								
	2	39	34	37	30	32	26	33	27	38	32	35	28	30	25	31	25								
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22								
Wind Speed [mph]		190								200															
45	1	44	37	41	33	36	29	36	30	42	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
50	1	43	37	41	33	36	29	36	30	42	36	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
60	1	42	37	41	33	36	29	36	30	40	35	39	32	34	27	34	28								
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	51	48	51	47	51	45	60	51	51	47	50	46	49	44	58	48	50	46	50	45	48	43	56	47
	2	48	44	47	43	45	40	51	42	47	43	46	42	44	39	48	40	46	42	45	41	43	37	47	38
	3	45	39	44	39	42	36	44	36	44	37	43	38	40	34	42	35	43	36	42	37	39	32	40	33
80	1	49	46	49	46	49	44	59	51	48	45	48	45	48	43	57	48	48	44	48	44	47	42	55	47
	2	46	42	46	42	44	39	51	42	45	41	45	41	43	38	48	40	44	40	44	40	42	37	47	38
	3	43	39	43	38	41	35	44	36	43	37	42	37	39	34	42	35	42	36	41	36	38	32	40	33
90	1	47	44	47	44	47	43	58	50	47	44	47	43	46	42	56	48	46	43	46	43	46	41	54	47
	2	44	41	44	40	43	38	50	42	44	40	43	40	42	37	48	40	43	39	43	39	41	36	47	38
	3	42	38	42	38	40	35	44	36	41	37	41	37	39	34	42	35	40	36	40	36	38	32	40	33
70	1	49	45	49	45	47	42	54	45	48	44	48	44	46	41	52	43								
	2	45	41	45	40	42	36	45	37	44	40	44	39	41	34	43	35								
	3	42	34	41	36	38	31	39	32	40	33	40	34	37	30	37	31								
80	1	47	44	47	43	46	41	54	45	47	43	46	42	45	40	52	43								
	2	44	40	43	39	41	36	45	37	43	39	42	38	40	34	43	35								
	3	41	34	40	36	37	31	39	32	40	33	39	34	36	30	37	31								
90	1	45	42	45	42	45	40	53	45	45	42	45	41	44	39	52	43								
	2	42	39	42	38	40	35	45	37	42	38	41	37	39	34	43	35								
	3	40	34	39	35	37	31	39	32	39	33	38	34	36	30	37	31								
70	1	49	45	49	45	47	42	54	45	48	44	48	44	46	41	52	43								
	2	45	41	45	40	42	36	45	37	44	40	44	39	41	34	43	35								
	3	42	34	41	36	38	31	39	32	40	33	40	34	37	30	37	31								
80	1	47	44	47	43	46	41	54	45	47	43	46	42	45	40	52	43								
	2	44	40	43	39	41	36	45	37	43	39	42	38	40	34	43	35								
	3	41	34	40	36	37	31	39	32	40	33	39	34	36	30	37	31								
90	1	45	42	45	42	45	40	53	45	45	42	45	41	44	39	52	43								
	2	42	39	42	38	40	35	45	37	42	38	41	37	39	34	43	35								
	3	40	34	39	35	37	31	39	32	39	33	38	34	36	30	37	31								
70	1	48	44	47	43	45	40	51	41	48	44	48	44	46	41	52	43								
	2	44	39	43	38	40	33	41	34	44	40	44	39	41	34	43	35								
	3	39	31	39	33	35	29	36	29	40	33	40	34	37	30	37	31								
80	1	46	42	46	42	44	39	51	41	47	43	46	42	45	40	52	43								
	2	42	38	42	37	39	33	41	34	43	39	42	38	40	34	43	35								
	3	39	31	38	33	35	29	36	29	40	33	39	34	36	30	37	31								
90	1	44	41	44	40	43	38	50	41	45	42	45	41	44	39	52	43								
	2	41	37	40	36	38	33	41	34	42	38	41	37	39	34	43	35								
	3	38	31	37	33	35	29	36	29	39	33	38	34	36	30	37	31								
70	1	48	44	47	43	45	40	51	41	48	44	48	44	46	41	52	43								
	2	44	39	43	38	40	33	41	34	44	40	44	39	41	34	43	35								
	3	39	31	39	33	35	29	36	29	40	33	40	34	37	30	37	31								
80	1	46	42	46	42	44	39	51	41	47	43	46	42	45	40	52	43								
	2	42	38	42	37	39	33	41	34	43	39	42	38	40	34	43	35								
	3	39	31	38	33	35	29	36	29	40	33	39	34	36	30	37	31								
90	1	44	41	44	40	43	38	50	41	45	42	45	41	44	39	52	43								
	2	41	37	40	36	38	33	41	34	42	38	41	37	39	34	43	35								
	3	38	31	37	33	35	29	36	29	39	33	38	34	36	30	37	31								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	47	43	46	42	44	39	49	40	46	41	45	40	42	37	46	37	44	40	44	39	41	35	43	35	
	2	43	38	42	37	39	32	40	33	41	36	40	34	37	30	37	31	40	35	39	32	34	28	35	29	
	3	37	30	39	32	34	28	35	28	35	28	37	30	32	26	32	26	33	26	34	28	30	24	30	25	
	80	1	45	41	45	41	43	38	49	40	44	40	44	39	42	36	46	37	43	39	42	38	40	35	43	35
		2	41	37	41	36	38	32	40	33	40	36	39	34	36	30	37	31	39	34	38	32	34	28	35	29
		3	37	30	38	32	34	28	35	28	35	28	36	30	32	26	32	26	33	26	34	28	30	24	30	25
	90	1	44	40	43	40	42	37	49	40	43	39	42	38	41	36	46	37	42	38	41	37	39	34	43	35
		2	40	36	40	35	37	32	40	33	39	35	38	34	36	30	37	31	38	34	37	32	34	28	35	29
		3	37	30	37	32	34	28	35	28	35	28	35	30	32	26	32	26	33	26	34	28	30	24	30	25
Wind Speed [mph]		170								180																
70	1	43	38	42	37	39	32	40	33	42	37	41	35	38	31	38	31	42	37	41	35	38	31	38	31	
	2	38	34	37	30	32	26	33	27	37	32	35	28	30	25	31	25	37	32	35	28	30	25	31	25	
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22	29	23	30	25	26	21	27	22	
80	1	42	37	41	36	38	32	40	33	40	36	40	35	37	31	38	31	40	36	40	35	37	31	38	31	
	2	37	33	36	30	32	26	33	27	36	32	35	28	30	25	31	25	36	32	35	28	30	25	31	25	
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22	29	23	30	25	26	21	27	22	
90	1	40	37	40	36	38	32	40	33	39	35	39	34	36	31	38	31	39	35	39	34	36	31	38	31	
	2	37	32	36	30	32	26	33	27	35	31	34	28	30	25	31	25	35	31	34	28	30	25	31	25	
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22	29	23	30	25	26	21	27	22	
Wind Speed [mph]		190								200																
70	1	40	36	39	33	36	29	36	30	39	34	38	32	34	27	34	28	39	34	38	32	34	27	34	28	
	2	36	31	33	27	29	23	30	24	34	29	31	25	27	22	28	23	34	29	31	25	27	22	28	23	
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20	26	21	27	22	24	19	24	20	
80	1	39	35	39	33	35	29	36	30	38	34	37	32	34	27	34	28	38	34	37	32	34	27	34	28	
	2	35	30	33	27	29	23	30	24	34	29	31	25	27	22	28	23	34	29	31	25	27	22	28	23	
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20	26	21	27	22	24	19	24	20	
90	1	38	34	38	33	35	29	36	30	37	33	37	32	34	27	34	28	37	33	37	32	34	27	34	28	
	2	34	30	33	27	29	23	30	24	33	29	31	25	27	22	28	23	33	29	31	25	27	22	28	23	
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20	26	21	27	22	24	19	24	20	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	45	43	46	43	46	42	57	50	45	42	45	42	45	41	55	48	44	42	44	41	44	40	54	47
	2	43	40	43	39	42	38	50	42	42	39	42	39	41	37	48	40	42	38	41	38	40	36	47	38
	3	41	37	40	37	39	34	44	36	40	37	40	36	38	33	42	35	39	36	39	35	37	32	40	33
Wind Speed [mph]		110								115															
100	1	44	41	44	41	44	39	52	45	43	40	43	40	43	38	51	43								
	2	41	38	41	37	39	35	45	37	40	37	40	36	38	34	43	35								
	3	39	34	38	34	36	31	39	32	38	33	37	33	35	30	37	31								
Wind Speed [mph]		120								130															
100	1	43	40	43	39	42	38	50	41	43	40	43	40	43	38	51	43								
	2	40	36	39	35	38	33	41	34	40	37	40	36	38	34	43	35								
	3	37	31	37	33	34	29	36	29	38	33	37	33	35	30	37	31								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	42	39	42	39	41	37	48	40	41	38	41	37	40	35	46	37	40	37	40	36	38	34	43	35
	2	39	36	39	35	37	32	40	33	38	34	37	33	35	30	37	31	37	33	36	32	34	28	35	29
	3	37	30	36	32	33	28	35	28	35	28	35	30	32	26	32	26	33	26	33	28	30	24	30	25
Wind Speed [mph]		170								180															
100	1	39	36	39	35	37	32	40	33	38	35	38	34	36	31	38	31	29	23	30	25	26	21	27	22
	2	36	32	35	30	32	26	33	27	35	31	34	28	30	25	31	25	29	23	30	25	26	21	27	22
	3	31	25	32	26	28	23	29	23	29	23	30	25	26	21	27	22	29	23	30	25	26	21	27	22
Wind Speed [mph]		190								200															
100	1	37	34	37	33	34	29	36	30	36	32	36	32	33	27	34	28	26	21	27	22	24	19	24	20
	2	34	29	33	27	29	23	30	24	32	28	31	25	27	22	28	23	26	21	27	22	24	19	24	20
	3	27	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20	26	21	27	22	24	19	24	20

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	67	58	65	54	56	46	57	47	65	56	63	52	54	44	54	45	64	54	61	49	52	43	52	43
	2	58	48	54	43	46	38	47	38	56	46	51	41	44	36	45	37	54	44	49	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
5	1	67	58	65	54	56	46	57	47	65	56	63	52	54	44	54	45	64	54	61	49	52	43	52	43
	2	58	48	54	43	46	38	47	38	56	46	51	41	44	36	45	37	54	44	49	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
10	1	67	58	65	54	56	46	57	47	65	56	63	52	54	44	54	45	64	54	61	49	52	43	52	43
	2	58	48	54	43	46	38	47	38	56	46	51	41	44	36	45	37	54	44	49	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
0	1	62	52	58	47	50	41	50	41	60	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
5	1	62	52	58	47	50	41	50	41	60	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
10	1	62	52	58	47	50	41	50	41	60	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
0	1	62	52	58	47	50	41	50	41	60	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
5	1	62	52	58	47	50	41	50	41	60	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
10	1	62	52	58	47	50	41	50	41	60	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
0	1	58	48	54	44	46	38	47	38	60	50	56	45	48	39	48	40								
	2	48	39	43	35	37	30	38	31	50	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
5	1	58	48	54	44	46	38	47	38	60	50	56	45	48	39	48	40								
	2	48	39	43	35	37	30	38	31	50	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
10	1	58	48	54	44	46	38	47	38	60	50	56	45	48	39	48	40								
	2	48	39	43	35	37	30	38	31	50	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	56	46	52	42	45	36	45	37	53	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
5	1	56	46	52	42	45	36	45	37	53	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
10	1	56	46	52	42	45	36	45	37	53	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
0	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
5	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
10	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
0	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
5	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
10	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	65	58	64	54	56	46	57	47	64	56	62	52	54	44	54	45	62	54	61	49	52	43	52	43
	2	58	48	54	43	46	38	47	38	56	46	51	41	44	36	45	37	54	44	49	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
20	1	63	56	62	54	56	46	57	47	62	54	60	52	54	44	54	45	60	53	59	49	52	43	52	43
	2	56	48	54	43	46	38	47	38	54	46	51	41	44	36	45	37	53	44	49	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
25	1	63	56	62	54	56	46	57	47	62	54	60	52	54	44	54	45	60	53	59	49	52	43	52	43
	2	56	48	54	43	46	38	47	38	54	46	51	41	44	36	45	37	53	44	49	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
15	1	61	52	58	47	50	41	50	41	59	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
20	1	59	51	57	47	50	41	50	41	57	50	56	45	48	39	48	40								
	2	51	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
25	1	59	51	57	47	50	41	50	41	57	50	56	45	48	39	48	40								
	2	51	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
15	1	61	52	58	47	50	41	50	41	59	50	56	45	48	39	48	40								
	2	52	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
20	1	59	51	57	47	50	41	50	41	57	50	56	45	48	39	48	40								
	2	51	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
25	1	59	51	57	47	50	41	50	41	57	50	56	45	48	39	48	40								
	2	51	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
15	1	58	48	54	44	46	38	47	38	59	50	56	45	48	39	48	40								
	2	48	39	43	35	37	30	38	31	50	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
20	1	56	48	54	44	46	38	47	38	57	50	56	45	48	39	48	40								
	2	48	39	43	35	37	30	38	31	50	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
25	1	56	48	54	44	46	38	47	38	57	50	56	45	48	39	48	40								
	2	48	39	43	35	37	30	38	31	50	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	56	46	52	42	45	36	45	37	53	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
20	1	55	46	52	42	45	36	45	37	52	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
25	1	55	46	52	42	45	36	45	37	52	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
15	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
20	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
25	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
15	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
20	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
25	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
15	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
20	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
25	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	63	56	62	54	56	46	57	47	61	54	60	52	54	44	54	45	60	53	58	49	52	43	52	43	
	2	56	48	54	43	46	38	47	38	54	46	51	41	44	36	45	37	53	44	49	39	42	34	43	35	
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30	
	35	1	61	55	60	53	56	46	57	47	60	53	58	52	54	44	54	45	58	52	57	49	52	43	52	43
		2	55	48	53	43	46	38	47	38	53	46	51	41	44	36	45	37	52	44	49	39	42	34	43	35
		3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
	40	1	59	53	58	52	55	46	57	47	58	52	57	51	53	44	54	45	57	51	56	49	51	43	52	43
		2	53	47	52	43	46	38	47	38	52	46	51	41	44	36	45	37	51	44	49	39	42	34	43	35
		3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
Wind Speed [mph]		110								115																
30	1	59	51	57	47	50	41	50	41	57	50	56	45	48	39	48	40									
	2	51	43	47	38	41	33	41	34	50	41	45	36	39	32	40	32									
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28									
35	1	57	50	56	47	50	41	50	41	56	49	54	45	48	39	48	40									
	2	50	43	47	38	41	33	41	34	49	41	45	36	39	32	40	32									
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28									
40	1	56	49	54	47	50	41	50	41	54	48	53	45	48	39	48	40									
	2	49	43	47	38	41	33	41	34	48	41	45	36	39	32	40	32									
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28									
Wind Speed [mph]		120								130																
30	1	56	48	54	44	46	38	47	38	57	50	56	45	48	39	48	40									
	2	48	39	43	35	37	30	38	31	50	41	45	36	39	32	40	32									
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28									
35	1	55	48	53	44	46	38	47	38	56	49	54	45	48	39	48	40									
	2	48	39	43	35	37	30	38	31	49	41	45	36	39	32	40	32									
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28									
40	1	53	47	52	44	46	38	47	38	54	48	53	45	48	39	48	40									
	2	47	39	43	35	37	30	38	31	48	41	45	36	39	32	40	32									
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	55	46	52	42	45	36	45	37	52	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
35	1	53	46	52	42	45	36	45	37	51	43	48	39	42	34	42	34	49	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
40	1	52	46	51	42	45	36	45	37	50	43	48	39	42	34	42	34	48	41	45	36	39	32	39	32
	2	46	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
30	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
35	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
40	1	46	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
30	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
35	1	47	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
40	1	46	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
30	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
35	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
40	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	58	52	57	51	54	46	57	47	57	51	56	50	52	44	54	45	56	50	55	48	51	43	52	43
	2	52	46	51	43	46	38	47	38	51	45	50	41	44	36	45	37	50	44	48	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
50	1	56	51	56	50	53	46	57	47	55	50	55	49	51	44	54	45	54	49	53	48	50	43	52	43
	2	51	45	50	43	46	38	47	38	50	44	49	41	44	36	45	37	49	43	48	39	42	34	43	35
	3	44	36	46	38	40	33	41	33	42	34	44	36	38	31	39	32	40	33	42	34	37	30	37	30
60	1	54	49	53	48	51	45	57	47	53	48	52	47	50	44	54	45	52	47	51	46	49	42	52	43
	2	49	44	48	43	45	38	47	38	48	43	47	41	44	36	45	37	47	42	46	39	42	34	43	35
	3	44	36	44	38	40	33	41	33	42	34	43	36	38	31	39	32	40	33	42	34	37	30	37	30
45	1	54	48	53	47	49	41	50	41	53	47	52	45	48	39	48	40								
	2	48	42	47	38	41	33	41	34	47	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
50	1	53	48	52	46	49	41	50	41	52	46	51	45	47	39	48	40								
	2	48	42	46	38	41	33	41	34	46	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
60	1	51	46	50	45	47	41	50	41	50	45	49	44	46	39	48	40								
	2	46	41	45	38	41	33	41	34	45	40	44	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
45	1	54	48	53	47	49	41	50	41	53	47	52	45	48	39	48	40								
	2	48	42	47	38	41	33	41	34	47	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
50	1	53	48	52	46	49	41	50	41	52	46	51	45	47	39	48	40								
	2	48	42	46	38	41	33	41	34	46	41	45	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
60	1	51	46	50	45	47	41	50	41	50	45	49	44	46	39	48	40								
	2	46	41	45	38	41	33	41	34	45	40	44	36	39	32	40	32								
	3	39	31	41	33	35	29	36	29	37	30	39	32	34	27	34	28								
45	1	52	46	51	44	46	38	47	38	53	47	52	45	48	39	48	40								
	2	46	39	43	35	37	30	38	31	47	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
50	1	51	45	50	44	46	38	47	38	52	46	51	45	47	39	48	40								
	2	45	39	43	35	37	30	38	31	46	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
60	1	49	44	48	43	45	38	47	38	50	45	49	44	46	39	48	40								
	2	44	39	43	35	37	30	38	31	45	40	44	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
45	1	52	46	51	44	46	38	47	38	53	47	52	45	48	39	48	40								
	2	46	39	43	35	37	30	38	31	47	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
50	1	51	45	50	44	46	38	47	38	52	46	51	45	47	39	48	40								
	2	45	39	43	35	37	30	38	31	46	41	45	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								
60	1	49	44	48	43	45	38	47	38	50	45	49	44	46	39	48	40								
	2	44	39	43	35	37	30	38	31	45	40	44	36	39	32	40	32								
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	51	45	50	42	45	36	45	37	49	43	48	39	42	34	42	34	47	41	45	36	39	32	39	32
	2	45	38	42	34	36	29	37	30	43	36	39	31	34	27	34	28	41	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
50	1	50	44	49	42	45	36	45	37	48	42	47	39	42	34	42	34	46	40	45	36	39	32	39	32
	2	44	38	42	34	36	29	37	30	42	36	39	31	34	27	34	28	40	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
60	1	48	43	47	42	44	36	45	37	47	41	45	39	42	34	42	34	45	39	44	36	39	32	39	32
	2	43	38	42	34	36	29	37	30	41	36	39	31	34	27	34	28	39	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
Wind Speed [mph]		170								180															
45	1	45	38	42	34	37	30	37	30	44	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
50	1	45	38	42	34	37	30	37	30	43	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
60	1	43	38	42	34	37	30	37	30	42	36	40	32	35	28	35	29								
	2	38	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23								
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20								
Wind Speed [mph]		190								200															
45	1	42	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
50	1	41	34	38	31	33	26	33	27	40	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
60	1	40	34	38	31	33	26	33	27	39	33	36	29	31	25	32	26								
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	52	47	51	47	50	44	57	47	51	46	50	46	48	43	54	45	50	46	49	45	47	41	52	43
	2	47	43	47	42	44	38	47	38	46	42	46	41	43	36	45	37	46	41	45	39	41	34	43	35
	3	44	36	43	38	40	33	41	33	42	34	42	36	38	31	39	32	40	33	41	34	37	30	37	30
	1	50	46	49	45	48	43	56	47	49	45	49	44	47	42	54	45	48	44	48	43	46	41	52	43
	2	46	42	45	41	43	38	47	38	45	41	44	40	42	36	45	37	44	40	43	39	41	34	43	35
	3	43	36	42	37	39	33	41	33	42	34	41	36	38	31	39	32	40	33	40	34	37	30	37	30
80	1	48	44	48	44	47	42	55	47	47	44	47	43	46	41	54	45	46	43	46	42	45	40	52	43
	2	44	41	44	40	42	37	47	38	44	40	43	39	41	36	45	37	43	39	42	38	40	34	43	35
	3	42	36	41	37	38	33	41	33	41	34	40	36	37	31	39	32	40	33	39	34	36	30	37	30
	1	49	45	48	44	46	40	50	41	48	44	48	43	45	39	48	40	48	44	48	43	45	39	48	40
	2	45	40	44	38	40	33	41	34	44	39	43	36	39	32	40	32	44	39	43	36	39	32	40	32
	3	39	31	40	33	35	29	36	29	37	30	39	32	34	27	34	28	37	30	39	32	34	27	34	28
90	1	47	43	47	42	45	40	50	41	47	42	46	42	44	39	48	40	47	42	46	42	44	39	48	40
	2	43	39	42	38	40	33	41	34	42	38	42	36	39	32	40	32	42	38	42	36	39	32	40	32
	3	39	31	39	33	35	29	36	29	37	30	38	32	34	27	34	28	37	30	38	32	34	27	34	28
	1	46	42	45	41	44	39	50	41	45	41	45	41	43	38	48	40	45	41	45	41	43	38	48	40
	2	42	38	41	37	39	33	41	34	41	37	41	36	38	32	40	32	41	37	41	36	38	32	40	32
	3	39	31	38	33	35	29	36	29	37	30	37	32	34	27	34	28	37	30	37	32	34	27	34	28
70	1	47	43	47	42	44	38	47	38	48	44	48	43	45	39	48	40	48	44	48	43	45	39	48	40
	2	43	38	42	35	37	30	38	31	44	39	43	36	39	32	40	32	44	39	43	36	39	32	40	32
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28	37	30	39	32	34	27	34	28
	1	46	42	45	41	43	38	47	38	47	42	46	42	44	39	48	40	47	42	46	42	44	39	48	40
	2	42	37	41	35	37	30	38	31	42	38	42	36	39	32	40	32	42	38	42	36	39	32	40	32
	3	36	29	37	30	32	26	33	27	37	30	38	32	34	27	34	28	37	30	38	32	34	27	34	28
80	1	44	41	44	40	42	37	47	38	45	41	45	41	43	38	48	40	45	41	45	41	43	38	48	40
	2	41	36	40	35	37	30	38	31	41	37	41	36	38	32	40	32	41	37	41	36	38	32	40	32
	3	36	29	36	30	32	26	33	27	37	30	37	32	34	27	34	28	37	30	37	32	34	27	34	28
	1	44	41	44	40	42	37	47	38	45	41	45	41	43	38	48	40	45	41	45	41	43	38	48	40
	2	41	36	40	35	37	30	38	31	41	37	41	36	38	32	40	32	41	37	41	36	38	32	40	32
	3	36	29	36	30	32	26	33	27	37	30	37	32	34	27	34	28	37	30	37	32	34	27	34	28
90	1	47	43	47	42	44	38	47	38	48	44	48	43	45	39	48	40	48	44	48	43	45	39	48	40
	2	43	38	42	35	37	30	38	31	44	39	43	36	39	32	40	32	44	39	43	36	39	32	40	32
	3	36	29	37	30	32	26	33	27	37	30	39	32	34	27	34	28	37	30	39	32	34	27	34	28
	1	46	42	45	41	43	38	47	38	47	42	46	42	44	39	48	40	47	42	46	42	44	39	48	40
	2	42	37	41	35	37	30	38	31	42	38	42	36	39	32	40	32	42	38	42	36	39	32	40	32
	3	36	29	37	30	32	26	33	27	37	30	38	32	34	27	34	28	37	30	38	32	34	27	34	28

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	47	42	46	41	43	36	45	37	45	40	44	39	41	34	42	34	44	39	43	36	39	32	39	32	
	2	42	37	41	34	36	29	37	30	40	35	39	31	34	27	34	28	39	33	36	29	31	25	32	26	
	3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23	
	80	1	45	41	44	40	42	36	45	37	44	39	43	38	40	34	42	34	42	38	41	36	38	32	39	32
		2	41	36	40	34	36	29	37	30	39	34	38	31	34	27	34	28	38	33	36	29	31	25	32	26
		3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
	90	1	44	40	43	39	41	36	45	37	42	38	42	37	39	34	42	34	41	37	40	36	38	32	39	32
		2	40	35	39	34	36	29	37	30	38	34	37	31	34	27	34	28	37	32	36	29	31	25	32	26
		3	34	28	36	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
Wind Speed [mph]		170								180																
70	1	42	37	41	34	37	30	37	30	41	36	40	32	35	28	35	29									
	2	37	31	34	28	30	24	30	25	36	30	32	26	28	23	29	23									
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20									
80	1	41	36	40	34	37	30	37	30	40	35	39	32	35	28	35	29									
	2	36	31	34	28	30	24	30	25	35	30	32	26	28	23	29	23									
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20									
90	1	40	36	39	34	36	30	37	30	39	34	38	32	35	28	35	29									
	2	36	31	34	28	30	24	30	25	34	30	32	26	28	23	29	23									
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20									
Wind Speed [mph]		190								200																
70	1	39	34	38	31	33	26	33	27	38	33	36	29	31	25	32	26									
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21									
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18									
80	1	38	34	37	31	33	26	33	27	37	32	36	29	31	25	32	26									
	2	34	28	30	25	26	21	27	22	32	27	29	23	25	20	26	21									
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18									
90	1	38	33	37	31	33	26	33	27	36	32	35	29	31	25	32	26									
	2	33	28	30	25	26	21	27	22	32	27	29	23	25	20	26	21									
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	46	43	46	43	46	41	55	47	46	42	46	42	45	40	53	45	45	42	45	41	44	39	51	43
	2	43	40	43	39	41	36	47	38	42	39	42	38	40	35	45	37	42	38	41	37	39	34	43	35
	3	41	36	40	36	38	33	41	33	40	34	39	35	37	31	39	32	39	33	38	34	36	30	37	30
100	1	44	41	44	40	43	38	50	41	44	40	43	40	42	37	48	40								
	2	41	37	40	36	38	33	41	34	40	36	40	35	37	32	40	32								
	3	38	31	37	33	35	29	36	29	37	30	37	32	34	27	34	28								
0	1																								
	2																								
	3																								
100	1	43	40	43	39	41	36	47	38	44	40	43	40	42	37	48	40								
	2	40	35	39	35	36	30	38	31	40	36	40	35	37	32	40	32								
	3	36	29	36	30	32	26	33	27	37	30	37	32	34	27	34	28								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	43	39	42	38	40	35	45	37	41	37	41	37	39	34	42	34	40	36	40	35	37	32	39	32
	2	39	35	38	34	35	29	37	30	37	33	37	31	34	27	34	28	36	32	35	29	31	25	32	26
	3	34	28	35	29	31	25	32	26	32	26	34	27	29	24	30	24	30	24	31	26	27	22	28	23
Wind Speed [mph]		170								180															
100	1	39	35	38	34	36	30	37	30	38	34	37	32	34	28	35	29	34	29	32	26	28	23	29	23
	2	35	31	34	28	30	24	30	25	34	29	32	26	28	23	29	23	34	29	32	26	28	23	29	23
	3	28	23	30	24	26	21	26	21	26	21	28	23	24	20	25	20	26	21	28	23	24	20	25	20
Wind Speed [mph]		190								200															
100	1	37	32	36	31	33	26	33	27	36	31	35	29	31	25	32	26	36	31	35	29	31	25	32	26
	2	32	28	30	25	26	21	27	22	31	27	29	23	25	20	26	21	31	27	29	23	25	20	26	21
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	73	65	71	63	64	54	64	54	71	63	69	61	62	52	63	52	70	62	67	58	60	50	60	50
	2	65	56	63	51	54	44	54	45	63	53	60	49	52	42	52	43	62	51	58	46	50	40	50	41
	3	52	42	55	44	47	38	47	39	50	40	52	42	45	37	45	37	47	38	50	40	43	35	43	36
5	1	73	65	71	63	64	54	64	54	71	63	69	61	62	52	63	52	70	62	67	58	60	50	60	50
	2	65	56	63	51	54	44	54	45	63	53	60	49	52	42	52	43	62	51	58	46	50	40	50	41
	3	52	42	55	44	47	38	47	39	50	40	52	42	45	37	45	37	47	38	50	40	43	35	43	36
10	1	71	65	70	63	64	54	64	54	70	63	69	61	62	52	63	52	69	62	67	58	60	50	60	50
	2	65	56	63	51	54	44	54	45	63	53	60	49	52	42	52	43	62	51	58	46	50	40	50	41
	3	52	42	55	44	47	38	47	39	50	40	52	42	45	37	45	37	47	38	50	40	43	35	43	36
0	1	68	60	66	56	58	48	58	48	67	57	64	53	56	46	56	46								
	2	60	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
5	1	68	60	66	56	58	48	58	48	67	57	64	53	56	46	56	46								
	2	60	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
10	1	68	60	66	56	58	48	58	48	67	57	64	53	56	46	56	46								
	2	60	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
0	1	68	60	66	56	58	48	58	48	67	57	64	53	56	46	56	46								
	2	60	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
5	1	68	60	66	56	58	48	58	48	67	57	64	53	56	46	56	46								
	2	60	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
10	1	68	60	66	56	58	48	58	48	67	57	64	53	56	46	56	46								
	2	60	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
0	1	65	56	63	51	54	44	54	44	67	57	64	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
5	1	65	56	63	51	54	44	54	44	67	57	64	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
10	1	65	56	63	51	54	44	54	44	67	57	64	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
0	1	65	56	63	51	54	44	54	44	67	57	64	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
5	1	65	56	63	51	54	44	54	44	67	57	64	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
10	1	65	56	63	51	54	44	54	44	67	57	64	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	64	54	61	49	52	43	52	43	61	50	57	46	49	40	49	40	57	47	53	43	46	37	46	38
	2	54	44	49	40	42	34	43	35	50	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
5	1	64	54	61	49	52	43	52	43	61	50	57	46	49	40	49	40	57	47	53	43	46	37	46	38
	2	54	44	49	40	42	34	43	35	50	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
10	1	64	54	61	49	52	43	52	43	61	50	57	46	49	40	49	40	57	47	53	43	46	37	46	38
	2	54	44	49	40	42	34	43	35	50	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
0	1	54	45	50	40	43	35	43	35	51	42	47	38	41	33	41	34								
	2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
5	1	54	45	50	40	43	35	43	35	51	42	47	38	41	33	41	34								
	2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
10	1	54	45	50	40	43	35	43	35	51	42	47	38	41	33	41	34								
	2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
0	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
5	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
10	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	69	63	68	62	64	54	64	54	67	62	66	61	62	52	63	52	66	61	65	58	60	50	60	50
	2	63	56	62	51	54	44	54	45	62	53	60	49	52	42	52	43	61	51	58	46	50	40	50	41
	3	52	42	55	44	47	38	47	39	50	40	52	42	45	37	45	37	47	38	50	40	43	35	43	36
20	1	66	61	65	60	64	54	64	54	65	60	64	58	62	52	63	52	64	58	63	57	60	50	60	50
	2	61	54	60	51	54	44	54	45	60	53	58	49	52	42	52	43	58	51	57	46	50	40	50	41
	3	52	42	55	44	47	38	47	39	50	40	52	42	45	37	45	37	47	38	50	40	43	35	43	36
25	1	66	61	65	60	63	54	64	54	65	60	64	58	62	52	63	52	64	58	63	57	60	50	60	50
	2	61	54	60	51	54	44	54	45	60	53	58	49	52	42	52	43	58	51	57	46	50	40	50	41
	3	52	42	55	44	47	38	47	39	50	40	52	42	45	37	45	37	47	38	50	40	43	35	43	36
15	1	65	59	64	56	58	48	58	48	64	57	63	53	56	46	56	46								
	2	59	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
20	1	63	57	62	55	58	48	58	48	62	56	61	53	56	46	56	46								
	2	57	49	55	45	48	39	48	39	56	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
25	1	63	57	62	55	58	48	58	48	62	56	61	53	56	46	56	46								
	2	57	49	55	45	48	39	48	39	56	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
15	1	65	59	64	56	58	48	58	48	64	57	63	53	56	46	56	46								
	2	59	49	55	45	48	39	48	39	57	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
20	1	63	57	62	55	58	48	58	48	62	56	61	53	56	46	56	46								
	2	57	49	55	45	48	39	48	39	56	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
25	1	63	57	62	55	58	48	58	48	62	56	61	53	56	46	56	46								
	2	57	49	55	45	48	39	48	39	56	48	53	43	46	37	46	38								
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
15	1	63	56	62	51	54	44	54	44	64	57	63	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
20	1	61	54	60	51	54	44	54	44	62	56	61	53	56	46	56	46								
	2	54	46	51	41	44	36	44	36	56	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
25	1	61	54	60	51	54	44	54	44	62	56	61	53	56	46	56	46								
	2	54	46	51	41	44	36	44	36	56	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
15	1	63	56	62	51	54	44	54	44	64	57	63	53	56	46	56	46								
	2	56	46	51	41	44	36	44	36	57	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
20	1	61	54	60	51	54	44	54	44	62	56	61	53	56	46	56	46								
	2	54	46	51	41	44	36	44	36	56	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
25	1	61	54	60	51	54	44	54	44	62	56	61	53	56	46	56	46								
	2	54	46	51	41	44	36	44	36	56	48	53	43	46	37	46	38								
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	62	54	61	49	52	43	52	43	60	50	57	46	49	40	49	40	57	47	53	43	46	37	46	38
	2	54	44	49	40	42	34	43	35	50	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
20	1	60	53	59	49	52	43	52	43	58	50	56	46	49	40	49	40	55	47	53	43	46	37	46	38
	2	53	44	49	40	42	34	43	35	50	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
25	1	60	53	59	49	52	43	52	43	58	50	56	46	49	40	49	40	55	47	53	43	46	37	46	38
	2	53	44	49	40	42	34	43	35	50	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
15	1	54	45	50	40	43	35	43	35	51	42	47	38	41	33	41	34								
	2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
20	1	53	45	50	40	43	35	43	35	51	42	47	38	41	33	41	34								
	2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
25	1	53	45	50	40	43	35	43	35	51	42	47	38	41	33	41	34								
	2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
15	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
20	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
25	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
15	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
20	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
25	1	49	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	65	60	64	59	62	54	64	54	64	59	63	57	60	52	63	52	63	57	62	56	58	50	60	50	
	2	60	53	59	51	54	44	54	45	59	52	57	49	52	42	52	43	57	50	56	46	50	40	50	41	
	3	52	42	54	44	47	38	47	39	50	40	52	42	45	37	45	37	47	38	50	40	43	35	43	36	
	35	1	63	58	63	57	60	53	64	54	62	57	62	56	59	51	63	52	62	56	61	54	57	50	60	50
		2	58	52	57	51	53	44	54	45	57	51	56	49	51	42	52	43	56	49	54	46	50	40	50	41
		3	52	42	53	44	47	38	47	39	50	40	51	42	45	37	45	37	47	38	50	40	43	35	43	36
	40	1	62	57	61	56	59	52	64	54	61	55	60	54	57	51	63	52	60	54	59	53	56	49	60	50
		2	57	51	56	50	52	44	54	45	55	50	54	48	51	42	52	43	54	48	53	46	49	40	50	41
		3	52	42	51	44	47	38	47	39	50	40	50	42	45	37	45	37	47	38	49	40	43	35	43	36
Wind Speed [mph]		110								115																
30	1	62	56	61	54	57	48	58	48	61	55	60	53	55	46	56	46									
	2	56	49	54	45	48	39	48	39	55	48	53	43	46	37	46	38									
	3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33									
	35	1	60	54	59	53	56	48	58	48	59	53	58	52	54	46	56	46								
		2	54	48	53	45	48	39	48	39	53	47	52	43	46	37	46	38								
		3	45	37	48	39	41	34	42	34	44	35	46	37	40	32	40	33								
	40	1	59	53	58	52	55	48	58	48	58	52	57	51	53	46	56	46								
		2	53	47	52	45	48	39	48	39	52	46	51	43	46	37	46	38								
		3	45	37	47	39	41	34	42	34	44	35	46	37	40	32	40	33								
Wind Speed [mph]		120								130																
30	1	60	53	59	51	54	44	54	44	61	55	60	53	55	46	56	46									
	2	53	46	51	41	44	36	44	36	55	48	53	43	46	37	46	38									
	3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33									
	35	1	58	52	57	51	53	44	54	44	59	53	58	52	54	46	56	46								
		2	52	45	51	41	44	36	44	36	53	47	52	43	46	37	46	38								
		3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								
	40	1	57	51	56	49	52	44	54	44	58	52	57	51	53	46	56	46								
		2	51	45	49	41	44	36	44	36	52	46	51	43	46	37	46	38								
		3	42	34	44	36	38	31	39	32	44	35	46	37	40	32	40	33								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	59	52	57	49	52	43	52	43	57	50	55	46	49	40	49	40	54	47	53	43	46	37	46	38	
	2	52	44	49	40	42	34	43	35	50	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31	
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27	
	35	1	57	51	56	49	52	43	52	43	55	49	54	46	49	40	49	40	53	47	52	43	46	37	46	38
		2	51	44	49	40	42	34	43	35	49	41	45	37	39	32	40	33	47	39	43	34	37	30	38	31
		3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
	40	1	56	50	55	48	51	43	52	43	54	48	52	46	48	40	49	40	52	46	51	43	46	37	46	38
		2	50	44	48	40	42	34	43	35	48	41	45	37	39	32	40	33	46	39	43	34	37	30	38	31
		3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
Wind Speed [mph]		170								180																
30	1	52	45	50	40	43	35	43	35	50	42	47	38	41	33	41	34									
	2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27									
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24									
	35	1	51	45	50	40	43	35	43	35	49	42	47	38	41	33	41	34								
		2	45	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
		3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
	40	1	50	44	49	40	43	35	43	35	48	42	47	38	41	33	41	34								
		2	44	37	40	32	35	28	35	29	42	35	38	30	33	26	34	27								
		3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
Wind Speed [mph]		190								200																
30	1	48	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30									
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25									
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21									
	35	1	48	40	44	36	38	31	39	32	46	38	42	34	36	29	37	30								
		2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
	40	1	47	40	44	36	38	31	39	32	45	38	42	34	36	29	37	30								
		2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	60	55	59	54	58	51	64	54	59	54	58	53	56	50	63	52	58	53	57	52	55	48	60	50	
	2	55	50	54	49	51	44	54	45	54	49	53	47	50	42	52	43	53	47	52	46	48	40	50	41	
	3	51	42	50	44	46	38	47	39	50	40	49	42	45	37	45	37	47	38	48	40	43	35	43	36	
	50	1	58	54	58	53	56	50	64	54	57	53	57	52	55	49	63	52	56	52	56	51	54	48	60	50
		2	54	49	53	48	50	44	54	45	53	48	52	46	49	42	52	43	52	46	51	45	48	40	50	41
		3	50	42	49	44	46	38	47	39	49	40	48	42	44	37	45	37	47	38	47	40	43	35	43	36
	60	1	55	51	55	51	54	49	63	54	54	50	54	50	53	47	62	52	53	49	53	49	52	46	60	50
		2	51	47	51	46	49	43	54	45	50	46	50	45	47	42	52	43	49	45	49	44	46	40	50	41
		3	48	42	47	42	45	38	47	39	47	40	46	41	43	37	45	37	46	38	45	40	42	35	43	36
Wind Speed [mph]		110								115																
45	1	57	52	56	51	54	47	58	48	56	51	55	50	52	46	56	46									
	2	52	46	51	45	47	39	48	39	51	45	50	43	46	37	46	38									
	3	45	37	47	39	41	34	42	34	44	35	45	37	40	32	40	33									
	50	1	55	51	55	50	53	46	58	48	55	50	54	49	51	45	56	46								
		2	51	45	50	44	46	39	48	39	50	44	49	43	45	37	46	38								
		3	45	37	46	39	41	34	42	34	44	35	45	37	40	32	40	33								
	60	1	53	49	52	48	51	45	58	48	52	48	52	47	50	44	56	46								
		2	49	44	48	43	45	39	48	39	48	43	47	42	44	37	46	38								
		3	45	37	44	39	41	34	42	34	44	35	43	37	40	32	40	33								
Wind Speed [mph]		120								130																
45	1	55	50	54	49	51	44	54	44	56	51	55	50	52	46	56	46									
	2	50	44	49	41	44	36	44	36	51	45	50	43	46	37	46	38									
	3	42	34	44	36	38	31	39	32	44	35	45	37	40	32	40	33									
	50	1	54	49	53	48	50	44	54	44	55	50	54	49	51	45	56	46								
		2	49	43	48	41	44	36	44	36	50	44	49	43	45	37	46	38								
		3	42	34	44	36	38	31	39	32	44	35	45	37	40	32	40	33								
	60	1	51	47	51	46	49	43	54	44	52	48	52	47	50	44	56	46								
		2	47	42	46	41	43	36	44	36	48	43	47	42	44	37	46	38								
		3	42	34	42	36	38	31	39	32	44	35	43	37	40	32	40	33								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	54	49	53	47	50	43	52	43	52	47	51	45	48	40	49	40	51	45	49	43	46	37	46	38	
	2	49	43	47	40	42	34	43	35	47	41	45	37	39	32	40	33	45	39	43	34	37	30	38	31	
	3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27	
	50	1	53	48	52	47	49	43	52	43	51	46	50	45	47	40	49	40	50	44	49	43	45	37	46	38
		2	48	42	47	40	42	34	43	35	46	40	45	37	39	32	40	33	44	39	43	34	37	30	38	31
		3	40	33	42	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
	60	1	50	46	50	45	48	42	52	43	49	44	48	43	46	40	49	40	48	43	47	42	44	37	46	38
		2	46	41	45	40	42	34	43	35	44	39	43	37	39	32	40	33	43	38	42	34	37	30	38	31
		3	40	33	41	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
45	1	49	43	48	40	43	35	43	35	47	41	46	38	41	33	41	34									
	2	43	37	40	32	35	28	35	29	41	35	38	30	33	26	34	27									
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24									
	50	1	48	42	47	40	43	35	43	35	46	41	45	38	41	33	41	34								
		2	42	37	40	32	35	28	35	29	41	35	38	30	33	26	34	27								
		3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
	60	1	46	41	45	40	42	35	43	35	45	40	44	38	40	33	41	34								
		2	41	36	40	32	35	28	35	29	40	35	38	30	33	26	34	27								
		3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
45	1	46	40	44	36	38	31	39	32	44	38	42	34	36	29	37	30									
	2	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25									
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21									
	50	1	45	39	44	36	38	31	39	32	44	38	42	34	36	29	37	30								
		2	39	33	36	29	31	25	32	26	38	31	34	27	29	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
	60	1	43	38	42	36	38	31	39	32	42	37	41	34	36	29	37	30								
		2	38	33	36	29	31	25	32	26	37	31	34	27	29	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	52	49	52	49	52	47	62	54	52	48	52	48	51	46	61	52	51	47	51	47	50	45	59	50	
	2	49	45	49	44	47	42	54	45	48	44	48	43	46	41	52	43	47	43	47	42	45	39	50	41	
	3	46	42	46	41	43	38	47	39	45	40	45	40	42	37	45	37	45	38	44	39	41	35	43	36	
	80	1	50	47	50	47	50	46	61	54	49	46	49	46	49	45	60	52	49	46	49	45	49	44	58	50
		2	47	44	47	43	46	41	54	45	46	43	46	42	45	40	52	43	46	42	45	41	44	39	50	41
		3	45	41	44	40	42	37	47	39	44	40	43	39	41	36	45	37	43	38	42	38	40	35	43	36
	90	1	48	45	48	45	49	45	60	53	47	45	48	45	48	44	58	51	47	44	47	44	47	43	57	50
		2	45	42	45	42	45	40	53	45	45	41	45	41	44	39	51	43	44	41	44	40	43	38	50	41
		3	43	40	43	39	41	37	47	39	42	39	42	38	40	35	45	37	42	38	41	37	39	34	43	36
70	1	50	47	50	46	49	44	57	48	50	46	49	45	48	43	56	46									
	2	47	42	46	42	44	38	48	39	46	41	45	41	43	37	46	38									
	3	44	37	43	38	40	34	42	34	43	35	42	37	39	32	40	33									
	80	1	48	45	48	45	48	43	56	48	48	44	48	44	47	42	55	46								
		2	45	41	45	40	43	38	48	39	44	40	44	40	42	37	46	38								
		3	42	37	42	37	39	34	42	34	42	35	41	36	38	32	40	33								
	90	1	46	43	46	43	46	42	56	48	46	43	46	42	45	41	54	46								
		2	43	40	43	39	42	37	48	39	43	39	42	39	41	36	46	38								
		3	41	37	40	36	38	33	42	34	40	35	40	36	37	32	40	33								
70	1	49	45	49	44	47	42	54	44	50	46	49	45	48	43	56	46									
	2	45	41	44	40	42	36	44	36	46	41	45	41	43	37	46	38									
	3	42	34	41	36	38	31	39	32	43	35	42	37	39	32	40	33									
	80	1	47	44	47	43	46	41	54	44	48	44	48	44	47	42	55	46								
		2	44	40	43	39	41	36	44	36	44	40	44	40	42	37	46	38								
		3	41	34	40	35	37	31	39	32	42	35	41	36	38	32	40	33								
	90	1	45	42	45	42	45	40	53	44	46	43	46	42	45	41	54	46								
		2	42	38	42	38	40	35	44	36	43	39	42	39	41	36	46	38								
		3	40	34	39	35	37	31	39	32	40	35	40	36	37	32	40	33								
70	1	49	45	49	44	47	42	54	44	50	46	49	45	48	43	56	46									
	2	45	41	44	40	42	36	44	36	46	41	45	41	43	37	46	38									
	3	42	34	41	36	38	31	39	32	43	35	42	37	39	32	40	33									
	80	1	47	44	47	43	46	41	54	44	48	44	48	44	47	42	55	46								
		2	44	40	43	39	41	36	44	36	44	40	44	40	42	37	46	38								
		3	41	34	40	35	37	31	39	32	42	35	41	36	38	32	40	33								
	90	1	45	42	45	42	45	40	53	44	46	43	46	42	45	41	54	46								
		2	42	38	42	38	40	35	44	36	43	39	42	39	41	36	46	38								
		3	40	34	39	35	37	31	39	32	40	35	40	36	37	32	40	33								
70	1	49	45	49	44	47	42	54	44	50	46	49	45	48	43	56	46									
	2	45	41	44	40	42	36	44	36	46	41	45	41	43	37	46	38									
	3	42	34	41	36	38	31	39	32	43	35	42	37	39	32	40	33									
	80	1	47	44	47	43	46	41	54	44	48	44	48	44	47	42	55	46								
		2	44	40	43	39	41	36	44	36	44	40	44	40	42	37	46	38								
		3	41	34	40	35	37	31	39	32	42	35	41	36	38	32	40	33								
	90	1	45	42	45	42	45	40	53	44	46	43	46	42	45	41	54	46								
		2	42	38	42	38	40	35	44	36	43	39	42	39	41	36	46	38								
		3	40	34	39	35	37	31	39	32	40	35	40	36	37	32	40	33								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	48	44	48	44	46	41	52	43	47	43	47	42	44	39	49	40	46	41	45	40	43	37	46	38
	2	44	40	44	39	41	34	43	35	43	38	42	37	39	32	40	33	41	37	40	34	37	30	38	31
	3	40	33	40	34	37	30	37	30	38	30	39	32	34	28	35	28	35	28	37	30	32	26	33	27
80	1	47	43	46	42	45	40	52	43	45	42	45	41	43	38	49	40	44	40	44	39	42	37	46	38
	2	43	39	42	38	40	34	43	35	42	37	41	36	38	32	40	33	40	36	39	34	37	30	38	31
	3	40	33	39	34	36	30	37	30	38	30	38	32	34	28	35	28	35	28	36	30	32	26	33	27
90	1	45	42	45	41	44	39	51	43	44	40	44	40	42	37	49	40	43	39	42	38	41	36	46	38
	2	42	38	41	37	39	34	43	35	40	36	40	36	37	32	40	33	39	35	38	34	36	30	38	31
	3	39	33	38	34	36	30	37	30	38	30	37	32	34	28	35	28	35	28	35	30	32	26	33	27
70	1	45	40	44	39	41	35	43	35	43	39	42	38	39	33	41	34								
	2	40	35	39	32	35	28	35	29	39	34	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
80	1	43	39	42	38	40	35	43	35	42	38	41	37	39	33	41	34								
	2	39	34	38	32	35	28	35	29	38	33	37	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
90	1	42	38	41	37	39	34	43	35	41	37	40	36	38	33	41	34								
	2	38	34	37	32	34	28	35	29	37	33	36	30	33	26	34	27								
	3	33	27	34	28	30	24	31	25	31	25	33	27	28	23	29	24								
70	1	45	40	44	39	41	35	43	35	43	39	42	38	39	33	41	34								
	2	40	35	39	32	35	28	35	29	39	34	38	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
80	1	43	39	42	38	40	35	43	35	42	38	41	37	39	33	41	34								
	2	39	34	38	32	35	28	35	29	38	33	37	30	33	26	34	27								
	3	33	27	35	28	30	24	31	25	31	25	33	27	28	23	29	24								
90	1	42	38	41	37	39	34	43	35	41	37	40	36	38	33	41	34								
	2	38	34	37	32	34	28	35	29	37	33	36	30	33	26	34	27								
	3	33	27	34	28	30	24	31	25	31	25	33	27	28	23	29	24								
70	1	42	37	41	36	38	31	39	32	41	36	40	34	36	29	37	30								
	2	37	33	36	29	31	25	32	26	36	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
80	1	41	37	40	36	37	31	39	32	40	35	39	34	36	29	37	30								
	2	37	32	36	29	31	25	32	26	35	31	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								
90	1	40	36	39	35	37	31	39	32	39	35	38	34	35	29	37	30								
	2	36	31	35	29	31	25	32	26	35	30	34	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	45	44	46	44	47	44	59	52	45	43	46	43	47	43	57	50	45	43	45	43	46	42	56	49
	2	44	41	44	41	44	39	52	45	43	40	43	40	43	38	50	43	43	40	43	39	42	37	49	41
	3	42	39	42	38	40	36	47	39	41	38	41	37	40	35	45	37	41	37	40	36	39	34	43	36
Wind Speed [mph]		110								115															
100	1	45	42	45	42	45	41	55	48	44	42	44	41	44	40	53	46								
	2	42	39	42	38	41	36	48	39	42	38	41	38	40	35	46	38								
	3	40	36	39	36	38	33	42	34	39	35	39	35	37	32	40	33								
Wind Speed [mph]		120								130															
100	1	44	41	44	41	43	39	52	44	44	42	44	41	44	40	53	46								
	2	41	38	41	37	39	35	44	36	42	38	41	38	40	35	46	38								
	3	39	34	38	34	36	31	39	32	39	35	39	35	37	32	40	33								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	43	40	43	40	43	38	51	43	42	39	42	39	41	37	48	40	41	38	41	38	40	35	46	38
	2	40	37	40	36	38	34	43	35	39	36	39	35	37	32	40	33	38	34	38	33	35	30	38	31
	3	38	33	37	33	35	30	37	30	37	30	36	32	33	28	35	28	35	28	35	30	32	26	33	27
Wind Speed [mph]		170								180															
100	1	41	37	40	36	39	34	43	35	40	36	39	35	37	33	41	34								
	2	37	33	36	32	34	28	35	29	36	32	35	30	33	26	34	27								
	3	33	27	33	28	30	24	31	25	31	25	32	27	28	23	29	24								
Wind Speed [mph]		190								200															
100	1	39	35	38	34	36	31	39	32	38	34	37	33	35	29	37	30								
	2	35	31	34	29	31	25	32	26	34	30	33	27	29	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	29	24	25	21	26	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	67	59	65	55	57	47	57	47	66	56	63	52	54	45	55	45	64	54	62	50	52	43	53	43	
	2	59	48	54	44	47	38	47	39	56	46	52	42	45	36	45	37	54	45	49	40	43	35	43	35	
	3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31	
	5	1	67	59	65	55	57	47	57	47	66	56	63	52	54	45	55	45	64	54	62	50	52	43	53	43
		2	59	48	54	44	47	38	47	39	56	46	52	42	45	36	45	37	54	45	49	40	43	35	43	35
		3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
	10	1	67	59	65	55	57	47	57	47	66	56	63	52	54	45	55	45	64	54	62	50	52	43	53	43
		2	59	48	54	44	47	38	47	39	56	46	52	42	45	36	45	37	54	45	49	40	43	35	43	35
		3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
0	1	62	52	59	48	50	41	51	42	61	50	57	46	48	40	49	40	61	50	57	46	48	40	49	40	
	2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33	50	41	45	37	39	32	40	33	
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28	37	30	39	32	34	28	35	28	
	5	1	62	52	59	48	50	41	51	42	61	50	57	46	48	40	49	40	61	50	57	46	48	40	49	40
		2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33	50	41	45	37	39	32	40	33
		3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28	37	30	39	32	34	28	35	28
	10	1	62	52	59	48	50	41	51	42	61	50	57	46	48	40	49	40	61	50	57	46	48	40	49	40
		2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33	50	41	45	37	39	32	40	33
		3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28	37	30	39	32	34	28	35	28
0	1	58	48	54	44	47	38	47	39	61	50	57	46	48	40	49	40	61	50	57	46	48	40	49	40	
	2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33	50	41	45	37	39	32	40	33	
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28	37	30	39	32	34	28	35	28	
	5	1	58	48	54	44	47	38	47	39	61	50	57	46	48	40	49	40	61	50	57	46	48	40	49	40
		2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33	50	41	45	37	39	32	40	33
		3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28	37	30	39	32	34	28	35	28
	10	1	58	48	54	44	47	38	47	39	61	50	57	46	48	40	49	40	61	50	57	46	48	40	49	40
		2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33	50	41	45	37	39	32	40	33
		3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28	37	30	39	32	34	28	35	28

Exposure Category : C

ASCE Group Zone	
Panal Angle	Gable
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	57	47	52	42	45	37	45	37	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	33
	2	47	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
5	1	57	47	52	42	45	37	45	37	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	33
	2	47	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
10	1	57	47	52	42	45	37	45	37	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	33
	2	47	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
0	1	47	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
5	1	47	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
10	1	47	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
0	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								
5	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								
10	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	65	58	64	55	57	47	57	47	64	56	63	52	54	45	55	45	63	54	61	50	52	43	53	43
	2	58	48	54	44	47	38	47	39	56	46	52	42	45	36	45	37	54	45	49	40	43	35	43	35
	3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
20	1	63	56	62	55	57	47	57	47	62	55	60	52	54	45	55	45	60	53	59	50	52	43	53	43
	2	56	48	54	44	47	38	47	39	55	46	52	42	45	36	45	37	53	45	49	40	43	35	43	35
	3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
25	1	63	56	62	55	57	47	57	47	62	55	60	52	54	45	55	45	60	53	59	50	52	43	53	43
	2	56	48	54	44	47	38	47	39	55	46	52	42	45	36	45	37	53	45	49	40	43	35	43	35
	3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
15	1	61	52	59	48	50	41	51	42	60	50	57	46	48	40	49	40								
	2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
20	1	59	52	57	48	50	41	51	42	58	50	56	46	48	40	49	40								
	2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
25	1	59	52	57	48	50	41	51	42	58	50	56	46	48	40	49	40								
	2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
15	1	61	52	59	48	50	41	51	42	60	50	57	46	48	40	49	40								
	2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
20	1	59	52	57	48	50	41	51	42	58	50	56	46	48	40	49	40								
	2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
25	1	59	52	57	48	50	41	51	42	58	50	56	46	48	40	49	40								
	2	52	43	47	38	41	33	42	34	50	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
15	1	58	48	54	44	47	38	47	39	60	50	57	46	48	40	49	40								
	2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
20	1	56	48	54	44	47	38	47	39	58	50	56	46	48	40	49	40								
	2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
25	1	56	48	54	44	47	38	47	39	58	50	56	46	48	40	49	40								
	2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
15	1	58	48	54	44	47	38	47	39	60	50	57	46	48	40	49	40								
	2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
20	1	56	48	54	44	47	38	47	39	58	50	56	46	48	40	49	40								
	2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
25	1	56	48	54	44	47	38	47	39	58	50	56	46	48	40	49	40								
	2	48	40	44	35	38	31	39	32	50	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	57	47	52	42	45	37	45	37	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	33
	2	47	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
20	1	55	47	52	42	45	37	45	37	52	44	49	39	42	34	42	35	50	41	45	37	39	32	40	33
	2	47	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
25	1	55	47	52	42	45	37	45	37	52	44	49	39	42	34	42	35	50	41	45	37	39	32	40	33
	2	47	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
Wind Speed [mph]		170								180															
15	1	47	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
20	1	47	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
25	1	47	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
Wind Speed [mph]		190								200															
15	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								
20	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								
25	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	62	55	61	54	56	47	57	47	60	54	59	52	54	45	55	45	59	52	58	50	52	43	53	43	
	2	55	48	54	44	47	38	47	39	54	46	52	42	45	36	45	37	52	45	49	40	43	35	43	35	
	3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31	
	35	1	60	54	59	52	55	47	57	47	59	52	58	51	53	45	55	45	57	51	56	50	52	43	53	43
		2	54	47	52	44	47	38	47	39	52	46	51	42	45	36	45	37	51	45	49	40	43	35	43	35
		3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
	40	1	58	52	57	51	54	47	57	47	57	51	56	50	52	45	55	45	56	50	55	49	51	43	53	43
		2	52	46	51	44	47	38	47	39	51	45	50	42	45	36	45	37	50	44	49	40	43	35	43	35
		3	44	36	47	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
Wind Speed [mph]		110								115																
30	1	58	51	56	48	50	41	51	42	56	49	55	46	48	40	49	40									
	2	51	43	47	38	41	33	42	34	49	41	45	37	39	32	40	33									
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28									
	35	1	56	50	55	48	50	41	51	42	55	48	54	46	48	40	49	40								
		2	50	43	47	38	41	33	42	34	48	41	45	37	39	32	40	33								
		3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
	40	1	55	49	54	47	50	41	51	42	54	48	52	46	48	40	49	40								
		2	49	43	47	38	41	33	42	34	48	41	45	37	39	32	40	33								
		3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
Wind Speed [mph]		120								130																
30	1	55	48	54	44	47	38	47	39	56	49	55	46	48	40	49	40									
	2	48	40	44	35	38	31	39	32	49	41	45	37	39	32	40	33									
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28									
	35	1	54	47	52	44	47	38	47	39	55	48	54	46	48	40	49	40								
		2	47	40	44	35	38	31	39	32	48	41	45	37	39	32	40	33								
		3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
	40	1	52	46	51	44	47	38	47	39	54	48	52	46	48	40	49	40								
		2	46	40	44	35	38	31	39	32	48	41	45	37	39	32	40	33								
		3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	54	47	52	42	45	37	45	37	52	44	49	39	42	34	42	35	49	41	45	37	39	32	40	33
	2	47	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
35	1	53	46	51	42	45	37	45	37	50	44	49	39	42	34	42	35	48	41	45	37	39	32	40	33
	2	46	38	42	34	36	30	37	30	44	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
40	1	51	45	50	42	45	37	45	37	49	43	48	39	42	34	42	35	47	41	45	37	39	32	40	33
	2	45	38	42	34	36	30	37	30	43	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
Wind Speed [mph]		170								180															
30	1	47	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
35	1	46	39	43	35	37	30	37	31	45	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
40	1	46	39	43	35	37	30	37	31	44	37	40	33	35	28	35	29								
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24								
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20								
Wind Speed [mph]		190								200															
30	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								
35	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								
40	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26								
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	57	51	56	50	53	46	57	47	55	50	55	49	52	45	55	45	54	49	53	48	50	43	53	43
	2	51	46	50	44	46	38	47	39	50	44	49	42	45	36	45	37	49	43	48	40	43	35	43	35
	3	44	36	46	38	41	33	41	33	42	34	45	36	39	31	39	32	41	33	43	35	37	30	38	31
50	1	55	50	54	49	52	46	57	47	54	49	53	48	51	44	55	45	53	48	52	47	49	43	53	43
	2	50	45	49	44	46	38	47	39	49	44	48	42	44	36	45	37	48	42	47	40	43	35	43	35
	3	44	36	45	38	41	33	41	33	42	34	44	36	39	31	39	32	41	33	43	35	37	30	38	31
60	1	52	48	52	47	50	44	57	47	51	47	51	46	49	43	55	45	51	46	50	45	48	42	53	43
	2	48	43	47	42	44	38	47	39	47	42	46	41	43	36	45	37	46	41	45	40	42	35	43	35
	3	44	36	44	38	40	33	41	33	42	34	43	36	39	31	39	32	41	33	42	35	37	30	38	31
45	1	53	48	52	46	49	41	51	42	52	47	51	45	47	40	49	40								
	2	48	42	46	38	41	33	42	34	47	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
50	1	52	47	51	46	48	41	51	42	51	46	50	45	47	40	49	40								
	2	47	41	46	38	41	33	42	34	46	40	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
60	1	50	45	49	44	47	41	51	42	49	44	48	43	45	40	49	40								
	2	45	40	44	38	41	33	42	34	44	39	43	37	39	32	40	33								
	3	39	32	40	33	35	29	36	29	37	30	39	32	34	28	35	28								
45	1	53	48	52	46	49	41	51	42	52	47	51	45	47	40	49	40								
	2	48	42	46	38	41	33	42	34	47	41	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
50	1	52	47	51	46	48	41	51	42	51	46	50	45	47	40	49	40								
	2	47	41	46	38	41	33	42	34	46	40	45	37	39	32	40	33								
	3	39	32	41	33	35	29	36	29	37	30	39	32	34	28	35	28								
60	1	50	45	49	44	47	41	51	42	49	44	48	43	45	40	49	40								
	2	45	40	44	38	41	33	42	34	44	39	43	37	39	32	40	33								
	3	39	32	40	33	35	29	36	29	37	30	39	32	34	28	35	28								
45	1	51	46	50	44	46	38	47	39	52	47	51	45	47	40	49	40								
	2	46	40	44	35	38	31	39	32	47	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
50	1	50	45	49	44	46	38	47	39	51	46	50	45	47	40	49	40								
	2	45	39	44	35	38	31	39	32	46	40	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
60	1	48	43	47	42	44	38	47	39	49	44	48	43	45	40	49	40								
	2	43	38	42	35	38	31	39	32	44	39	43	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
45	1	51	46	50	44	46	38	47	39	52	47	51	45	47	40	49	40								
	2	46	40	44	35	38	31	39	32	47	41	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
50	1	50	45	49	44	46	38	47	39	51	46	50	45	47	40	49	40								
	2	45	39	44	35	38	31	39	32	46	40	45	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								
60	1	48	43	47	42	44	38	47	39	49	44	48	43	45	40	49	40								
	2	43	38	42	35	38	31	39	32	44	39	43	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	39	32	34	28	35	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	50	44	49	42	45	37	45	37	48	42	47	39	42	34	42	35	46	41	45	37	39	32	40	33	
	2	44	38	42	34	36	30	37	30	42	36	39	32	34	27	35	28	41	34	36	30	32	26	33	27	
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23	
	50	1	49	44	48	42	44	37	45	37	47	42	46	39	42	34	42	35	46	40	44	37	39	32	40	33
		2	44	38	42	34	36	30	37	30	42	36	39	32	34	27	35	28	40	34	36	30	32	26	33	27
		3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
	60	1	47	42	46	41	43	37	45	37	46	41	45	39	41	34	42	35	44	39	43	37	39	32	40	33
		2	42	37	41	34	36	30	37	30	41	35	39	32	34	27	35	28	39	34	36	30	32	26	33	27
		3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
Wind Speed [mph]		170								180																
45	1	45	39	43	35	37	30	37	31	43	37	40	33	35	28	35	29									
	2	39	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24									
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20									
50	1	44	38	43	35	37	30	37	31	42	37	40	33	35	28	35	29									
	2	38	32	34	28	30	24	31	25	37	30	32	26	28	23	29	24									
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20									
60	1	43	37	41	35	37	30	37	31	41	36	40	33	35	28	35	29									
	2	37	32	34	28	30	24	31	25	36	30	32	26	28	23	29	24									
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20									
Wind Speed [mph]		190								200																
45	1	42	35	38	31	33	27	34	27	40	33	36	29	31	25	32	26									
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18									
50	1	41	35	38	31	33	27	34	27	39	33	36	29	31	25	32	26									
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18									
60	1	40	35	38	31	33	27	34	27	38	33	36	29	31	25	32	26									
	2	35	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	50	46	50	46	49	43	57	47	49	45	49	45	48	42	55	45	48	44	48	44	46	41	53	43
	2	46	42	46	41	43	38	47	39	45	41	45	40	42	36	45	37	44	40	44	39	41	35	43	35
	3	43	36	42	38	39	33	41	33	42	34	41	36	38	31	39	32	41	33	40	35	37	30	38	31
80	1	48	45	48	44	47	42	56	47	47	44	47	43	46	41	54	45	47	43	46	42	45	40	52	43
	2	45	41	44	40	42	37	47	39	44	40	43	39	41	36	45	37	43	39	42	38	40	35	43	35
	3	42	36	41	37	39	33	41	33	41	34	40	36	38	31	39	32	40	33	39	35	36	30	38	31
90	1	46	43	46	43	46	41	55	47	46	42	45	42	45	40	53	45	45	42	45	41	44	39	52	43
	2	43	40	43	39	41	36	47	39	42	39	42	38	40	35	45	37	42	38	41	37	39	34	43	35
	3	41	36	40	36	38	33	41	33	40	34	39	35	37	31	39	32	39	33	38	34	36	30	38	31
70	1	48	44	47	43	45	40	51	42	47	43	46	42	44	39	49	40								
	2	44	39	43	38	40	33	42	34	43	38	42	37	39	32	40	33								
	3	39	32	39	33	35	29	36	29	37	30	38	32	34	28	35	28								
80	1	46	42	46	42	44	39	51	42	45	41	45	41	43	38	49	40								
	2	42	38	42	37	39	33	42	34	41	37	41	36	38	32	40	33								
	3	39	32	38	33	35	29	36	29	37	30	38	32	34	28	35	28								
90	1	44	41	44	40	43	38	50	42	44	40	43	40	42	37	49	40								
	2	41	37	40	36	38	33	42	34	40	36	40	35	37	32	40	33								
	3	38	32	38	33	35	29	36	29	37	30	37	32	34	28	35	28								
70	1	48	44	47	43	45	40	51	42	47	43	46	42	44	39	49	40								
	2	44	39	43	38	40	33	42	34	43	38	42	37	39	32	40	33								
	3	39	32	39	33	35	29	36	29	37	30	38	32	34	28	35	28								
80	1	46	42	46	42	44	39	51	42	45	41	45	41	43	38	49	40								
	2	42	38	42	37	39	33	42	34	41	37	41	36	38	32	40	33								
	3	39	32	38	33	35	29	36	29	37	30	38	32	34	28	35	28								
90	1	44	41	44	40	43	38	50	42	44	40	43	40	42	37	49	40								
	2	41	37	40	36	38	33	42	34	40	36	40	35	37	32	40	33								
	3	38	32	38	33	35	29	36	29	37	30	37	32	34	28	35	28								
70	1	46	42	46	41	43	38	47	39	47	43	46	42	44	39	49	40								
	2	42	37	41	35	38	31	39	32	43	38	42	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	38	32	34	28	35	28								
80	1	45	41	44	40	42	37	47	39	45	41	45	41	43	38	49	40								
	2	41	36	40	35	37	31	39	32	41	37	41	36	38	32	40	33								
	3	36	29	37	31	33	27	33	27	37	30	38	32	34	28	35	28								
90	1	43	40	43	39	41	36	47	39	44	40	43	40	42	37	49	40								
	2	40	36	39	35	36	31	39	32	40	36	40	35	37	32	40	33								
	3	36	29	36	31	33	27	33	27	37	30	37	32	34	28	35	28								
70	1	46	42	46	41	43	38	47	39	47	43	46	42	44	39	49	40								
	2	42	37	41	35	38	31	39	32	43	38	42	37	39	32	40	33								
	3	36	29	38	31	33	27	33	27	37	30	38	32	34	28	35	28								
80	1	45	41	44	40	42	37	47	39	45	41	45	41	43	38	49	40								
	2	41	36	40	35	37	31	39	32	41	37	41	36	38	32	40	33								
	3	36	29	37	31	33	27	33	27	37	30	38	32	34	28	35	28								
90	1	43	40	43	39	41	36	47	39	44	40	43	40	42	37	49	40								
	2	40	36	39	35	36	31	39	32	40	36	40	35	37	32	40	33								
	3	36	29	36	31	33	27	33	27	37	30	37	32	34	28	35	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	45	41	45	40	42	37	45	37	44	39	43	38	40	34	42	35	43	38	42	37	39	32	40	33	
	2	41	36	40	34	36	30	37	30	39	35	38	32	34	27	35	28	38	33	36	30	32	26	33	27	
	3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23	
	80	1	44	40	43	39	41	36	45	37	43	38	42	38	40	34	42	35	41	37	41	36	38	32	40	33
		2	40	36	39	34	36	30	37	30	38	34	38	32	34	27	35	28	37	33	36	30	32	26	33	27
		3	35	28	36	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
	90	1	43	39	42	38	40	36	45	37	41	38	41	37	39	34	42	35	40	36	40	35	37	32	40	33
		2	39	35	38	34	36	30	37	30	38	33	37	32	34	27	35	28	36	32	35	30	32	26	33	27
		3	35	28	35	30	32	26	32	26	32	26	34	28	29	24	30	25	30	24	32	26	28	22	28	23
Wind Speed [mph]		170								180																
70	1	41	37	40	35	37	30	37	31	40	35	39	33	35	28	35	29	35	30	32	26	28	23	29	24	
	2	37	32	34	28	30	24	31	25	35	30	32	26	28	23	29	24	35	30	32	26	28	23	29	24	
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
80	1	40	36	39	35	36	30	37	31	39	34	38	33	35	28	35	29	39	34	38	33	35	28	35	29	
	2	36	31	34	28	30	24	31	25	34	30	32	26	28	23	29	24	34	30	32	26	28	23	29	24	
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
90	1	39	35	38	34	36	30	37	31	38	34	37	33	34	28	35	29	38	34	37	33	34	28	35	29	
	2	35	31	34	28	30	24	31	25	34	29	32	26	28	23	29	24	34	29	32	26	28	23	29	24	
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
Wind Speed [mph]		190								200																
70	1	39	34	38	31	33	27	34	27	37	33	36	29	31	25	32	26	37	33	36	29	31	25	32	26	
	2	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21	33	27	29	24	25	20	26	21	
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18	24	19	25	20	22	18	23	18	
80	1	38	33	37	31	33	27	34	27	37	32	36	29	31	25	32	26	37	32	36	29	31	25	32	26	
	2	33	28	31	25	27	22	27	22	32	27	29	24	25	20	26	21	32	27	29	24	25	20	26	21	
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18	24	19	25	20	22	18	23	18	
90	1	37	33	36	31	33	27	34	27	36	32	35	29	31	25	32	26	36	32	35	29	31	25	32	26	
	2	33	28	31	25	27	22	27	22	32	27	29	24	25	20	26	21	32	27	29	24	25	20	26	21	
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18	24	19	25	20	22	18	23	18	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		70in x 41in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	45	42	45	42	45	40	54	47	44	41	44	41	44	39	52	45	43	40	43	40	43	38	51	43
	2	42	39	42	38	40	36	47	39	41	38	41	37	39	35	45	37	40	37	40	36	38	34	43	35
	3	40	36	39	35	37	33	41	33	39	34	38	34	36	31	39	32	38	33	37	33	35	30	38	31
Wind Speed [mph]		110								115															
100	1	43	40	43	39	42	38	50	42	42	39	42	39	41	37	48	40								
	2	40	36	39	36	38	33	42	34	39	35	39	35	37	32	40	33								
	3	37	32	37	33	34	29	36	29	37	30	36	32	33	28	35	28								
Wind Speed [mph]		120								130															
100	1	42	39	42	38	40	36	47	39	42	39	42	39	41	37	48	40								
	2	39	35	38	34	36	31	39	32	39	35	39	35	37	32	40	33								
	3	36	29	35	31	33	27	33	27	37	30	36	32	33	28	35	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$

64" to 71"

48" to 63"

$x \leq 47''$

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	41	38	41	37	40	35	45	37	40	37	40	36	38	33	42	35	39	35	39	35	37	32	40	33
	2	38	34	37	33	35	30	37	30	37	33	36	32	33	27	35	28	35	31	35	30	32	26	33	27
	3	35	28	34	30	32	26	32	26	32	26	33	28	29	24	30	25	30	24	32	26	28	22	28	23
Wind Speed [mph]		170								180															
100	1	38	34	37	33	35	30	37	31	37	33	36	32	34	28	35	29	37	33	36	32	34	28	35	29
	2	34	30	33	28	30	24	31	25	33	29	32	26	28	23	29	24	33	29	32	26	28	23	29	24
	3	28	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20
Wind Speed [mph]		190								200															
100	1	36	32	35	31	33	27	34	27	35	31	34	29	31	25	32	26	35	31	34	29	31	25	32	26
	2	32	28	31	25	27	22	27	22	31	27	29	24	25	20	26	21	31	27	29	24	25	20	26	21
	3	25	20	27	22	23	19	24	19	24	19	25	20	22	18	23	18	24	19	25	20	22	18	23	18

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	65	55	62	51	53	44	53	44	63	53	60	48	51	42	51	42	61	51	57	46	49	40	49	40	
	2	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34	51	42	46	37	40	32	40	33	
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29	
	5	1	65	55	62	51	53	44	53	44	63	53	60	48	51	42	51	42	61	51	57	46	49	40	49	40
		2	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34	51	42	46	37	40	32	40	33
		3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
	10	1	65	55	62	51	53	44	53	44	63	53	60	48	51	42	51	42	61	51	57	46	49	40	49	40
		2	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34	51	42	46	37	40	32	40	33
		3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
0	1	59	49	55	44	47	38	47	39	57	47	53	43	45	37	46	37									
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31									
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26									
	5	1	59	49	55	44	47	38	47	39	57	47	53	43	45	37	46	37								
		2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
		3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
	10	1	59	49	55	44	47	38	47	39	57	47	53	43	45	37	46	37								
		2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
		3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
0	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37									
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31									
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26									
	5	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37								
		2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
		3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
	10	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37								
		2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
		3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
0	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37									
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31									
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26									
	5	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37								
		2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
		3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
	10	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37								
		2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
		3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
5	1	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
10	1	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
Wind Speed [mph]		170								180															
0	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
5	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
10	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
Wind Speed [mph]		190								200															
0	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
5	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
10	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	63	55	62	51	53	44	53	44	62	53	60	48	51	42	51	42	60	51	57	46	49	40	49	40
	2	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34	51	42	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
20	1	61	54	59	51	53	44	53	44	59	52	58	48	51	42	51	42	58	51	56	46	49	40	49	40
	2	54	45	50	41	43	35	44	36	52	43	48	39	42	34	42	34	51	42	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
25	1	61	54	59	51	53	44	53	44	59	52	58	48	51	42	51	42	58	51	56	46	49	40	49	40
	2	54	45	50	41	43	35	44	36	52	43	48	39	42	34	42	34	51	42	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
15	1	59	49	55	44	47	38	47	39	57	47	53	43	45	37	46	37								
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
20	1	56	49	55	44	47	38	47	39	55	47	53	43	45	37	46	37								
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
25	1	56	49	55	44	47	38	47	39	55	47	53	43	45	37	46	37								
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
15	1	59	49	55	44	47	38	47	39	57	47	53	43	45	37	46	37								
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
20	1	56	49	55	44	47	38	47	39	55	47	53	43	45	37	46	37								
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
25	1	56	49	55	44	47	38	47	39	55	47	53	43	45	37	46	37								
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
15	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37								
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
20	1	54	45	51	41	44	35	44	36	55	47	53	43	45	37	46	37								
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
25	1	54	45	51	41	44	35	44	36	55	47	53	43	45	37	46	37								
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
15	1	55	45	51	41	44	35	44	36	57	47	53	43	45	37	46	37								
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
20	1	54	45	51	41	44	35	44	36	55	47	53	43	45	37	46	37								
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
25	1	54	45	51	41	44	35	44	36	55	47	53	43	45	37	46	37								
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	53	44	49	39	42	34	42	35	50	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
20	1	52	44	49	39	42	34	42	35	50	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
25	1	52	44	49	39	42	34	42	35	50	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
15	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
20	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
15	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
20	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
25	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	61	54	59	51	53	44	53	44	59	52	58	48	51	42	51	42	58	51	56	46	49	40	49	40	
	2	54	45	50	41	43	35	44	36	52	43	48	39	42	34	42	34	51	42	46	37	40	32	40	33	
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29	
	35	1	59	53	58	51	53	44	53	44	58	51	56	48	51	42	51	42	56	50	55	46	49	40	49	40
		2	53	45	50	41	43	35	44	36	51	43	48	39	42	34	42	34	50	42	46	37	40	32	40	33
		3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
	40	1	58	51	57	50	52	44	53	44	56	50	55	48	51	42	51	42	55	49	54	46	49	40	49	40
		2	51	45	50	41	43	35	44	36	50	43	48	39	42	34	42	34	49	42	46	37	40	32	40	33
		3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
Wind Speed [mph]		110								115																
30	1	56	49	55	44	47	38	47	39	55	47	53	43	45	37	46	37									
	2	49	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31									
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26									
	35	1	55	48	54	44	47	38	47	39	54	47	52	43	45	37	46	37								
		2	48	40	44	36	38	31	39	32	47	39	42	34	37	30	37	31								
		3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
	40	1	54	47	52	44	47	38	47	39	53	46	51	43	45	37	46	37								
		2	47	40	44	36	38	31	39	32	46	39	42	34	37	30	37	31								
		3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
Wind Speed [mph]		120								130																
30	1	54	45	51	41	44	35	44	36	55	47	53	43	45	37	46	37									
	2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31									
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26									
	35	1	52	45	51	41	44	35	44	36	54	47	52	43	45	37	46	37								
		2	45	37	40	33	35	29	36	29	47	39	42	34	37	30	37	31								
		3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
	40	1	51	45	50	41	44	35	44	36	53	46	51	43	45	37	46	37								
		2	45	37	40	33	35	29	36	29	46	39	42	34	37	30	37	31								
		3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	52	44	49	39	42	34	42	35	50	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
35	1	51	44	49	39	42	34	42	35	49	41	45	37	39	32	40	32	47	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
40	1	50	44	49	39	42	34	42	35	48	41	45	37	39	32	40	32	46	38	42	34	37	30	37	30
	2	44	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
Wind Speed [mph]		170								180															
30	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
35	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
40	1	44	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
Wind Speed [mph]		190								200															
30	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
35	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
40	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	56	50	55	49	52	44	53	44	55	49	54	48	50	42	51	42	54	48	53	46	49	40	49	40
	2	50	44	49	41	43	35	44	36	49	43	48	39	42	34	42	34	48	42	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
50	1	55	49	54	48	51	44	53	44	54	48	53	47	49	42	51	42	53	47	52	46	48	40	49	40
	2	49	44	48	41	43	35	44	36	48	42	47	39	42	34	42	34	47	41	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
60	1	53	48	52	47	49	43	53	44	52	47	51	46	48	42	51	42	51	45	50	44	47	40	49	40
	2	48	42	47	41	43	35	44	36	47	41	46	39	42	34	42	34	45	40	44	37	40	32	40	33
	3	41	33	43	35	38	31	38	31	39	32	42	34	36	29	37	30	38	31	40	32	34	28	35	29
Wind Speed [mph]		110								115															
45	1	53	47	51	44	47	38	47	39	52	45	50	43	45	37	46	37								
	2	47	40	44	36	38	31	39	32	45	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
50	1	52	46	50	44	47	38	47	39	50	45	49	43	45	37	46	37								
	2	46	40	44	36	38	31	39	32	45	39	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
60	1	50	44	49	43	45	38	47	39	49	43	48	42	44	37	46	37								
	2	44	39	43	36	38	31	39	32	43	38	42	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
Wind Speed [mph]		120								130															
45	1	50	44	49	41	44	35	44	36	52	45	50	43	45	37	46	37								
	2	44	37	40	33	35	29	36	29	45	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
50	1	49	44	48	41	44	35	44	36	50	45	49	43	45	37	46	37								
	2	44	37	40	33	35	29	36	29	45	39	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
60	1	48	42	47	41	43	35	44	36	49	43	48	42	44	37	46	37								
	2	42	37	40	33	35	29	36	29	43	38	42	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	49	43	48	39	42	34	42	35	47	41	45	37	39	32	40	32	45	38	42	34	37	30	37	30
	2	43	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
50	1	48	43	47	39	42	34	42	35	46	41	45	37	39	32	40	32	45	38	42	34	37	30	37	30
	2	43	36	39	32	34	27	35	28	41	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
60	1	47	41	46	39	42	34	42	35	45	40	44	37	39	32	40	32	43	38	42	34	37	30	37	30
	2	41	36	39	32	34	27	35	28	40	34	36	29	32	26	32	26	38	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
Wind Speed [mph]		170								180															
45	1	43	36	40	32	34	28	35	29	42	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
50	1	43	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
60	1	42	36	40	32	34	28	35	29	40	34	37	30	32	26	33	27								
	2	36	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
Wind Speed [mph]		190								200															
45	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
50	1	40	32	35	29	31	25	31	26	38	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								
60	1	39	32	35	29	31	25	31	26	37	31	34	27	29	24	30	24								
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	50	46	50	45	48	42	53	44	50	45	49	44	47	41	51	42	49	44	48	43	46	40	49	40
	2	46	41	45	40	42	35	44	36	45	40	44	39	41	34	42	34	44	39	43	37	40	32	40	33
	3	41	33	42	35	38	31	38	31	39	32	41	34	36	29	37	30	38	31	39	32	34	28	35	29
80	1	49	45	48	44	47	41	53	44	48	44	47	43	46	40	51	42	47	43	46	42	44	39	49	40
	2	45	40	44	39	41	35	44	36	44	39	43	38	40	34	42	34	43	38	42	37	39	32	40	33
	3	41	33	41	35	38	31	38	31	39	32	40	34	36	29	37	30	38	31	39	32	34	28	35	29
90	1	47	43	47	43	46	41	53	44	46	43	46	42	44	39	51	42	45	42	45	41	43	38	49	40
	2	43	39	43	38	41	35	44	36	43	38	42	37	39	34	42	34	42	37	41	36	38	32	40	33
	3	41	33	40	35	37	31	38	31	39	32	39	34	36	29	37	30	38	31	38	32	34	28	35	29
70	1	48	43	47	42	44	38	47	39	47	42	46	41	43	37	46	37								
	2	43	38	42	36	38	31	39	32	42	37	41	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
80	1	46	42	46	41	43	38	47	39	45	41	45	40	42	37	46	37								
	2	42	37	41	36	38	31	39	32	41	36	40	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
90	1	45	41	44	40	42	37	47	39	44	40	44	39	41	36	46	37								
	2	41	36	40	36	37	31	39	32	40	36	39	34	36	30	37	31								
	3	36	29	37	31	33	27	34	27	35	28	36	30	32	26	32	26								
70	1	48	43	47	42	44	38	47	39	47	42	46	41	43	37	46	37								
	2	43	38	42	36	38	31	39	32	42	37	41	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
80	1	46	42	46	41	43	38	47	39	45	41	45	40	42	37	46	37								
	2	42	37	41	36	38	31	39	32	41	36	40	34	37	30	37	31								
	3	36	29	38	31	33	27	34	27	35	28	37	30	32	26	32	26								
90	1	45	41	44	40	42	37	47	39	44	40	44	39	41	36	46	37								
	2	41	36	40	36	37	31	39	32	40	36	39	34	36	30	37	31								
	3	36	29	37	31	33	27	34	27	35	28	36	30	32	26	32	26								
70	1	46	41	45	40	42	35	44	36	47	42	46	41	43	37	46	37								
	2	41	36	40	33	35	29	36	29	42	37	41	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
80	1	45	40	44	39	41	35	44	36	45	41	45	40	42	37	46	37								
	2	40	35	39	33	35	29	36	29	41	36	40	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
90	1	43	39	43	38	41	35	44	36	44	40	44	39	41	36	46	37								
	2	39	35	38	33	35	29	36	29	40	36	39	34	36	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	36	30	32	26	32	26								
70	1	46	41	45	40	42	35	44	36	47	42	46	41	43	37	46	37								
	2	41	36	40	33	35	29	36	29	42	37	41	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
80	1	45	40	44	39	41	35	44	36	45	41	45	40	42	37	46	37								
	2	40	35	39	33	35	29	36	29	41	36	40	34	37	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	37	30	32	26	32	26								
90	1	43	39	43	38	41	35	44	36	44	40	44	39	41	36	46	37								
	2	39	35	38	33	35	29	36	29	40	36	39	34	36	30	37	31								
	3	33	27	35	29	31	25	31	25	35	28	36	30	32	26	32	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	45	40	44	39	41	34	42	35	44	39	43	37	39	32	40	32	42	37	41	34	37	30	37	30	
	2	40	35	39	32	34	27	35	28	39	34	36	29	32	26	32	26	37	31	34	28	30	24	30	25	
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21	
	80	1	44	39	43	38	40	34	42	35	42	38	42	37	38	32	40	32	41	36	40	34	37	30	37	30
		2	39	35	38	32	34	27	35	28	38	33	36	29	32	26	32	26	36	31	34	28	30	24	30	25
		3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
	90	1	43	38	42	38	40	34	42	35	41	37	41	36	38	32	40	32	40	36	39	34	36	30	37	30
		2	38	34	38	32	34	27	35	28	37	32	36	29	32	26	32	26	36	31	34	28	30	24	30	25
		3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
Wind Speed [mph]		170								180																
70	1	41	35	39	32	34	28	35	29	39	34	37	30	32	26	33	27	34	28	30	24	26	21	27	22	
	2	35	30	32	26	28	22	29	23	34	28	30	24	26	21	27	22	25	20	26	21	23	18	23	19	
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19	25	20	26	21	23	18	23	19	
80	1	40	35	39	32	34	28	35	29	38	33	37	30	32	26	33	27	33	28	30	24	26	21	27	22	
	2	35	30	32	26	28	22	29	23	33	28	30	24	26	21	27	22	33	28	30	24	26	21	27	22	
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19	25	20	26	21	23	18	23	19	
90	1	39	34	38	32	34	28	35	29	37	33	36	30	32	26	33	27	37	33	36	30	32	26	33	27	
	2	34	30	32	26	28	22	29	23	33	28	30	24	26	21	27	22	33	28	30	24	26	21	27	22	
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19	25	20	26	21	23	18	23	19	
Wind Speed [mph]		190								200																
70	1	38	32	35	29	31	25	31	26	36	31	34	27	29	24	30	24	31	25	27	22	23	19	24	20	
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20	22	18	23	19	20	17	21	17	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17	22	18	23	19	20	17	21	17	
80	1	37	32	35	29	31	25	31	26	36	31	34	27	29	24	30	24	31	25	27	22	23	19	24	20	
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20	31	25	27	22	23	19	24	20	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17	22	18	23	19	20	17	21	17	
90	1	36	32	35	29	31	25	31	26	35	31	34	27	29	24	30	24	31	25	27	22	23	19	24	20	
	2	32	27	28	23	25	20	26	21	31	25	27	22	23	19	24	20	31	25	27	22	23	19	24	20	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17	22	18	23	19	20	17	21	17	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	45	42	45	42	44	40	52	44	45	41	45	41	43	39	51	42	44	41	44	40	43	38	49	40
	2	42	38	42	38	40	35	44	36	41	37	41	37	39	34	42	34	41	37	40	36	38	32	40	33
	3	40	33	39	35	36	31	38	31	39	32	38	34	35	29	37	30	38	31	37	32	34	28	35	29
100	1	43	40	43	39	42	37	47	39	43	39	42	38	41	36	46	37								
	2	40	36	39	35	37	31	39	32	39	35	38	34	36	30	37	31								
	3	36	29	36	31	33	27	34	27	35	28	35	30	32	26	32	26								
0	1																								
	2																								
	3																								
100	1	42	38	42	38	40	35	44	36	43	39	42	38	41	36	46	37								
	2	38	34	38	33	35	29	36	29	39	35	38	34	36	30	37	31								
	3	33	27	34	29	31	25	31	25	35	28	35	30	32	26	32	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	41	38	41	37	39	34	42	35	40	36	40	35	37	32	40	32	39	35	38	34	36	30	37	30
	2	38	33	37	32	34	27	35	28	36	32	35	29	32	26	32	26	35	31	34	28	30	24	30	25
	3	32	26	34	27	29	24	30	25	30	24	32	26	27	22	28	23	28	23	30	24	26	21	26	21
Wind Speed [mph]		170								180															
100	1	38	34	37	32	34	28	35	29	37	32	36	30	32	26	33	27								
	2	34	29	32	26	28	22	29	23	32	28	30	24	26	21	27	22								
	3	26	21	28	23	24	20	25	20	25	20	26	21	23	18	23	19								
Wind Speed [mph]		190								200															
100	1	35	31	35	29	31	25	31	26	34	30	33	27	29	24	30	24								
	2	31	27	28	23	25	20	26	21	30	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	17	21	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	76	68	74	66	67	57	67	58	74	66	72	64	65	55	65	55	72	64	70	62	63	53	64	53
	2	68	59	66	55	57	47	58	48	66	57	64	52	55	45	55	46	64	55	62	50	53	43	53	44
	3	56	45	59	48	50	41	50	41	53	43	56	45	48	39	48	40	51	41	54	43	46	38	46	38
5	1	76	68	74	66	67	57	67	58	74	66	72	64	65	55	65	55	72	64	70	62	63	53	64	53
	2	68	59	66	55	57	47	58	48	66	57	64	52	55	45	55	46	64	55	62	50	53	43	53	44
	3	56	45	59	48	50	41	50	41	53	43	56	45	48	39	48	40	51	41	54	43	46	38	46	38
10	1	73	67	72	66	67	57	67	58	72	66	70	64	65	55	65	55	70	64	69	62	63	53	64	53
	2	67	59	66	55	57	47	58	48	66	57	64	52	55	45	55	46	64	55	62	50	53	43	53	44
	3	56	45	59	48	50	41	50	41	53	43	56	45	48	39	48	40	51	41	54	43	46	38	46	38
0	1	71	63	68	60	61	51	62	51	69	61	67	58	59	49	60	49								
	2	63	53	59	48	51	42	51	42	61	51	57	46	49	40	49	40								
	3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35								
5	1	71	63	68	60	61	51	62	51	69	61	67	58	59	49	60	49								
	2	63	53	59	48	51	42	51	42	61	51	57	46	49	40	49	40								
	3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35								
10	1	69	63	68	60	61	51	62	51	68	61	67	58	59	49	60	49								
	2	63	53	59	48	51	42	51	42	61	51	57	46	49	40	49	40								
	3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35								
0	1	68	59	65	55	57	47	58	48	69	61	67	58	59	49	60	49								
	2	59	49	55	44	47	38	48	39	61	51	57	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
5	1	68	59	65	55	57	47	58	48	69	61	67	58	59	49	60	49								
	2	59	49	55	44	47	38	48	39	61	51	57	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
10	1	67	59	65	55	57	47	58	48	68	61	67	58	59	49	60	49								
	2	59	49	55	44	47	38	48	39	61	51	57	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
0	1	68	59	65	55	57	47	58	48	69	61	67	58	59	49	60	49								
	2	59	49	55	44	47	38	48	39	61	51	57	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
5	1	68	59	65	55	57	47	58	48	69	61	67	58	59	49	60	49								
	2	59	49	55	44	47	38	48	39	61	51	57	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
10	1	67	59	65	55	57	47	58	48	68	61	67	58	59	49	60	49								
	2	59	49	55	44	47	38	48	39	61	51	57	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	66	57	64	53	55	46	56	46	64	54	61	49	52	43	52	43	61	50	57	46	49	40	49	40
	2	57	47	53	43	46	37	46	38	54	44	49	40	42	34	43	35	50	42	46	37	40	32	40	33
	3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
5	1	66	57	64	53	55	46	56	46	64	54	61	49	52	43	52	43	61	50	57	46	49	40	49	40
	2	57	47	53	43	46	37	46	38	54	44	49	40	42	34	43	35	50	42	46	37	40	32	40	33
	3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
10	1	66	57	64	53	55	46	56	46	64	54	61	49	52	43	52	43	61	50	57	46	49	40	49	40
	2	57	47	53	43	46	37	46	38	54	44	49	40	42	34	43	35	50	42	46	37	40	32	40	33
	3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
0	1	58	48	54	43	46	37	46	38	55	45	50	41	44	35	44	36								
	2	48	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29								
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
5	1	58	48	54	43	46	37	46	38	55	45	50	41	44	35	44	36								
	2	48	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29								
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
10	1	58	48	54	43	46	37	46	38	55	45	50	41	44	35	44	36								
	2	48	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29								
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
0	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
5	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
10	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
0	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
5	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
10	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
Exposure Category : B	15	1	69	65	69	64	67	57	67	58	68	64	68	62	65	55	65	55	67	63	67	61	63	53	64	53
		2	65	58	64	55	57	47	58	48	64	57	62	52	55	45	55	46	63	55	61	50	53	43	53	44
		3	56	45	59	48	50	41	50	41	53	43	56	45	48	39	48	40	51	41	54	43	46	38	46	38
	20	1	67	63	66	62	66	57	67	58	66	62	65	60	64	55	65	55	65	60	64	59	63	53	64	53
		2	63	56	62	55	57	47	58	48	62	55	60	52	55	45	55	46	60	53	59	50	53	43	53	44
		3	56	45	57	48	50	41	50	41	53	43	55	45	48	39	48	40	51	41	54	43	46	38	46	38
	25	1	67	63	66	62	64	57	67	58	66	62	65	60	63	55	65	55	65	60	64	59	62	53	64	53
		2	63	56	62	55	57	47	58	48	62	55	60	52	55	45	55	46	60	53	59	50	53	43	53	44
		3	56	45	57	48	50	41	50	41	53	43	55	45	48	39	48	40	51	41	54	43	46	38	46	38
Exposure Category : B	15	1	67	61	66	59	61	51	62	51	66	60	65	58	59	49	60	49	66	60	65	58	59	49	60	49
		2	61	53	59	48	51	42	51	42	60	51	57	46	49	40	49	40	60	51	57	46	49	40	49	40
		3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35	47	38	49	40	43	35	43	35
	20	1	64	59	63	57	61	51	62	51	63	57	63	56	59	49	60	49	63	57	63	56	59	49	60	49
		2	59	52	57	48	51	42	51	42	57	50	56	46	49	40	49	40	57	50	56	46	49	40	49	40
		3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35	47	38	49	40	43	35	43	35
	25	1	64	59	63	57	60	51	62	51	63	57	63	56	59	49	60	49	63	57	63	56	59	49	60	49
		2	59	52	57	48	51	42	51	42	57	50	56	46	49	40	49	40	57	50	56	46	49	40	49	40
		3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35	47	38	49	40	43	35	43	35
Exposure Category : B	15	1	65	58	64	55	57	47	58	48	66	60	65	58	59	49	60	49	66	60	65	58	59	49	60	49
		2	58	49	55	44	47	38	48	39	60	51	57	46	49	40	49	40	60	51	57	46	49	40	49	40
		3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35	47	38	49	40	43	35	43	35
	20	1	63	56	62	54	57	47	58	48	63	57	63	56	59	49	60	49	63	57	63	56	59	49	60	49
		2	56	49	54	44	47	38	48	39	57	50	56	46	49	40	49	40	57	50	56	46	49	40	49	40
		3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35	47	38	49	40	43	35	43	35
	25	1	63	56	62	54	57	47	58	48	63	57	63	56	59	49	60	49	63	57	63	56	59	49	60	49
		2	56	49	54	44	47	38	48	39	57	50	56	46	49	40	49	40	57	50	56	46	49	40	49	40
		3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35	47	38	49	40	43	35	43	35

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	64	57	63	53	55	46	56	46	62	54	60	49	52	43	52	43	60	50	57	46	49	40	49	40
	2	57	47	53	43	46	37	46	38	54	44	49	40	42	34	43	35	50	42	46	37	40	32	40	33
	3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
20	1	62	55	60	53	55	46	56	46	59	52	58	49	52	43	52	43	57	50	56	46	49	40	49	40
	2	55	47	53	43	46	37	46	38	52	44	49	40	42	34	43	35	50	42	46	37	40	32	40	33
	3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
25	1	62	55	60	53	55	46	56	46	59	52	58	49	52	43	52	43	57	50	56	46	49	40	49	40
	2	55	47	53	43	46	37	46	38	52	44	49	40	42	34	43	35	50	42	46	37	40	32	40	33
	3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
15	1	57	48	54	43	46	37	46	38	55	45	50	41	44	35	44	36								
	2	48	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29								
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
20	1	55	48	53	43	46	37	46	38	53	45	50	41	44	35	44	36								
	2	48	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29								
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
25	1	55	48	53	43	46	37	46	38	53	45	50	41	44	35	44	36								
	2	48	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29								
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
15	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
20	1	51	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
25	1	51	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
15	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
20	1	51	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
25	1	51	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32								
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	65	61	65	60	63	56	67	58	65	60	64	59	62	54	65	55	64	59	63	57	60	53	64	53
	2	61	55	60	54	56	47	58	48	60	54	59	52	54	45	55	46	59	52	57	50	53	43	53	44
	3	56	45	56	48	50	41	50	41	53	43	54	45	48	39	48	40	51	41	53	43	46	38	46	38
35	1	64	59	63	58	62	55	67	58	63	58	63	57	60	53	65	55	62	57	62	56	59	52	64	53
	2	59	54	58	52	55	47	58	48	58	52	57	51	53	45	55	46	57	51	56	50	52	43	53	44
	3	55	45	54	48	50	41	50	41	53	43	53	45	48	39	48	40	51	41	51	43	46	38	46	38
40	1	62	58	62	57	60	54	67	58	61	56	61	56	59	52	65	55	60	55	60	54	58	51	64	53
	2	58	52	57	51	54	47	58	48	56	51	56	50	52	45	55	46	55	50	54	48	51	43	53	44
	3	54	45	53	47	49	41	50	41	53	43	52	45	48	39	48	40	51	41	50	43	46	38	46	38
30	1	63	57	62	56	59	51	62	51	62	56	61	55	57	49	60	49								
	2	57	51	56	48	51	42	51	42	56	49	55	46	49	40	49	40								
	3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35								
35	1	61	56	61	55	58	50	62	51	60	55	60	53	56	49	60	49								
	2	56	50	55	48	50	42	51	42	55	48	53	46	49	40	49	40								
	3	49	39	50	42	44	36	45	37	47	38	49	40	43	35	43	35								
40	1	59	54	59	53	56	50	62	51	58	53	58	52	55	48	60	49								
	2	54	49	53	47	50	42	51	42	53	47	52	46	48	40	49	40								
	3	49	39	49	42	44	36	45	37	47	38	48	40	43	35	43	35								
30	1	63	57	62	56	59	51	62	51	62	56	61	55	57	49	60	49								
	2	57	51	56	48	51	42	51	42	56	49	55	46	49	40	49	40								
	3	49	39	51	42	44	36	45	37	47	38	49	40	43	35	43	35								
35	1	61	56	61	55	58	50	62	51	60	55	60	53	56	49	60	49								
	2	56	50	55	48	50	42	51	42	55	48	53	46	49	40	49	40								
	3	49	39	50	42	44	36	45	37	47	38	49	40	43	35	43	35								
40	1	59	54	59	53	56	50	62	51	58	53	58	52	55	48	60	49								
	2	54	49	53	47	50	42	51	42	53	47	52	46	48	40	49	40								
	3	49	39	49	42	44	36	45	37	47	38	48	40	43	35	43	35								
30	1	61	55	60	53	56	47	58	48	62	56	61	55	57	49	60	49								
	2	55	48	53	44	47	38	48	39	56	49	55	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
35	1	59	53	58	52	55	47	58	48	60	55	60	53	56	49	60	49								
	2	53	47	52	44	47	38	48	39	55	48	53	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
40	1	58	52	57	51	54	47	58	48	58	53	58	52	55	48	60	49								
	2	52	46	51	44	47	38	48	39	53	47	52	46	48	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	48	40	43	35	43	35								
30	1	61	55	60	53	56	47	58	48	62	56	61	55	57	49	60	49								
	2	55	48	53	44	47	38	48	39	56	49	55	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
35	1	59	53	58	52	55	47	58	48	60	55	60	53	56	49	60	49								
	2	53	47	52	44	47	38	48	39	55	48	53	46	49	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	49	40	43	35	43	35								
40	1	58	52	57	51	54	47	58	48	58	53	58	52	55	48	60	49								
	2	52	46	51	44	47	38	48	39	53	47	52	46	48	40	49	40								
	3	45	36	47	38	41	33	41	34	47	38	48	40	43	35	43	35								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the e edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	60	54	59	52	55	46	56	46	58	51	57	49	52	43	52	43	56	49	55	46	49	40	49	40	
	2	54	47	52	43	46	37	46	38	51	44	49	40	42	34	43	35	49	42	46	37	40	32	40	33	
	3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29	
	35	1	58	52	57	51	54	46	56	46	56	50	55	49	51	43	52	43	54	48	53	46	49	40	49	40
		2	52	46	51	43	46	37	46	38	50	44	49	40	42	34	43	35	48	42	46	37	40	32	40	33
		3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
	40	1	57	51	56	50	53	46	56	46	55	49	54	48	50	43	52	43	53	47	52	46	48	40	49	40
		2	51	45	50	43	46	37	46	38	49	43	48	40	42	34	43	35	47	41	46	37	40	32	40	33
		3	43	35	46	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
Wind Speed [mph]		170								180																
30	1	54	47	53	43	46	37	46	38	52	45	50	41	44	35	44	36	54	47	53	43	46	37	46	38	
	2	47	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29	45	37	40	33	35	28	36	29	
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25	
35	1	53	46	51	43	46	37	46	38	51	45	50	41	44	35	44	36	51	45	50	41	44	35	44	36	
	2	46	39	43	35	37	30	38	31	45	37	40	33	35	28	36	29	45	37	40	33	35	28	36	29	
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25	
40	1	51	45	50	43	46	37	46	38	50	44	48	41	44	35	44	36	50	44	48	41	44	35	44	36	
	2	45	39	43	35	37	30	38	31	44	37	40	33	35	28	36	29	44	37	40	33	35	28	36	29	
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25	
Wind Speed [mph]		190								200																
30	1	50	43	48	39	41	33	41	34	49	41	45	37	39	32	39	32	49	41	45	37	39	32	39	32	
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26	41	33	36	29	31	26	32	26	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	30	24	32	26	27	22	28	23	
35	1	49	43	48	39	41	33	41	34	48	41	45	37	39	32	39	32	48	41	45	37	39	32	39	32	
	2	43	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26	41	33	36	29	31	26	32	26	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	30	24	32	26	27	22	28	23	
40	1	48	42	47	39	41	33	41	34	47	41	45	37	39	32	39	32	47	41	45	37	39	32	39	32	
	2	42	35	38	31	33	27	34	28	41	33	36	29	31	26	32	26	41	33	36	29	31	26	32	26	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	30	24	32	26	27	22	28	23	

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	60	56	60	55	59	53	66	58	59	55	59	54	58	51	65	55	58	54	58	53	56	50	64	53	
	2	56	51	55	50	53	46	58	48	55	50	54	49	51	45	55	46	54	49	53	48	50	43	53	44	
	3	52	45	52	46	48	41	50	41	51	43	50	45	47	39	48	40	50	41	49	43	45	38	46	38	
	50	1	58	54	58	54	58	52	66	58	57	53	57	53	56	50	65	55	57	52	56	52	55	49	63	53
		2	54	50	54	49	52	46	58	48	53	49	53	48	50	44	55	46	52	48	52	47	49	43	53	44
		3	51	45	50	45	47	41	50	41	50	43	49	44	46	39	48	40	49	41	48	43	45	38	46	38
	60	1	55	52	55	51	55	50	65	58	54	51	54	50	54	49	64	55	54	50	54	50	53	48	62	53
		2	52	48	51	47	50	44	58	48	51	47	50	46	49	43	55	46	50	46	50	45	48	42	53	44
		3	49	44	48	44	46	40	50	41	48	43	47	42	45	39	48	40	47	41	46	41	44	38	46	38
Wind Speed [mph]		110								115																
45	1	58	53	57	52	55	49	62	51	57	52	56	51	54	47	60	49									
	2	53	48	52	46	49	42	51	42	52	46	51	45	47	40	49	40									
	3	49	39	48	42	44	36	45	37	47	38	47	40	43	35	43	35									
	50	1	56	52	56	51	54	48	62	51	55	51	55	50	53	47	60	49								
		2	52	47	51	46	48	42	51	42	51	46	50	44	47	40	49	40								
		3	48	39	47	42	44	36	45	37	47	38	46	40	42	35	43	35								
	60	1	53	49	53	49	52	46	61	51	52	48	52	48	51	45	59	49								
		2	49	45	49	44	46	41	51	42	48	44	48	43	45	40	49	40								
		3	46	39	45	40	42	36	45	37	45	38	44	39	41	35	43	35								
Wind Speed [mph]		120								130																
45	1	56	51	55	50	53	46	58	48	57	52	56	51	54	47	60	49									
	2	51	45	50	44	46	38	48	39	52	46	51	45	47	40	49	40									
	3	45	36	46	38	41	33	41	34	47	38	47	40	43	35	43	35									
	50	1	54	50	54	49	52	46	58	48	55	51	55	50	53	47	60	49								
		2	50	45	49	43	46	38	48	39	51	46	50	44	47	40	49	40								
		3	45	36	45	38	41	33	41	34	47	38	46	40	42	35	43	35								
	60	1	52	48	51	47	50	44	58	48	52	48	52	48	51	45	59	49								
		2	48	43	47	42	44	38	48	39	48	44	48	43	45	40	49	40								
		3	44	36	44	38	40	33	41	34	45	38	44	39	41	35	43	35								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	55	50	54	49	52	45	56	46	53	48	53	47	49	43	52	43	52	46	51	45	47	40	49	40	
	2	50	44	49	43	45	37	46	38	48	42	47	40	42	34	43	35	46	41	45	37	40	32	40	33	
	3	43	35	45	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29	
	50	1	54	49	53	48	51	44	56	46	52	47	51	46	49	42	52	43	51	45	50	44	47	40	49	40
		2	49	44	48	42	44	37	46	38	47	42	46	40	42	34	43	35	45	40	44	37	40	32	40	33
		3	43	35	44	37	40	32	40	33	40	33	42	34	37	30	37	30	38	31	40	32	34	28	35	29
	60	1	51	47	51	46	49	43	56	46	50	45	49	44	47	41	52	43	48	44	48	43	45	40	49	40
		2	47	42	46	41	43	37	46	38	45	40	44	39	41	34	43	35	44	39	43	37	40	32	40	33
		3	43	35	43	37	39	32	40	33	40	33	41	34	37	30	37	30	38	31	39	32	34	28	35	29
Wind Speed [mph]		170								180																
45	1	50	45	49	43	45	37	46	38	49	43	48	41	44	35	44	36									
	2	45	39	43	35	37	30	38	31	43	37	40	33	35	28	36	29									
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25									
	50	1	49	44	48	43	45	37	46	38	48	42	47	41	43	35	44	36								
		2	44	38	43	35	37	30	38	31	42	37	40	33	35	28	36	29								
		3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
	60	1	47	42	46	41	44	37	46	38	46	41	45	40	42	35	44	36								
		2	42	37	41	35	37	30	38	31	41	36	40	33	35	28	36	29								
		3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
Wind Speed [mph]		190								200																
45	1	47	42	46	39	41	33	41	34	46	40	45	37	39	32	39	32									
	2	42	35	38	31	33	27	34	28	40	33	36	29	31	26	32	26									
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23									
	50	1	46	41	45	39	41	33	41	34	45	39	44	37	39	32	39	32								
		2	41	35	38	31	33	27	34	28	39	33	36	29	31	26	32	26								
		3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
	60	1	45	40	44	39	40	33	41	34	43	38	42	37	39	32	39	32								
		2	40	35	38	31	33	27	34	28	38	33	36	29	31	26	32	26								
		3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	52	49	52	49	53	48	64	57	52	49	52	48	52	47	63	55	51	48	51	48	51	46	61	53	
	2	49	46	49	45	48	43	57	48	49	45	48	44	47	42	55	46	48	44	48	43	46	41	53	44	
	3	47	43	46	42	45	39	50	41	46	42	46	41	44	38	48	40	45	41	45	40	42	37	46	38	
	80	1	49	47	50	47	51	47	63	56	49	47	49	46	50	46	61	54	49	46	49	46	49	45	60	53
		2	47	44	47	44	47	42	56	48	47	43	46	43	46	41	54	46	46	43	46	42	45	40	53	44
		3	45	42	45	41	44	39	50	41	44	41	44	40	42	38	48	40	44	40	43	39	41	36	46	38
	90	1	46	45	48	45	49	45	62	55	46	45	47	45	48	45	60	53	46	44	47	44	48	44	59	52
		2	45	43	45	42	45	41	55	48	45	42	45	42	45	40	53	46	44	41	44	41	44	39	52	44
		3	43	40	43	40	42	38	50	41	43	39	43	39	41	37	48	40	42	39	42	38	40	36	46	38
Wind Speed [mph]		110								115																
70	1	50	47	50	47	50	45	60	51	50	46	50	46	49	44	58	49									
	2	47	43	47	43	45	40	51	42	46	42	46	42	44	39	49	40									
	3	44	39	44	39	41	36	45	37	44	38	43	38	40	35	43	35									
80	1	48	45	48	45	48	44	58	51	48	45	48	44	48	43	57	49									
	2	45	42	45	41	44	39	51	42	45	41	44	40	43	38	49	40									
	3	43	39	42	38	40	35	45	37	42	38	42	37	39	34	43	35									
90	1	46	44	46	44	47	43	57	50	46	43	46	43	46	42	56	49									
	2	44	41	44	40	43	38	50	42	43	40	43	39	42	37	49	40									
	3	42	38	41	37	40	35	45	37	41	37	40	37	39	34	43	35									
Wind Speed [mph]		120								130																
70	1	49	46	49	45	48	43	57	48	50	46	50	46	49	44	58	49									
	2	46	42	45	41	43	38	48	39	46	42	46	42	44	39	49	40									
	3	43	36	42	37	39	33	41	34	44	38	43	38	40	35	43	35									
80	1	47	44	47	44	47	42	56	48	48	45	48	44	48	43	57	49									
	2	44	40	44	40	42	37	48	39	45	41	44	40	43	38	49	40									
	3	41	36	41	37	39	33	41	34	42	38	42	37	39	34	43	35									
90	1	45	43	45	42	45	41	55	48	46	43	46	43	46	42	56	49									
	2	43	39	42	39	41	36	48	39	43	40	43	39	42	37	49	40									
	3	40	36	40	36	38	33	41	34	41	37	40	37	39	34	43	35									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	49	45	48	44	47	42	55	46	48	44	47	43	46	40	52	43	46	42	46	42	44	39	49	40
	2	45	41	44	40	42	37	46	38	44	39	43	38	40	34	43	35	42	38	42	37	39	32	40	33
	3	42	35	41	37	38	32	40	33	40	33	40	34	37	30	37	30	38	31	38	32	34	28	35	29
80	1	47	43	47	43	46	41	54	46	46	42	45	42	44	40	52	43	45	41	44	40	43	38	49	40
	2	43	40	43	39	41	36	46	38	42	38	42	37	40	34	43	35	41	37	40	36	38	32	40	33
	3	41	35	40	36	38	32	40	33	39	33	39	34	36	30	37	30	38	31	37	32	34	28	35	29
90	1	45	42	45	42	45	40	53	46	44	41	44	40	43	39	51	43	43	40	43	39	42	37	49	40
	2	42	39	42	38	40	36	46	38	41	37	40	37	39	34	43	35	40	36	39	35	37	32	40	33
	3	40	35	39	35	37	32	40	33	38	33	38	34	35	30	37	30	37	31	36	32	34	28	35	29
Wind Speed [mph]		170								180															
70	1	45	41	45	40	42	37	46	38	44	40	43	39	41	35	44	36								
	2	41	36	40	35	37	30	38	31	40	35	39	33	35	28	36	29								
	3	35	29	37	30	32	26	33	27	33	27	35	28	30	25	31	25								
80	1	44	40	43	39	41	36	46	38	43	39	42	38	40	35	44	36								
	2	40	36	39	35	36	30	38	31	39	34	38	33	35	28	36	29								
	3	35	29	36	30	32	26	33	27	33	27	35	28	30	25	31	25								
90	1	42	39	42	38	40	36	46	38	41	38	41	37	39	34	44	36								
	2	39	35	38	34	36	30	38	31	38	34	37	33	34	28	36	29								
	3	35	29	35	30	32	26	33	27	33	27	34	28	30	25	31	25								
Wind Speed [mph]		190								200															
70	1	43	39	42	38	40	33	41	34	42	37	41	36	38	32	39	32								
	2	39	34	38	31	33	27	34	28	37	33	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
80	1	42	38	41	37	39	33	41	34	41	36	40	36	37	32	39	32								
	2	38	33	37	31	33	27	34	28	36	32	36	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								
90	1	40	37	40	36	38	33	41	34	39	36	39	35	37	32	39	32								
	2	37	33	36	31	33	27	34	28	36	31	35	29	31	26	32	26								
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	44	44	45	44	48	44	60	54	44	43	45	43	47	43	59	52	44	43	45	43	46	42	58	51
	2	44	41	44	41	44	40	54	47	43	41	43	40	43	39	52	46	43	40	43	40	42	38	51	44
	3	42	39	42	39	41	37	49	41	41	38	41	38	40	36	48	40	41	38	41	37	40	35	46	38
Wind Speed [mph]		110								115															
100	1	44	42	45	42	45	42	56	50	44	42	44	42	45	41	55	48								
	2	42	39	42	39	42	37	50	42	42	39	42	38	41	37	48	40								
	3	40	37	40	36	39	34	45	37	40	36	39	36	38	33	43	35								
Wind Speed [mph]		120								130															
100	1	44	41	44	41	44	40	54	47	44	42	44	42	45	41	55	48								
	2	41	38	41	38	40	36	47	39	42	39	42	38	41	37	48	40								
	3	39	36	39	35	37	33	41	34	40	36	39	36	38	33	43	35								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	43	41	43	40	43	39	53	46	43	40	42	39	42	38	50	43	42	39	42	38	41	36	48	40
	2	41	38	40	37	39	35	46	38	40	36	39	36	38	33	43	35	39	35	38	34	36	32	40	33
	3	39	35	38	34	36	32	40	33	37	33	37	33	35	30	37	30	36	31	36	32	33	28	35	29
Wind Speed [mph]		170								180															
100	1	41	38	41	37	40	35	46	38	40	37	40	36	38	34	44	36	37	33	36	32	34	28	36	29
	2	38	34	37	33	35	30	38	31	37	33	36	32	34	28	36	29	33	27	33	28	30	25	31	25
	3	35	29	34	30	32	26	33	27	33	27	33	28	30	25	31	25								
Wind Speed [mph]		190								200															
100	1	39	36	39	35	37	33	41	34	38	35	38	34	36	31	39	32	35	31	34	29	31	26	32	26
	2	36	32	35	31	33	27	34	28	35	31	34	29	31	26	32	26	30	24	31	26	27	22	28	23
	3	32	26	32	27	29	23	29	24	30	24	31	26	27	22	28	23								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge															
0	1	69	61	67	57	59	49	60	49	67	59	65	55	57	47	57	47	66	56	63	52	55	45	55	45	
	2	61	51	57	46	49	40	49	40	59	49	54	44	47	38	47	39	56	47	52	42	45	36	45	37	
	3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32	
	5	1	69	61	67	57	59	49	60	49	67	59	65	55	57	47	57	47	66	56	63	52	55	45	55	45
		2	61	51	57	46	49	40	49	40	59	49	54	44	47	38	47	39	56	47	52	42	45	36	45	37
		3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32
	10	1	68	61	67	57	59	49	60	49	67	59	65	55	57	47	57	47	66	56	63	52	55	45	55	45
		2	61	51	57	46	49	40	49	40	59	49	54	44	47	38	47	39	56	47	52	42	45	36	45	37
		3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32
0	1	64	54	62	50	53	43	53	43	63	52	60	48	51	42	51	42	ASCE Group Zone	0 - 7.5	Gable	1 = 1					
	2	54	45	50	40	43	35	43	36	52	43	48	39	41	33	42	34			2 = 2						
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30			3 = 3						
	5	1	64	54	62	50	53	43	53	43	63	52	60	48	51	42	51		42	7.5 - 15	1 = 1					
		2	54	45	50	40	43	35	43	36	52	43	48	39	41	33	42		34		2 = 2					
		3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36		30		3 = 3					
	10	1	64	54	62	50	53	43	53	43	63	52	60	48	51	42	51		42	15 - 30	1 = 1					
		2	54	45	50	40	43	35	43	36	52	43	48	39	41	33	42		34		2 = 2					
		3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36		30		3 = 3					
0	1	64	54	62	50	53	43	53	43	63	52	60	48	51	42	51	42	ASCE Group Zone	0 - 7.5	Gable	1 = 1					
	2	54	45	50	40	43	35	43	36	52	43	48	39	41	33	42	34			2 = 2						
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30			3 = 3						
	5	1	64	54	62	50	53	43	53	43	63	52	60	48	51	42	51		42	7.5 - 15	1 = 1					
		2	54	45	50	40	43	35	43	36	52	43	48	39	41	33	42		34		2 = 2					
		3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36		30		3 = 3					
	10	1	64	54	62	50	53	43	53	43	63	52	60	48	51	42	51		42	15 - 30	1 = 1					
		2	54	45	50	40	43	35	43	36	52	43	48	39	41	33	42		34		2 = 2					
		3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36		30		3 = 3					
0	1	61	51	57	46	49	40	49	40	63	52	60	48	51	42	51	42	ASCE Group Zone	0 - 7.5	Gable	1 = 1					
	2	51	42	46	37	40	32	40	33	52	43	48	39	41	33	42	34			2 = 2						
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30			3 = 3						
	5	1	61	51	57	46	49	40	49	40	63	52	60	48	51	42	51		42	7.5 - 15	1 = 1					
		2	51	42	46	37	40	32	40	33	52	43	48	39	41	33	42		34		2 = 2					
		3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36		30		3 = 3					
	10	1	61	51	57	46	49	40	49	40	63	52	60	48	51	42	51		42	15 - 30	1 = 1					
		2	51	42	46	37	40	32	40	33	52	43	48	39	41	33	42		34		2 = 2					
		3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36		30		3 = 3					
0	1	61	51	57	46	49	40	49	40	63	52	60	48	51	42	51	42	ASCE Group Zone	0 - 7.5	Gable	1 = 1					
	2	51	42	46	37	40	32	40	33	52	43	48	39	41	33	42	34			2 = 2						
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30			3 = 3						
	5	1	61	51	57	46	49	40	49	40	63	52	60	48	51	42	51		42	7.5 - 15	1 = 1					
		2	51	42	46	37	40	32	40	33	52	43	48	39	41	33	42		34		2 = 2					
		3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36		30		3 = 3					
	10	1	61	51	57	46	49	40	49	40	63	52	60	48	51	42	51		42	15 - 30	1 = 1					
		2	51	42	46	37	40	32	40	33	52	43	48	39	41	33	42		34		2 = 2					
		3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36		30		3 = 3					

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	59	49	55	45	47	39	47	39	55	46	51	41	44	36	44	36	52	43	48	39	41	34	42	34
	2	49	40	44	36	38	31	39	32	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
5	1	59	49	55	45	47	39	47	39	55	46	51	41	44	36	44	36	52	43	48	39	41	34	42	34
	2	49	40	44	36	38	31	39	32	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
10	1	59	49	55	45	47	39	47	39	55	46	51	41	44	36	44	36	52	43	48	39	41	34	42	34
	2	49	40	44	36	38	31	39	32	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
0	1	49	41	45	36	39	32	39	32	47	38	42	34	37	30	37	30								
	2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
5	1	49	41	45	36	39	32	39	32	47	38	42	34	37	30	37	30								
	2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
10	1	49	41	45	36	39	32	39	32	47	38	42	34	37	30	37	30								
	2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
0	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								
5	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								
10	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	66	60	65	57	59	49	60	49	64	58	63	55	57	47	57	47	63	56	62	52	55	45	55	45	
	2	60	51	57	46	49	40	49	40	58	49	54	44	47	38	47	39	56	47	52	42	45	36	45	37	
	3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32	
	20	1	63	57	63	56	59	49	60	49	62	56	61	54	57	47	57	47	61	54	60	52	55	45	55	45
		2	57	50	56	46	49	40	49	40	56	49	54	44	47	38	47	39	54	47	52	42	45	36	45	37
		3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32
	25	1	63	57	63	56	59	49	60	49	62	56	61	54	57	47	57	47	61	54	60	52	55	45	55	45
		2	57	50	56	46	49	40	49	40	56	49	54	44	47	38	47	39	54	47	52	42	45	36	45	37
		3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32
Wind Speed [mph]		110								115																
15	1	62	54	61	50	53	43	53	43	61	52	59	48	51	42	51	42	61	54	61	50	53	43	53	43	
	2	54	45	50	40	43	35	43	36	52	43	48	39	41	33	42	34	52	43	48	39	41	33	42	34	
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30	39	32	41	34	36	29	36	30	
	20	1	60	53	58	50	53	43	53	43	59	52	57	48	51	42	51	42	59	52	57	48	51	42	51	42
		2	53	45	50	40	43	35	43	36	52	43	48	39	41	33	42	34	52	43	48	39	41	33	42	34
		3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30	39	32	41	34	36	29	36	30
	25	1	60	53	58	50	53	43	53	43	59	52	57	48	51	42	51	42	59	52	57	48	51	42	51	42
		2	53	45	50	40	43	35	43	36	52	43	48	39	41	33	42	34	52	43	48	39	41	33	42	34
		3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30	39	32	41	34	36	29	36	30
Wind Speed [mph]		120								130																
15	1	60	51	57	46	49	40	49	40	61	52	59	48	51	42	51	42	61	52	59	48	51	42	51	42	
	2	51	42	46	37	40	32	40	33	52	43	48	39	41	33	42	34	52	43	48	39	41	33	42	34	
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30	39	32	41	34	36	29	36	30	
	20	1	57	50	56	46	49	40	49	40	59	52	57	48	51	42	51	42	59	52	57	48	51	42	51	42
		2	50	42	46	37	40	32	40	33	52	43	48	39	41	33	42	34	52	43	48	39	41	33	42	34
		3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30	39	32	41	34	36	29	36	30
	25	1	57	50	56	46	49	40	49	40	59	52	57	48	51	42	51	42	59	52	57	48	51	42	51	42
		2	50	42	46	37	40	32	40	33	52	43	48	39	41	33	42	34	52	43	48	39	41	33	42	34
		3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30	39	32	41	34	36	29	36	30

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	58	49	55	45	47	39	47	39	55	46	51	41	44	36	44	36	52	43	48	39	41	34	42	34	
	2	49	40	44	36	38	31	39	32	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24	
	20	1	56	49	54	45	47	39	47	39	54	46	51	41	44	36	44	36	51	43	48	39	41	34	42	34
		2	49	40	44	36	38	31	39	32	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28
		3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
	25	1	56	49	54	45	47	39	47	39	54	46	51	41	44	36	44	36	51	43	48	39	41	34	42	34
		2	49	40	44	36	38	31	39	32	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28
		3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
Wind Speed [mph]		170								180																
15	1	49	41	45	36	39	32	39	32	47	38	42	34	37	30	37	30									
	2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25									
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21									
	20	1	49	41	45	36	39	32	39	32	47	38	42	34	37	30	37	30								
		2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
		3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
	25	1	49	41	45	36	39	32	39	32	47	38	42	34	37	30	37	30								
		2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
		3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
Wind Speed [mph]		190								200																
15	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27									
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22									
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19									
	20	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
		2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
		3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								
	25	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
		2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
		3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	62	56	61	55	57	49	60	49	61	55	60	53	56	47	57	47	60	53	59	52	54	45	55	45	
	2	56	49	55	46	49	40	49	40	55	48	53	44	47	38	47	39	53	47	52	42	45	36	45	37	
	3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32	
	35	1	60	55	59	53	56	49	60	49	59	53	58	52	55	47	57	47	58	52	57	51	53	45	55	45
		2	55	48	53	46	49	40	49	40	53	47	52	44	47	38	47	39	52	46	51	42	45	36	45	37
		3	47	38	49	40	43	35	43	35	45	36	47	38	41	33	41	34	43	35	45	36	39	32	39	32
	40	1	58	53	58	52	55	48	60	49	57	52	57	51	54	47	57	47	56	51	55	50	52	45	55	45
		2	53	47	52	46	48	40	49	40	52	46	51	44	47	38	47	39	51	45	50	42	45	36	45	37
		3	47	38	48	40	43	35	43	35	45	36	46	38	41	33	41	34	43	35	45	36	39	32	39	32
Wind Speed [mph]		110								115																
30	1	59	52	57	50	53	43	53	43	57	51	56	48	51	42	51	42									
	2	52	45	50	40	43	35	43	36	51	43	48	39	41	33	42	34									
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30									
35	1	57	51	56	49	52	43	53	43	56	49	54	48	50	42	51	42									
	2	51	44	49	40	43	35	43	36	49	43	48	39	41	33	42	34									
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30									
40	1	55	50	54	48	51	43	53	43	54	48	53	47	49	42	51	42									
	2	50	44	48	40	43	35	43	36	48	42	47	39	41	33	42	34									
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30									
Wind Speed [mph]		120								130																
30	1	56	49	55	46	49	40	49	40	57	51	56	48	51	42	51	42									
	2	49	42	46	37	40	32	40	33	51	43	48	39	41	33	42	34									
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30									
35	1	55	48	53	46	49	40	49	40	56	49	54	48	50	42	51	42									
	2	48	42	46	37	40	32	40	33	49	43	48	39	41	33	42	34									
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30									
40	1	53	47	52	46	48	40	49	40	54	48	53	47	49	42	51	42									
	2	47	41	46	37	40	32	40	33	48	42	47	39	41	33	42	34									
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedgesshallnotincludeanyoverhangdistances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	55	48	53	45	47	39	47	39	53	46	51	41	44	36	44	36	50	43	48	39	41	34	42	34
	2	48	40	44	36	38	31	39	32	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
35	1	53	47	52	45	47	39	47	39	51	45	50	41	44	36	44	36	49	43	48	39	41	34	42	34
	2	47	40	44	36	38	31	39	32	45	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
40	1	52	46	51	45	47	39	47	39	50	44	49	41	44	36	44	36	48	42	47	39	41	34	42	34
	2	46	40	44	36	38	31	39	32	44	38	41	33	36	29	36	30	42	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
Wind Speed [mph]		170								180															
30	1	48	41	45	36	39	32	39	32	47	38	42	34	37	30	37	30								
	2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
35	1	47	41	45	36	39	32	39	32	46	38	42	34	37	30	37	30								
	2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
40	1	47	41	45	36	39	32	39	32	45	38	42	34	37	30	37	30								
	2	41	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
Wind Speed [mph]		190								200															
30	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								
35	1	44	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								
40	1	43	36	40	32	35	28	35	29	42	35	38	31	33	27	33	27								
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	57	52	56	51	54	47	60	49	56	51	55	50	52	46	57	47	55	50	54	48	51	45	55	45
	2	52	46	51	45	47	40	49	40	51	45	50	44	46	38	47	39	50	44	48	42	45	36	45	37
	3	47	38	47	40	43	35	43	35	45	36	46	38	41	33	41	34	43	35	44	36	39	32	39	32
50	1	55	51	55	50	53	47	60	49	54	50	54	49	51	45	57	47	53	48	53	48	50	44	55	45
	2	51	46	50	44	47	40	49	40	50	44	49	43	45	38	47	39	48	43	48	42	44	36	45	37
	3	47	38	46	40	42	35	43	35	45	36	45	38	41	33	41	34	43	35	44	36	39	32	39	32
60	1	52	48	52	48	51	45	59	49	51	47	51	47	50	44	57	47	51	47	50	46	49	43	55	45
	2	48	44	48	43	45	40	49	40	47	43	47	42	44	38	47	39	47	42	46	41	43	36	45	37
	3	45	38	44	39	41	35	43	35	44	36	43	38	40	33	41	34	43	35	42	36	39	32	39	32
45	1	54	48	53	47	50	43	53	43	53	47	52	46	49	42	51	42								
	2	48	43	47	40	43	35	43	36	47	42	46	39	41	33	42	34								
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30								
50	1	52	47	52	46	49	43	53	43	51	46	51	45	48	42	51	42								
	2	47	42	46	40	43	35	43	36	46	41	45	39	41	33	42	34								
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30								
60	1	50	46	49	45	47	42	53	43	49	45	49	44	46	41	51	42								
	2	46	41	45	40	42	35	43	36	45	40	44	39	41	33	42	34								
	3	41	33	41	35	37	30	38	31	39	32	40	34	36	29	36	30								
45	1	54	48	53	47	50	43	53	43	53	47	52	46	49	42	51	42								
	2	48	43	47	40	43	35	43	36	47	42	46	39	41	33	42	34								
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30								
50	1	52	47	52	46	49	43	53	43	51	46	51	45	48	42	51	42								
	2	47	42	46	40	43	35	43	36	46	41	45	39	41	33	42	34								
	3	41	33	43	35	37	30	38	31	39	32	41	34	36	29	36	30								
60	1	50	46	49	45	47	42	53	43	49	45	49	44	46	41	51	42								
	2	46	41	45	40	42	35	43	36	45	40	44	39	41	33	42	34								
	3	41	33	41	35	37	30	38	31	39	32	40	34	36	29	36	30								
45	1	52	46	51	45	47	40	49	40	53	47	52	46	49	42	51	42								
	2	46	41	45	37	40	32	40	33	47	42	46	39	41	33	42	34								
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30								
50	1	51	45	50	44	47	40	49	40	51	46	51	45	48	42	51	42								
	2	45	40	44	37	40	32	40	33	46	41	45	39	41	33	42	34								
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30								
60	1	48	44	48	43	45	40	49	40	49	45	49	44	46	41	51	42								
	2	44	39	43	37	40	32	40	33	45	40	44	39	41	33	42	34								
	3	38	31	39	32	34	28	35	29	39	32	40	34	36	29	36	30								
45	1	52	46	51	45	47	40	49	40	53	47	52	46	49	42	51	42								
	2	46	41	45	37	40	32	40	33	47	42	46	39	41	33	42	34								
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30								
50	1	51	45	50	44	47	40	49	40	51	46	51	45	48	42	51	42								
	2	45	40	44	37	40	32	40	33	46	41	45	39	41	33	42	34								
	3	38	31	40	32	34	28	35	29	39	32	41	34	36	29	36	30								
60	1	48	44	48	43	45	40	49	40	49	45	49	44	46	41	51	42								
	2	44	39	43	37	40	32	40	33	45	40	44	39	41	33	42	34								
	3	38	31	39	32	34	28	35	29	39	32	40	34	36	29	36	30								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	51	45	50	44	46	39	47	39	49	43	48	41	44	36	44	36	47	42	46	39	41	34	42	34
	2	45	40	44	36	38	31	39	32	43	38	41	33	36	29	36	30	42	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
50	1	50	45	49	43	46	39	47	39	48	43	47	41	43	36	44	36	46	41	45	39	41	34	42	34
	2	45	39	43	36	38	31	39	32	43	37	41	33	36	29	36	30	41	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
60	1	48	43	47	42	44	39	47	39	46	41	45	40	42	36	44	36	45	40	44	39	41	34	42	34
	2	43	38	42	36	38	31	39	32	41	36	40	33	36	29	36	30	40	35	38	31	33	27	34	28
	3	36	29	38	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
45	1	46	40	44	36	39	32	39	32	44	38	42	34	37	30	37	30	44	38	42	34	37	30	37	30
	2	40	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25	38	31	34	28	30	24	30	25
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21	28	23	30	24	26	21	26	21
50	1	45	39	44	36	39	32	39	32	43	38	42	34	37	30	37	30	43	38	42	34	37	30	37	30
	2	39	33	36	29	31	25	32	26	38	31	34	28	30	24	30	25	38	31	34	28	30	24	30	25
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21	28	23	30	24	26	21	26	21
60	1	43	38	42	36	39	32	39	32	42	37	41	34	37	30	37	30	42	37	41	34	37	30	37	30
	2	38	33	36	29	31	25	32	26	37	31	34	28	30	24	30	25	37	31	34	28	30	24	30	25
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21	28	23	30	24	26	21	26	21
45	1	42	36	40	32	35	28	35	29	41	35	38	31	33	27	33	27	41	35	38	31	33	27	33	27
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22	35	28	30	25	26	21	27	22
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19	25	20	26	21	23	19	24	19
50	1	42	36	40	32	35	28	35	29	40	35	38	31	33	27	33	27	40	35	38	31	33	27	33	27
	2	36	30	32	26	28	23	29	23	35	28	30	25	26	21	27	22	35	28	30	25	26	21	27	22
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19	25	20	26	21	23	19	24	19
60	1	41	36	39	32	35	28	35	29	39	34	38	31	33	27	33	27	39	34	38	31	33	27	33	27
	2	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19	25	20	26	21	23	19	24	19

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	50	46	50	46	49	44	58	49	49	46	49	45	48	43	56	47	48	45	48	44	47	42	55	45
	2	46	42	46	42	44	39	49	40	46	41	45	41	43	38	47	39	45	41	44	40	42	36	45	37
	3	44	38	43	38	40	35	43	35	43	36	42	37	39	33	41	34	42	35	41	36	38	32	39	32
80	1	48	45	48	44	48	43	57	49	47	44	47	44	47	42	55	47	46	43	46	43	46	41	54	45
	2	45	41	44	40	43	38	49	40	44	40	44	40	42	37	47	39	43	39	43	39	41	36	45	37
	3	42	38	42	37	39	34	43	35	41	36	41	36	38	33	41	34	41	35	40	35	37	32	39	32
90	1	46	43	46	43	46	42	56	49	45	42	45	42	45	41	54	47	45	42	45	41	44	40	53	45
	2	43	40	43	39	42	37	49	40	42	39	42	38	41	36	47	39	42	38	41	38	40	35	45	37
	3	41	37	40	36	39	34	43	35	40	36	40	36	38	33	41	34	39	35	39	35	37	32	39	32
70	1	48	44	47	43	46	41	53	43	47	43	47	42	45	40	51	42	47	43	47	42	45	40	51	42
	2	44	40	43	39	41	35	43	36	43	39	42	38	40	33	42	34	43	39	42	38	40	33	42	34
	3	41	33	40	35	37	30	38	31	39	32	39	34	36	29	36	30	39	32	39	34	36	29	36	30
80	1	46	42	46	42	45	40	52	43	45	42	45	41	44	39	51	42	45	42	45	41	44	39	51	42
	2	42	39	42	38	40	35	43	36	42	38	41	37	39	33	42	34	42	38	41	37	39	33	42	34
	3	40	33	39	35	36	30	38	31	39	32	38	34	35	29	36	30	39	32	38	34	35	29	36	30
90	1	44	41	44	41	43	39	51	43	44	40	43	40	43	38	50	42	44	40	43	40	43	38	50	42
	2	41	38	41	37	39	34	43	36	40	37	40	36	38	33	42	34	40	37	40	36	38	33	42	34
	3	39	33	38	34	36	30	38	31	38	32	37	33	35	29	36	30	38	32	37	33	35	29	36	30
70	1	46	42	46	42	44	39	49	40	47	43	47	42	45	40	51	42	47	43	47	42	45	40	51	42
	2	42	38	42	37	39	32	40	33	43	39	42	38	40	33	42	34	43	39	42	38	40	33	42	34
	3	38	31	38	32	34	28	35	29	39	32	39	34	36	29	36	30	39	32	39	34	36	29	36	30
80	1	45	41	44	40	43	38	49	40	45	42	45	41	44	39	51	42	45	42	45	41	44	39	51	42
	2	41	37	40	36	38	32	40	33	42	38	41	37	39	33	42	34	42	38	41	37	39	33	42	34
	3	38	31	37	32	34	28	35	29	39	32	38	34	35	29	36	30	39	32	38	34	35	29	36	30
90	1	43	40	43	39	42	37	49	40	44	40	43	40	43	38	50	42	44	40	43	40	43	38	50	42
	2	40	36	39	35	37	32	40	33	40	37	40	36	38	33	42	34	40	37	40	36	38	33	42	34
	3	37	31	36	32	34	28	35	29	38	32	37	33	35	29	36	30	38	32	37	33	35	29	36	30
70	1	46	42	46	42	44	39	49	40	47	43	47	42	45	40	51	42	47	43	47	42	45	40	51	42
	2	42	38	42	37	39	32	40	33	43	39	42	38	40	33	42	34	43	39	42	38	40	33	42	34
	3	38	31	38	32	34	28	35	29	39	32	39	34	36	29	36	30	39	32	39	34	36	29	36	30
80	1	45	41	44	40	43	38	49	40	45	42	45	41	44	39	51	42	45	42	45	41	44	39	51	42
	2	41	37	40	36	38	32	40	33	42	38	41	37	39	33	42	34	42	38	41	37	39	33	42	34
	3	38	31	37	32	34	28	35	29	39	32	38	34	35	29	36	30	39	32	38	34	35	29	36	30
90	1	43	40	43	39	42	37	49	40	44	40	43	40	43	38	50	42	44	40	43	40	43	38	50	42
	2	40	36	39	35	37	32	40	33	40	37	40	36	38	33	42	34	40	37	40	36	38	33	42	34
	3	37	31	36	32	34	28	35	29	38	32	37	33	35	29	36	30	38	32	37	33	35	29	36	30

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	46	42	45	41	43	38	47	39	44	40	44	39	41	36	44	36	43	39	42	38	40	34	42	34
	2	42	37	41	36	38	31	39	32	40	35	39	33	36	29	36	30	39	34	38	31	33	27	34	28
	3	36	29	37	31	33	27	34	28	34	27	36	29	31	25	32	26	32	26	33	27	29	23	30	24
80	1	44	40	44	40	42	37	47	39	43	39	42	38	40	35	44	36	42	38	41	37	39	34	42	34
	2	40	36	40	35	37	31	39	32	39	35	38	33	35	29	36	30	38	33	37	31	33	27	34	28
	3	36	29	37	31	33	27	34	28	34	27	35	29	31	25	32	26	32	26	33	27	29	23	30	24
90	1	43	39	42	39	41	36	47	39	41	38	41	37	39	35	44	36	40	37	40	36	38	33	42	34
	2	39	35	39	34	36	31	39	32	38	34	37	33	35	29	36	30	37	33	36	31	33	27	34	28
	3	36	29	36	31	33	27	34	28	34	27	34	29	31	25	32	26	32	26	33	27	29	23	30	24
Wind Speed [mph]		170								180															
70	1	42	37	41	36	38	32	39	32	41	36	40	34	37	30	37	30								
	2	37	33	36	29	31	25	32	26	36	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
80	1	40	36	40	35	37	32	39	32	39	35	39	34	36	30	37	30								
	2	36	32	35	29	31	25	32	26	35	31	34	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
90	1	39	35	39	35	37	32	39	32	38	34	38	33	35	30	37	30								
	2	35	31	35	29	31	25	32	26	34	30	33	28	30	24	30	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21								
Wind Speed [mph]		190								200															
70	1	39	35	38	32	35	28	35	29	38	34	37	31	33	27	33	27								
	2	35	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								
80	1	38	34	37	32	35	28	35	29	37	33	36	31	33	27	33	27								
	2	34	30	32	26	28	23	29	23	33	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								
90	1	37	33	37	32	34	28	35	29	36	32	36	31	33	27	33	27								
	2	33	29	32	26	28	23	29	23	32	28	30	25	26	21	27	22								
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
100	1	44	42	44	42	45	41	55	48	44	41	44	41	44	40	53	47	43	41	43	40	43	39	52	45	
	2	42	39	42	38	41	37	48	40	41	38	41	38	40	36	47	39	41	37	40	37	39	35	45	37	
	3	40	36	39	36	38	33	43	35	39	35	39	35	37	32	41	34	38	35	38	34	36	31	39	32	
Wind Speed [mph]		110								115																
100	1	43	40	43	40	42	38	51	43	42	39	42	39	42	37	49	42	43	40	43	40	42	38	51	43	
	2	40	37	40	36	38	34	43	36	39	36	39	35	37	33	42	34	39	36	39	35	37	33	42	34	
	3	38	33	37	33	35	30	38	31	37	32	36	32	34	29	36	30	37	32	36	32	34	29	36	30	
Wind Speed [mph]		120								130																
100	1	42	39	42	38	41	36	48	40	42	39	42	39	42	37	49	42	42	39	42	38	41	36	48	40	
	2	39	35	38	35	36	32	40	33	39	36	39	35	37	33	42	34	39	36	39	35	37	33	42	34	
	3	36	31	36	32	33	28	35	29	37	32	36	32	34	29	36	30	37	32	36	32	34	29	36	30	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	41	38	41	38	40	36	47	39	40	37	40	36	39	34	44	36	39	36	39	35	37	33	42	34
	2	38	35	38	34	36	31	39	32	37	33	36	32	34	29	36	30	36	32	35	31	33	27	34	28
	3	36	29	35	31	32	27	34	28	34	27	34	29	31	25	32	26	32	26	32	27	29	23	30	24
Wind Speed [mph]		170								180															
100	1	38	35	38	34	36	31	39	32	37	34	37	33	35	30	37	30	34	30	33	28	30	24	30	25
	2	35	31	34	29	31	25	32	26	34	30	33	28	30	24	30	25	28	23	30	24	26	21	26	21
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	26	21	28	23	30	24	26	21	26	21
Wind Speed [mph]		190								200															
100	1	36	33	36	32	33	28	35	29	35	32	35	31	32	27	33	27	32	28	30	25	26	21	27	22
	2	33	29	32	26	28	23	29	23	32	28	30	25	26	21	27	22	25	20	26	21	23	19	24	19
	3	27	22	28	23	24	20	25	20	25	20	26	21	23	19	24	19	25	20	26	21	23	19	24	19

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				74in x 41.2in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	66	56	64	53	55	45	55	45	64	54	62	50	52	43	53	43	62	52	59	48	50	41	51	42	
	2	56	47	52	42	45	36	45	37	54	45	50	40	43	35	43	36	52	43	47	38	41	33	42	34	
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30	
	5	1	66	56	64	53	55	45	55	45	64	54	62	50	52	43	53	43	62	52	59	48	50	41	51	42
	2	56	47	52	42	45	36	45	37	54	45	50	40	43	35	43	36	52	43	47	38	41	33	42	34	
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30	
	10	1	66	56	64	53	55	45	55	45	64	54	62	50	52	43	53	43	62	52	59	48	50	41	51	42
	2	56	47	52	42	45	36	45	37	54	45	50	40	43	35	43	36	52	43	47	38	41	33	42	34	
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30	
0	1	60	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39									
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
	5	1	60	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
	10	1	60	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
0	1	60	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39									
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
	5	1	60	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
	10	1	60	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
0	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39									
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									
	5	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									
	10	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									
0	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39									
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									
	5	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									
	10	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	55	45	50	41	44	35	44	36	51	42	47	38	41	33	41	33	48	40	44	35	38	31	38	31
	2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
5	1	55	45	50	41	44	35	44	36	51	42	47	38	41	33	41	33	48	40	44	35	38	31	38	31
	2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
10	1	55	45	50	41	44	35	44	36	51	42	47	38	41	33	41	33	48	40	44	35	38	31	38	31
	2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180															
0	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28								
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
5	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28								
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
10	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28								
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
Wind Speed [mph]		190								200															
0	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25								
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
5	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25								
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
10	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25								
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	63	56	62	53	55	45	55	45	62	54	61	50	52	43	53	43	61	52	59	48	50	41	51	42
	2	56	47	52	42	45	36	45	37	54	45	50	40	43	35	43	36	52	43	47	38	41	33	42	34
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30
20	1	61	54	60	53	55	45	55	45	60	53	58	50	52	43	53	43	58	51	57	48	50	41	51	42
	2	54	47	52	42	45	36	45	37	53	45	50	40	43	35	43	36	51	43	47	38	41	33	42	34
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30
25	1	61	54	60	53	55	45	55	45	60	53	58	50	52	43	53	43	58	51	57	48	50	41	51	42
	2	54	47	52	42	45	36	45	37	53	45	50	40	43	35	43	36	51	43	47	38	41	33	42	34
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30
15	1	59	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
20	1	57	50	55	46	49	40	49	40	56	48	54	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
25	1	57	50	55	46	49	40	49	40	56	48	54	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
15	1	59	50	57	46	49	40	49	40	58	48	55	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
20	1	57	50	55	46	49	40	49	40	56	48	54	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
25	1	57	50	55	46	49	40	49	40	56	48	54	44	47	38	47	39								
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
15	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
20	1	54	47	52	42	45	37	45	37	56	48	54	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
25	1	54	47	52	42	45	37	45	37	56	48	54	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
15	1	56	47	52	42	45	37	45	37	58	48	55	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
20	1	54	47	52	42	45	37	45	37	56	48	54	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
25	1	54	47	52	42	45	37	45	37	56	48	54	44	47	38	47	39								
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	55	45	50	41	44	35	44	36	51	42	47	38	41	33	41	33	48	40	44	35	38	31	38	31	
	2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26	
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22	
	20	1	53	45	50	41	44	35	44	36	51	42	47	38	41	33	41	33	48	40	44	35	38	31	38	31
		2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
		3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
	25	1	53	45	50	41	44	35	44	36	51	42	47	38	41	33	41	33	48	40	44	35	38	31	38	31
		2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
		3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180																
15	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28									
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23									
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20									
	20	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28								
		2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
		3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
	25	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28								
		2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
		3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
Wind Speed [mph]		190								200																
15	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25									
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20									
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									
	20	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25								
		2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
		3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
	25	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25								
		2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
		3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	61	54	60	53	55	45	55	45	60	53	58	50	52	43	53	43	58	51	57	48	50	41	51	42	
	2	54	47	52	42	45	36	45	37	53	45	50	40	43	35	43	36	51	43	47	38	41	33	42	34	
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30	
	35	1	59	53	58	52	54	45	55	45	58	52	57	50	52	43	53	43	57	50	55	48	50	41	51	42
		2	53	46	52	42	45	36	45	37	52	45	50	40	43	35	43	36	50	43	47	38	41	33	42	34
		3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30
	40	1	58	52	57	51	53	45	55	45	57	51	55	49	52	43	53	43	55	49	54	48	50	41	51	42
		2	52	46	51	42	45	36	45	37	51	44	49	40	43	35	43	36	49	43	47	38	41	33	42	34
		3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30
30	1	57	50	55	46	49	40	49	40	56	48	54	44	47	38	47	39									
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
	35	1	55	49	54	46	49	40	49	40	54	48	53	44	47	38	47	39								
		2	49	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
		3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
	40	1	54	48	53	46	49	40	49	40	53	47	52	44	47	38	47	39								
		2	48	41	45	37	39	32	40	33	47	40	44	35	38	31	39	32								
		3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
30	1	57	50	55	46	49	40	49	40	56	48	54	44	47	38	47	39									
	2	50	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32									
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27									
	35	1	55	49	54	46	49	40	49	40	54	48	53	44	47	38	47	39								
		2	49	41	45	37	39	32	40	33	48	40	44	35	38	31	39	32								
		3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
	40	1	54	48	53	46	49	40	49	40	53	47	52	44	47	38	47	39								
		2	48	41	45	37	39	32	40	33	47	40	44	35	38	31	39	32								
		3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
30	1	54	47	52	42	45	37	45	37	56	48	54	44	47	38	47	39									
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									
	35	1	53	46	52	42	45	37	45	37	54	48	53	44	47	38	47	39								
		2	46	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
		3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
	40	1	52	46	51	42	45	37	45	37	53	47	52	44	47	38	47	39								
		2	46	38	42	34	36	30	37	30	47	40	44	35	38	31	39	32								
		3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
30	1	54	47	52	42	45	37	45	37	56	48	54	44	47	38	47	39									
	2	47	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32									
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27									
	35	1	53	46	52	42	45	37	45	37	54	48	53	44	47	38	47	39								
		2	46	38	42	34	36	30	37	30	48	40	44	35	38	31	39	32								
		3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
	40	1	52	46	51	42	45	37	45	37	53	47	52	44	47	38	47	39								
		2	46	38	42	34	36	30	37	30	47	40	44	35	38	31	39	32								
		3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the e edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	53	45	50	41	44	35	44	36	51	42	47	38	41	33	41	33	48	40	44	35	38	31	38	31	
	2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26	
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22	
	35	1	52	45	50	41	44	35	44	36	50	42	47	38	41	33	41	33	47	40	44	35	38	31	38	31
		2	45	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
		3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
	40	1	51	44	49	41	44	35	44	36	49	42	47	38	41	33	41	33	47	40	44	35	38	31	38	31
		2	44	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
		3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180																
30	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28									
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23									
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20									
35	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28									
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23									
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20									
40	1	45	37	41	33	36	29	36	30	43	35	39	31	34	27	34	28									
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23									
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20									
Wind Speed [mph]		190								200																
30	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25									
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20									
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									
35	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25									
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20									
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									
40	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25									
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20									
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	56	51	55	50	52	45	55	45	55	50	54	48	51	43	53	43	54	48	53	47	49	41	51	42
	2	51	45	50	42	45	36	45	37	50	44	48	40	43	35	43	36	48	42	47	38	41	33	42	34
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30
50	1	55	50	54	49	51	45	55	45	54	49	53	47	50	43	53	43	53	47	52	46	49	41	51	42
	2	50	44	49	42	45	36	45	37	49	43	47	40	43	35	43	36	47	42	46	38	41	33	42	34
	3	43	35	45	37	39	32	39	32	41	33	43	35	37	30	38	31	39	32	41	33	36	29	36	30
60	1	52	48	52	47	50	44	55	45	51	47	51	46	48	42	53	43	51	46	50	45	47	41	51	42
	2	48	43	47	42	44	36	45	37	47	42	46	40	42	35	43	36	46	41	45	38	41	33	42	34
	3	43	35	43	37	39	32	39	32	41	33	42	35	37	30	38	31	39	32	41	33	36	29	36	30
45	1	53	47	52	46	48	40	49	40	52	46	51	44	47	38	47	39								
	2	47	41	45	37	39	32	40	33	46	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
50	1	52	46	51	45	47	40	49	40	51	45	50	44	46	38	47	39								
	2	46	41	45	37	39	32	40	33	45	39	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
60	1	50	45	49	44	46	40	49	40	49	44	48	43	45	38	47	39								
	2	45	40	44	37	39	32	40	33	44	38	43	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
45	1	53	47	52	46	48	40	49	40	52	46	51	44	47	38	47	39								
	2	47	41	45	37	39	32	40	33	46	40	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
50	1	52	46	51	45	47	40	49	40	51	45	50	44	46	38	47	39								
	2	46	41	45	37	39	32	40	33	45	39	44	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
60	1	50	45	49	44	46	40	49	40	49	44	48	43	45	38	47	39								
	2	45	40	44	37	39	32	40	33	44	38	43	35	38	31	39	32								
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27								
45	1	51	45	50	42	45	37	45	37	52	46	51	44	47	38	47	39								
	2	45	38	42	34	36	30	37	30	46	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
50	1	50	44	49	42	45	37	45	37	51	45	50	44	46	38	47	39								
	2	44	38	42	34	36	30	37	30	45	39	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
60	1	48	43	47	42	44	37	45	37	49	44	48	43	45	38	47	39								
	2	43	37	42	34	36	30	37	30	44	38	43	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
45	1	51	45	50	42	45	37	45	37	52	46	51	44	47	38	47	39								
	2	45	38	42	34	36	30	37	30	46	40	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
50	1	50	44	49	42	45	37	45	37	51	45	50	44	46	38	47	39								
	2	44	38	42	34	36	30	37	30	45	39	44	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								
60	1	48	43	47	42	44	37	45	37	49	44	48	43	45	38	47	39								
	2	43	37	42	34	36	30	37	30	44	38	43	35	38	31	39	32								
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	50	44	48	41	44	35	44	36	48	42	46	38	41	33	41	33	46	40	44	35	38	31	38	31
	2	44	37	40	33	35	28	36	29	42	35	38	30	33	26	33	27	40	33	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
50	1	49	43	48	41	44	35	44	36	47	41	46	38	41	33	41	33	45	39	44	35	38	31	38	31
	2	43	37	40	33	35	28	36	29	41	35	38	30	33	26	33	27	39	33	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
60	1	47	42	46	41	43	35	44	36	45	40	44	38	41	33	41	33	44	38	43	35	38	31	38	31
	2	42	37	40	33	35	28	36	29	40	35	38	30	33	26	33	27	38	33	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180															
45	1	44	37	41	33	36	29	36	30	42	35	39	31	34	27	34	28								
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
50	1	43	37	41	33	36	29	36	30	42	35	39	31	34	27	34	28								
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
60	1	42	37	41	33	36	29	36	30	41	35	39	31	34	27	34	28								
	2	37	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
Wind Speed [mph]		190								200															
45	1	41	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25								
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
50	1	40	34	37	30	32	26	32	26	39	32	35	28	30	24	31	25								
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
60	1	39	34	37	30	32	26	32	26	38	32	35	28	30	24	31	25								
	2	34	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	50	46	50	45	48	43	55	45	49	45	49	44	47	42	53	43	49	44	48	43	46	40	51	42	
	2	46	42	45	41	43	36	45	37	45	41	44	40	42	35	43	36	44	40	43	38	40	33	42	34	
	3	43	35	42	37	39	32	39	32	41	33	41	35	37	30	38	31	39	32	40	33	36	29	36	30	
	80	1	48	45	48	44	47	42	55	45	48	44	47	43	46	41	53	43	47	43	46	42	45	40	51	42
		2	45	40	44	40	42	36	45	37	44	39	43	39	41	35	43	36	43	39	42	38	40	33	42	34
		3	42	35	41	36	38	32	39	32	41	33	40	35	37	30	38	31	39	32	39	33	36	29	36	30
	90	1	47	43	46	43	46	41	54	45	46	42	46	42	45	40	52	43	45	42	45	41	44	39	51	42
		2	43	39	43	39	41	36	45	37	42	39	42	38	40	35	43	36	42	38	41	37	39	33	42	34
		3	41	35	40	36	37	32	39	32	40	33	39	35	36	30	38	31	39	32	38	33	35	29	36	30
Wind Speed [mph]		110								115																
70	1	48	43	47	42	45	39	49	40	47	42	46	41	44	38	47	39	42	38	41	35	38	31	39	32	
	2	43	39	42	37	39	32	40	33	42	38	41	35	38	31	39	32	36	29	38	31	33	27	33	27	
	3	37	30	39	32	34	28	35	28	36	29	38	31	33	27	33	27	45	41	45	40	43	37	47	39	
80	1	46	42	46	41	44	38	49	40	45	41	45	40	43	37	47	39	41	37	40	35	37	31	39	32	
	2	42	38	41	37	38	32	40	33	41	37	40	35	37	31	39	32	36	29	37	31	33	27	33	27	
	3	37	30	38	32	34	28	35	28	36	29	37	31	33	27	33	27	44	40	43	39	42	37	47	39	
90	1	45	41	44	40	43	38	49	40	44	40	43	39	42	37	47	39	40	36	39	35	37	31	39	32	
	2	41	37	40	36	38	32	40	33	40	36	39	35	37	31	39	32	36	29	36	31	33	27	33	27	
	3	37	30	37	32	34	28	35	28	36	29	36	31	33	27	33	27	47	42	46	41	44	38	47	39	
Wind Speed [mph]		120								130																
70	1	46	42	45	41	43	37	45	37	47	42	46	41	44	38	47	39	42	38	41	35	38	31	39	32	
	2	42	37	41	34	36	30	37	30	42	38	41	35	38	31	39	32	36	29	38	31	33	27	33	27	
	3	35	28	36	30	32	26	32	26	36	29	38	31	33	27	33	27	45	41	45	40	43	37	47	39	
80	1	45	40	44	40	42	36	45	37	45	41	45	40	43	37	47	39	41	37	40	35	37	31	39	32	
	2	40	36	40	34	36	30	37	30	41	37	40	35	37	31	39	32	36	29	37	31	33	27	33	27	
	3	35	28	36	30	32	26	32	26	36	29	37	31	33	27	33	27	44	40	43	39	42	37	47	39	
90	1	43	39	43	39	41	36	45	37	44	40	43	39	42	37	47	39	40	36	39	35	37	31	39	32	
	2	39	35	39	34	36	30	37	30	40	36	39	35	37	31	39	32	36	29	36	31	33	27	33	27	
	3	35	28	35	30	32	26	32	26	36	29	36	31	33	27	33	27	47	42	46	41	44	38	47	39	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	45	41	45	40	42	35	44	36	44	39	43	38	40	33	41	33	42	37	41	35	38	31	38	31
	2	41	36	40	33	35	28	36	29	39	34	38	30	33	26	33	27	37	33	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
80	1	44	40	43	39	41	35	44	36	42	38	42	37	39	33	41	33	41	37	40	35	37	31	38	31
	2	40	35	39	33	35	28	36	29	38	33	37	30	33	26	33	27	37	32	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
90	1	43	39	42	38	40	35	44	36	41	37	41	36	38	33	41	33	40	36	39	35	37	31	38	31
	2	39	34	38	33	35	28	36	29	37	33	36	30	33	26	33	27	36	31	35	29	31	25	31	26
	3	33	27	35	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180															
70	1	41	36	40	33	36	29	36	30	40	35	38	31	34	27	34	28								
	2	36	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
80	1	40	35	39	33	36	29	36	30	39	34	38	31	34	27	34	28								
	2	35	31	33	27	29	23	30	24	34	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
90	1	39	35	38	33	35	29	36	30	38	33	37	31	34	27	34	28								
	2	35	30	33	27	29	23	30	24	33	29	31	25	27	22	28	23								
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20								
Wind Speed [mph]		190								200															
70	1	38	33	37	30	32	26	32	26	37	32	35	28	30	24	31	25								
	2	33	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
80	1	37	33	36	30	32	26	32	26	36	32	35	28	30	24	31	25								
	2	33	27	29	24	26	21	26	22	32	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
90	1	36	32	36	30	32	26	32	26	35	31	34	28	30	24	31	25								
	2	32	27	29	24	26	21	26	22	31	26	28	23	24	20	25	20								
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	45	42	45	42	45	40	53	45	44	41	44	41	44	39	52	43	44	41	44	40	43	38	50	42
	2	42	38	42	38	40	35	45	37	41	38	41	37	39	34	43	36	41	37	40	36	38	33	42	34
	3	40	35	39	35	37	32	39	32	39	33	38	34	36	30	38	31	38	32	37	33	35	29	36	30
0	1																								
	2																								
	3																								
100	1	43	40	43	39	42	37	49	40	43	39	42	39	41	36	47	39								
	2	40	36	39	35	37	32	40	33	39	35	39	34	36	31	39	32								
	3	37	30	36	32	34	28	35	28	36	29	36	31	33	27	33	27								
0	1																								
	2																								
	3																								
100	1	42	38	42	38	40	35	45	37	43	39	42	39	41	36	47	39								
	2	38	34	38	34	35	30	37	30	39	35	39	34	36	31	39	32								
	3	35	28	35	30	32	26	32	26	36	29	36	31	33	27	33	27								
0	1																								
	2																								
	3																								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$

64" to 71"

48" to 63"

$x \leq 47''$

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	41	38	41	37	39	34	44	36	40	36	40	36	38	33	41	33	39	35	38	34	36	31	38	31
	2	38	34	37	33	34	28	36	29	36	32	36	30	33	26	33	27	35	31	34	29	31	25	31	26
	3	33	27	34	28	30	25	31	25	31	25	33	26	28	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180															
100	1	38	34	37	33	35	29	36	30	37	33	36	31	33	27	34	28	33	29	31	25	27	22	28	23
	2	34	30	33	27	29	23	30	24	33	29	31	25	27	22	28	23	33	29	31	25	27	22	28	23
	3	27	22	29	23	25	20	26	21	26	21	27	22	23	19	24	20	26	21	27	22	23	19	24	20
Wind Speed [mph]		190								200															
100	1	36	32	35	30	32	26	32	26	35	31	34	28	30	24	31	25	35	31	34	28	30	24	31	25
	2	32	27	29	24	26	21	26	22	31	26	28	23	24	20	25	20	31	26	28	23	24	20	25	20
	3	24	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	23	19	24	20	21	17	22	18

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	72	64	70	62	63	52	63	53	70	62	68	59	61	50	61	50	68	60	66	56	58	48	59	48	
	2	64	54	61	49	52	43	53	43	62	52	59	47	50	41	50	41	60	50	56	45	48	39	48	40	
	3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	
	5	1	72	64	70	62	63	52	63	53	70	62	68	59	61	50	61	50	68	60	66	56	58	48	59	48
		2	64	54	61	49	52	43	53	43	62	52	59	47	50	41	50	41	60	50	56	45	48	39	48	40
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35
	10	1	70	64	69	62	63	52	63	53	69	62	68	59	61	50	61	50	68	60	66	56	58	48	59	48
		2	64	54	61	49	52	43	53	43	62	52	59	47	50	41	50	41	60	50	56	45	48	39	48	40
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35
0	1	67	58	65	54	56	46	57	47	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45	
	2	58	48	54	43	46	38	47	38	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37	
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32	
	5	1	67	58	65	54	56	46	57	47	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45
		2	58	48	54	43	46	38	47	38	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37
		3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32
	10	1	67	58	65	54	56	46	57	47	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45
		2	58	48	54	43	46	38	47	38	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37
		3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32
0	1	64	54	62	50	52	43	53	43	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45	
	2	54	45	49	40	43	35	43	35	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37	
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32	
	5	1	64	54	62	50	52	43	53	43	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45
		2	54	45	49	40	43	35	43	35	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37
		3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32
	10	1	64	54	62	50	52	43	53	43	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45
		2	54	45	49	40	43	35	43	35	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37
		3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32
0	1	64	54	62	50	52	43	53	43	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45	
	2	54	45	49	40	43	35	43	35	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37	
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32	
	5	1	64	54	62	50	52	43	53	43	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45
		2	54	45	49	40	43	35	43	35	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37
		3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32
	10	1	64	54	62	50	52	43	53	43	65	56	63	52	54	45	54	45	65	56	63	52	54	45	54	45
		2	54	45	49	40	43	35	43	35	56	46	51	42	44	36	45	37	56	46	51	42	44	36	45	37
		3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32	42	34	45	36	39	31	39	32

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	63	52	59	48	50	41	51	42	59	49	55	45	47	39	48	39	56	46	52	42	44	36	45	37
	2	52	43	48	38	41	33	42	34	49	40	44	36	38	31	39	32	46	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
5	1	63	52	59	48	50	41	51	42	59	49	55	45	47	39	48	39	56	46	52	42	44	36	45	37
	2	52	43	48	38	41	33	42	34	49	40	44	36	38	31	39	32	46	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
10	1	63	52	59	48	50	41	51	42	59	49	55	45	47	39	48	39	56	46	52	42	44	36	45	37
	2	52	43	48	38	41	33	42	34	49	40	44	36	38	31	39	32	46	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
0	1	53	43	48	39	42	34	42	34	50	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
5	1	53	43	48	39	42	34	42	34	50	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
10	1	53	43	48	39	42	34	42	34	50	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
0	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
5	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
10	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	67	62	66	61	63	52	63	53	66	61	65	59	61	50	61	50	65	59	64	56	58	48	59	48	
	2	62	54	61	49	52	43	53	43	61	52	59	47	50	41	50	41	59	50	56	45	48	39	48	40	
	3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35	
	20	1	65	60	64	58	63	52	63	53	64	58	63	57	61	50	61	50	63	57	62	55	58	48	59	48
		2	60	53	58	49	52	43	53	43	58	51	57	47	50	41	50	41	57	50	55	45	48	39	48	40
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35
	25	1	65	60	64	58	62	52	63	53	64	58	63	57	60	50	61	50	63	57	62	55	58	48	59	48
		2	60	53	58	49	52	43	53	43	58	51	57	47	50	41	50	41	57	50	55	45	48	39	48	40
		3	50	41	53	43	46	37	46	38	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35
15	1	64	58	63	54	56	46	57	47	63	56	62	52	54	45	54	45									
	2	58	48	54	43	46	38	47	38	56	46	51	42	44	36	45	37									
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32									
	20	1	62	55	61	54	56	46	57	47	61	54	60	52	54	45	54	45								
		2	55	48	54	43	46	38	47	38	54	46	51	42	44	36	45	37								
		3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
	25	1	62	55	61	54	56	46	57	47	61	54	60	52	54	45	54	45								
		2	55	48	54	43	46	38	47	38	54	46	51	42	44	36	45	37								
		3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
15	1	62	54	61	50	52	43	53	43	63	56	62	52	54	45	54	45									
	2	54	45	49	40	43	35	43	35	56	46	51	42	44	36	45	37									
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32									
	20	1	60	53	58	50	52	43	53	43	61	54	60	52	54	45	54	45								
		2	53	45	49	40	43	35	43	35	54	46	51	42	44	36	45	37								
		3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								
	25	1	60	53	58	50	52	43	53	43	61	54	60	52	54	45	54	45								
		2	53	45	49	40	43	35	43	35	54	46	51	42	44	36	45	37								
		3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	61	52	59	48	50	41	51	42	58	49	55	45	47	39	48	39	56	46	52	42	44	36	45	37
	2	52	43	48	38	41	33	42	34	49	40	44	36	38	31	39	32	46	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
20	1	58	51	57	48	50	41	51	42	56	49	54	45	47	39	48	39	54	46	52	42	44	36	45	37
	2	51	43	48	38	41	33	42	34	49	40	44	36	38	31	39	32	46	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
25	1	58	51	57	48	50	41	51	42	56	49	54	45	47	39	48	39	54	46	52	42	44	36	45	37
	2	51	43	48	38	41	33	42	34	49	40	44	36	38	31	39	32	46	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
15	1	53	43	48	39	42	34	42	34	50	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
20	1	52	43	48	39	42	34	42	34	50	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
25	1	52	43	48	39	42	34	42	34	50	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
15	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
20	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
25	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
15	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
20	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
25	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	64	58	63	57	60	52	63	53	63	57	62	56	58	50	61	50	62	56	61	54	57	48	59	48
	2	58	52	57	49	52	43	53	43	57	50	56	47	50	41	50	41	56	49	54	45	48	39	48	40
	3	50	41	52	43	46	37	46	38	48	39	51	41	44	36	44	36	46	37	48	39	42	34	42	35
35	1	62	57	61	56	59	52	63	53	61	55	60	54	57	50	61	50	60	54	59	53	56	48	59	48
	2	57	51	56	49	52	43	53	43	55	49	54	47	50	41	50	41	54	48	53	45	48	39	48	40
	3	50	41	51	43	46	37	46	38	48	39	50	41	44	36	44	36	46	37	48	39	42	34	42	35
40	1	60	55	60	54	57	51	63	53	59	54	58	53	56	49	61	50	58	53	57	52	54	48	59	48
	2	55	49	54	48	51	43	53	43	54	48	53	47	49	41	50	41	53	47	52	45	48	39	48	40
	3	50	41	50	43	46	37	46	38	48	39	49	41	44	36	44	36	46	37	47	39	42	34	42	35
30	1	61	54	60	53	55	46	57	47	60	53	58	51	54	45	54	45								
	2	54	48	53	43	46	38	47	38	53	46	51	42	44	36	45	37								
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
35	1	59	53	58	52	54	46	57	47	58	52	57	50	53	45	54	45								
	2	53	47	52	43	46	38	47	38	52	45	50	42	44	36	45	37								
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
40	1	57	52	56	50	53	46	57	47	56	50	55	49	52	45	54	45								
	2	52	46	50	43	46	38	47	38	50	45	49	42	44	36	45	37								
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
30	1	61	54	60	53	55	46	57	47	60	53	58	51	54	45	54	45								
	2	54	48	53	43	46	38	47	38	53	46	51	42	44	36	45	37								
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
35	1	59	53	58	52	54	46	57	47	58	52	57	50	53	45	54	45								
	2	53	47	52	43	46	38	47	38	52	45	50	42	44	36	45	37								
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
40	1	57	52	56	50	53	46	57	47	56	50	55	49	52	45	54	45								
	2	52	46	50	43	46	38	47	38	50	45	49	42	44	36	45	37								
	3	44	36	46	38	40	33	40	33	42	34	45	36	39	31	39	32								
30	1	58	52	57	50	52	43	53	43	60	53	58	51	54	45	54	45								
	2	52	45	49	40	43	35	43	35	53	46	51	42	44	36	45	37								
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								
35	1	57	51	55	49	51	43	53	43	58	52	57	50	53	45	54	45								
	2	51	44	49	40	43	35	43	35	52	45	50	42	44	36	45	37								
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								
40	1	55	49	54	48	51	43	53	43	56	50	55	49	52	45	54	45								
	2	49	43	48	40	43	35	43	35	50	45	49	42	44	36	45	37								
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								
30	1	58	52	57	50	52	43	53	43	60	53	58	51	54	45	54	45								
	2	52	45	49	40	43	35	43	35	53	46	51	42	44	36	45	37								
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								
35	1	57	51	55	49	51	43	53	43	58	52	57	50	53	45	54	45								
	2	51	44	49	40	43	35	43	35	52	45	50	42	44	36	45	37								
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								
40	1	55	49	54	48	51	43	53	43	56	50	55	49	52	45	54	45								
	2	49	43	48	40	43	35	43	35	50	45	49	42	44	36	45	37								
	3	41	33	43	35	37	30	38	31	42	34	45	36	39	31	39	32								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	57	51	56	48	50	41	51	42	55	48	54	45	47	39	48	39	53	46	51	42	44	36	45	37
	2	51	43	48	38	41	33	42	34	48	40	44	36	38	31	39	32	46	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
35	1	56	49	54	48	50	41	51	42	54	47	52	45	47	39	48	39	52	45	50	42	44	36	45	37
	2	49	43	48	38	41	33	42	34	47	40	44	36	38	31	39	32	45	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
40	1	54	48	53	47	49	41	51	42	52	46	51	45	47	39	48	39	50	44	49	42	44	36	45	37
	2	48	42	47	38	41	33	42	34	46	40	44	36	38	31	39	32	44	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
Wind Speed [mph]		170								180															
30	1	51	43	48	39	42	34	42	34	49	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
35	1	50	43	48	39	42	34	42	34	48	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
40	1	49	43	47	39	42	34	42	34	47	41	46	37	39	32	40	33								
	2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
Wind Speed [mph]		190								200															
30	1	47	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
35	1	46	39	43	35	37	30	38	31	45	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
40	1	45	39	43	35	37	30	38	31	44	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	58	54	58	53	56	50	63	53	57	53	57	52	55	48	61	50	56	51	56	50	53	47	59	48	
	2	54	48	53	47	50	43	53	43	53	47	52	46	48	41	50	41	51	46	50	45	47	39	48	40	
	3	50	41	49	43	45	37	46	38	48	39	48	41	44	36	44	36	46	37	46	39	42	34	42	35	
	50	1	56	52	56	52	55	49	63	53	56	51	55	50	54	48	61	50	55	50	54	49	52	46	59	48
		2	52	47	52	46	49	43	53	43	51	46	50	45	48	41	50	41	50	45	49	44	46	39	48	40
		3	49	41	48	42	45	37	46	38	48	39	47	41	43	36	44	36	46	37	46	39	42	34	42	35
	60	1	53	50	53	49	53	47	62	53	53	49	53	48	52	46	60	50	52	48	52	47	50	45	59	48
		2	50	46	49	45	47	42	53	43	49	45	48	44	46	40	50	41	48	44	47	43	45	39	48	40
		3	47	41	46	41	43	37	46	38	46	39	45	40	42	36	44	36	45	37	44	39	41	34	42	35
Wind Speed [mph]		110								115																
45	1	55	50	55	49	52	46	57	47	54	49	54	48	51	44	54	45									
	2	50	45	49	43	46	38	47	38	49	44	48	42	44	36	45	37									
	3	44	36	45	38	40	33	40	33	42	34	44	36	39	31	39	32									
	50	1	54	49	53	48	51	45	57	47	53	48	52	47	50	44	54	45								
		2	49	44	48	43	45	38	47	38	48	43	47	42	44	36	45	37								
		3	44	36	44	38	40	33	40	33	42	34	43	36	39	31	39	32								
	60	1	51	47	51	46	49	44	57	47	51	46	50	46	48	43	54	45								
		2	47	43	46	42	44	38	47	38	46	42	46	41	43	36	45	37								
		3	44	36	43	38	40	33	40	33	42	34	42	36	39	31	39	32								
Wind Speed [mph]		120								130																
45	1	54	48	53	47	50	43	53	43	54	49	54	48	51	44	54	45									
	2	48	43	47	40	43	35	43	35	49	44	48	42	44	36	45	37									
	3	41	33	43	35	37	30	38	31	42	34	44	36	39	31	39	32									
	50	1	52	47	52	46	49	43	53	43	53	48	52	47	50	44	54	45								
		2	47	42	46	40	43	35	43	35	48	43	47	42	44	36	45	37								
		3	41	33	42	35	37	30	38	31	42	34	43	36	39	31	39	32								
	60	1	50	45	49	45	47	42	53	43	51	46	50	46	48	43	54	45								
		2	45	41	45	40	42	35	43	35	46	42	46	41	43	36	45	37								
		3	41	33	41	35	37	30	38	31	42	34	42	36	39	31	39	32								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	53	47	52	46	48	41	51	42	51	45	50	44	46	39	48	39	49	44	48	42	44	36	45	37
	2	47	42	46	38	41	33	42	34	45	40	44	36	38	31	39	32	44	38	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
50	1	51	46	51	45	48	41	51	42	50	45	49	43	46	39	48	39	48	43	47	42	44	36	45	37
	2	46	41	45	38	41	33	42	34	45	39	43	36	38	31	39	32	43	37	41	33	36	29	37	30
	3	39	32	41	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
60	1	49	45	49	44	46	41	51	42	48	43	47	42	44	39	48	39	46	41	45	40	43	36	45	37
	2	45	40	44	38	41	33	42	34	43	38	42	36	38	31	39	32	41	37	40	33	36	29	37	30
	3	39	32	40	33	36	29	36	30	36	30	38	31	33	27	34	28	34	28	36	29	31	25	32	26
Wind Speed [mph]		170								180															
45	1	48	42	46	39	42	34	42	34	46	40	45	37	39	32	40	33								
	2	42	36	39	31	34	27	34	28	40	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
50	1	47	41	46	39	42	34	42	34	45	40	44	37	39	32	40	33								
	2	41	36	39	31	34	27	34	28	40	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
60	1	45	40	44	39	41	34	42	34	44	39	43	37	39	32	40	33								
	2	40	35	39	31	34	27	34	28	39	34	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
Wind Speed [mph]		190								200															
45	1	44	39	43	35	37	30	38	31	43	37	41	33	35	29	36	29								
	2	39	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
50	1	44	38	43	35	37	30	38	31	42	37	41	33	35	29	36	29								
	2	38	32	35	28	30	24	31	25	37	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
60	1	42	37	41	35	37	30	38	31	41	36	40	33	35	29	36	29								
	2	37	32	35	28	30	24	31	25	36	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	51	48	51	47	51	46	61	53	50	47	50	47	50	45	59	50	50	46	49	46	49	44	57	48
	2	48	44	47	43	46	41	53	43	47	43	47	42	45	40	50	41	46	42	46	41	44	38	48	40
	3	45	41	44	40	42	37	46	38	44	39	44	39	41	36	44	36	43	37	43	38	40	34	42	35
80	1	49	46	49	46	49	45	60	52	48	45	48	45	48	44	58	50	47	44	47	44	47	43	56	48
	2	46	42	46	42	45	40	52	43	45	42	45	41	44	39	50	41	44	41	44	40	43	38	48	40
	3	43	40	43	39	41	36	46	38	43	39	42	38	40	35	44	36	42	37	41	37	39	34	42	35
90	1	46	44	47	44	47	43	58	51	46	44	46	43	47	42	57	50	46	43	46	43	46	42	55	48
	2	44	41	44	41	43	39	51	43	44	40	43	40	42	38	50	41	43	40	43	39	42	37	48	40
	3	42	39	42	38	40	36	46	38	41	38	41	37	39	35	44	36	41	37	40	36	38	34	42	35
70	1	49	45	49	45	48	43	56	47	48	45	48	44	47	42	54	45								
	2	45	41	45	40	43	37	47	38	45	40	44	39	42	36	45	37								
	3	42	36	42	37	39	33	40	33	42	34	41	36	38	31	39	32								
80	1	47	44	47	43	46	42	55	47	46	43	46	43	45	41	53	45								
	2	44	40	43	39	42	37	47	38	43	39	43	38	41	36	45	37								
	3	41	36	40	36	38	33	40	33	40	34	40	35	37	31	39	32								
90	1	45	42	45	42	45	41	54	47	45	42	45	41	44	40	53	45								
	2	42	39	42	38	41	36	47	38	42	38	41	37	40	35	45	37								
	3	40	36	39	35	37	33	40	33	39	34	39	35	36	31	39	32								
70	1	49	45	49	45	48	43	56	47	48	45	48	44	47	42	54	45								
	2	45	41	45	40	43	37	47	38	45	40	44	39	42	36	45	37								
	3	42	36	42	37	39	33	40	33	42	34	41	36	38	31	39	32								
80	1	47	44	47	43	46	42	55	47	46	43	46	43	45	41	53	45								
	2	44	40	43	39	42	37	47	38	43	39	43	38	41	36	45	37								
	3	41	36	40	36	38	33	40	33	40	34	40	35	37	31	39	32								
90	1	45	42	45	42	45	41	54	47	45	42	45	41	44	40	53	45								
	2	42	39	42	38	41	36	47	38	42	38	41	37	40	35	45	37								
	3	40	36	39	35	37	33	40	33	39	34	39	35	36	31	39	32								
70	1	48	44	47	43	46	41	53	43	48	45	48	44	47	42	54	45								
	2	44	40	43	39	41	35	43	35	45	40	44	39	42	36	45	37								
	3	41	33	40	35	37	30	38	31	42	34	41	36	38	31	39	32								
80	1	46	42	46	42	45	40	52	43	46	43	46	43	45	41	53	45								
	2	42	38	42	38	40	35	43	35	43	39	43	38	41	36	45	37								
	3	40	33	39	34	36	30	38	31	40	34	40	35	37	31	39	32								
90	1	44	41	44	41	43	39	51	43	45	42	45	41	44	40	53	45								
	2	41	37	41	37	39	34	43	35	42	38	41	37	40	35	45	37								
	3	39	33	38	34	36	30	38	31	39	34	39	35	36	31	39	32								
70	1	48	44	47	43	46	41	53	43	48	45	48	44	47	42	54	45								
	2	44	40	43	39	41	35	43	35	45	40	44	39	42	36	45	37								
	3	41	33	40	35	37	30	38	31	42	34	41	36	38	31	39	32								
80	1	46	42	46	42	45	40	52	43	46	43	46	43	45	41	53	45								
	2	42	38	42	38	40	35	43	35	43	39	43	38	41	36	45	37								
	3	40	33	39	34	36	30	38	31	40	34	40	35	37	31	39	32								
90	1	44	41	44	41	43	39	51	43	45	42	45	41	44	40	53	45								
	2	41	37	41	37	39	34	43	35	42	38	41	37	40	35	45	37								
	3	39	33	38	34	36	30	38	31	39	34	39	35	36	31	39	32								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	47	43	47	42	45	40	51	42	46	42	45	41	43	38	48	39	45	40	44	39	41	36	45	37
	2	43	39	42	38	40	33	42	34	42	37	41	36	38	31	39	32	40	36	39	33	36	29	37	30
	3	39	32	39	33	36	29	36	30	36	30	37	31	33	27	34	28	34	28	36	29	31	25	32	26
80	1	45	42	45	41	44	39	51	42	44	40	44	40	42	37	48	39	43	39	42	38	41	36	45	37
	2	42	38	41	37	39	33	42	34	40	36	40	35	37	31	39	32	39	35	38	33	36	29	37	30
	3	39	32	38	33	35	29	36	30	36	30	37	31	33	27	34	28	34	28	35	29	31	25	32	26
90	1	44	40	43	40	43	38	50	42	43	39	42	39	41	36	48	39	42	38	41	37	40	35	45	37
	2	40	37	40	36	38	33	42	34	39	35	39	35	36	31	39	32	38	34	37	33	35	29	37	30
	3	38	32	37	33	35	29	36	30	36	30	36	31	33	27	34	28	34	28	34	29	31	25	32	26
Wind Speed [mph]		170								180															
70	1	43	39	43	38	40	34	42	34	42	38	41	37	38	32	40	33								
	2	39	34	38	31	34	27	34	28	38	33	37	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
80	1	42	38	41	37	39	34	42	34	41	37	40	36	38	32	40	33								
	2	38	34	37	31	34	27	34	28	37	32	36	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	30	24	32	26	28	22	28	23								
90	1	41	37	40	36	38	33	42	34	40	36	39	35	37	32	40	33								
	2	37	33	36	31	33	27	34	28	36	32	35	30	32	26	33	27								
	3	32	26	33	27	29	24	30	24	30	24	32	26	28	22	28	23								
Wind Speed [mph]		190								200															
70	1	41	36	40	35	37	30	38	31	40	35	39	33	35	29	36	29								
	2	36	32	35	28	30	24	31	25	35	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
80	1	40	35	39	35	36	30	38	31	39	34	38	33	35	29	36	29								
	2	35	31	35	28	30	24	31	25	34	30	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								
90	1	39	35	38	34	36	30	38	31	38	34	37	33	34	29	36	29								
	2	35	31	34	28	30	24	31	25	34	29	33	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	44	43	45	43	46	42	57	51	44	42	45	42	45	41	56	49	44	42	44	41	44	41	54	48
	2	43	40	43	40	42	38	51	43	42	39	42	39	41	37	49	41	42	38	41	38	41	36	48	40
	3	41	38	40	37	39	35	46	38	40	37	40	36	38	34	44	36	39	36	39	35	37	33	42	35
Wind Speed [mph]		110								115															
100	1	44	41	44	41	44	40	53	46	43	40	43	40	43	39	52	45	40	37	40	37	39	34	45	37
	2	41	38	41	37	40	35	46	38	40	37	40	37	39	34	45	37	38	34	38	34	36	31	39	32
	3	39	35	38	35	37	32	40	33	38	34	38	34	36	31	39	32								
Wind Speed [mph]		120								130															
100	1	43	40	43	39	42	38	51	43	43	40	43	40	43	39	52	45	40	37	40	37	39	34	45	37
	2	40	36	39	36	38	34	43	35	40	37	40	37	39	34	45	37	38	34	38	34	36	31	39	32
	3	37	33	37	33	35	30	38	31	38	34	38	34	36	31	39	32								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	42	39	42	39	42	37	49	42	41	38	41	38	40	36	47	39	40	37	40	36	39	34	45	37
	2	39	36	39	35	37	33	42	34	38	35	38	34	36	31	39	32	37	33	36	33	34	29	37	30
	3	37	32	36	32	34	29	36	30	36	30	35	31	33	27	34	28	34	28	34	29	31	25	32	26
Wind Speed [mph]		170								180															
100	1	39	36	39	35	37	33	42	34	38	35	38	34	36	32	40	33								
	2	36	32	35	31	33	27	34	28	35	31	34	30	32	26	33	27								
	3	32	26	33	27	29	24	30	24	30	24	31	26	28	22	28	23								
Wind Speed [mph]		190								200															
100	1	38	34	37	33	35	30	38	31	37	33	36	32	34	29	36	29								
	2	34	30	33	28	30	24	31	25	33	29	32	27	28	23	29	24								
	3	29	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge															
0	1	66	57	64	53	55	46	56	46	64	55	62	51	53	44	53	44	63	53	60	48	51	42	51	42	
	2	57	47	53	42	45	37	46	38	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34	
	3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30	
	5	1	66	57	64	53	55	46	56	46	64	55	62	51	53	44	53	44	63	53	60	48	51	42	51	42
		2	57	47	53	42	45	37	46	38	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34
		3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
	10	1	66	57	64	53	55	46	56	46	64	55	62	51	53	44	53	44	63	53	60	48	51	42	51	42
		2	57	47	53	42	45	37	46	38	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34
		3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
0	1	61	51	57	46	49	40	49	40	59	49	55	44	47	38	47	39	ASCE Group Zone	0 - 7.5	Gable						
	2	51	42	46	37	40	32	40	33	49	40	44	36	38	31	39	32			1 = 1						
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28			2 = 2						
	5	1	61	51	57	46	49	40	49	40	59	49	55	44	47	38	47		39	3 = 3						
		2	51	42	46	37	40	32	40	33	49	40	44	36	38	31	39		32	1 = 1						
		3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34		28	2 = 2						
	10	1	61	51	57	46	49	40	49	40	59	49	55	44	47	38	47		39	15 - 30	1 = 1					
		2	51	42	46	37	40	32	40	33	49	40	44	36	38	31	39		32		2 = 2					
		3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34		28		3 = 3					
0	1	57	47	53	43	45	37	46	37	59	49	55	44	47	38	47	39	30 - 45	1 = 1							
	2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39	32			2 = 2						
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28				3 = 3					
	5	1	57	47	53	43	45	37	46	37	59	49	55	44	47	38	47		39			1 = 1				
		2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39		32	2 = 2						
		3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34		28		3 = 3					
	10	1	57	47	53	43	45	37	46	37	59	49	55	44	47	38	47		39			2 = 2				
		2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39		32	3 = 3						
		3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34		28							

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	55	45	51	41	44	36	44	36	52	43	47	38	41	33	41	34	49	40	44	36	38	31	39	32
	2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
5	1	55	45	51	41	44	36	44	36	52	43	47	38	41	33	41	34	49	40	44	36	38	31	39	32
	2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
10	1	55	45	51	41	44	36	44	36	52	43	47	38	41	33	41	34	49	40	44	36	38	31	39	32
	2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
0	1	46	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28								
	2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
5	1	46	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28								
	2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
10	1	46	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28								
	2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
0	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
5	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
10	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	64	57	63	53	55	46	56	46	63	55	61	51	53	44	53	44	61	53	59	48	51	42	51	42
	2	57	47	53	42	45	37	46	38	55	45	50	41	43	35	44	36	53	43	48	39	42	34	42	34
	3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
20	1	62	55	60	53	55	46	56	46	60	53	59	51	53	44	53	44	59	52	57	48	51	42	51	42
	2	55	47	53	42	45	37	46	38	53	45	50	41	43	35	44	36	52	43	48	39	42	34	42	34
	3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
25	1	62	55	60	53	55	46	56	46	60	53	59	51	53	44	53	44	59	52	57	48	51	42	51	42
	2	55	47	53	42	45	37	46	38	53	45	50	41	43	35	44	36	52	43	48	39	42	34	42	34
	3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
15	1	60	51	57	46	49	40	49	40	58	49	55	44	47	38	47	39								
	2	51	42	46	37	40	32	40	33	49	40	44	36	38	31	39	32								
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
20	1	57	50	56	46	49	40	49	40	56	49	54	44	47	38	47	39								
	2	50	42	46	37	40	32	40	33	49	40	44	36	38	31	39	32								
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
25	1	57	50	56	46	49	40	49	40	56	49	54	44	47	38	47	39								
	2	50	42	46	37	40	32	40	33	49	40	44	36	38	31	39	32								
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
15	1	60	51	57	46	49	40	49	40	58	49	55	44	47	38	47	39								
	2	51	42	46	37	40	32	40	33	49	40	44	36	38	31	39	32								
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
20	1	57	50	56	46	49	40	49	40	56	49	54	44	47	38	47	39								
	2	50	42	46	37	40	32	40	33	49	40	44	36	38	31	39	32								
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
25	1	57	50	56	46	49	40	49	40	56	49	54	44	47	38	47	39								
	2	50	42	46	37	40	32	40	33	49	40	44	36	38	31	39	32								
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
15	1	57	47	53	43	45	37	46	37	58	49	55	44	47	38	47	39								
	2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39	32								
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								
20	1	55	47	53	43	45	37	46	37	56	49	54	44	47	38	47	39								
	2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39	32								
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								
25	1	55	47	53	43	45	37	46	37	56	49	54	44	47	38	47	39								
	2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39	32								
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								
15	1	57	47	53	43	45	37	46	37	58	49	55	44	47	38	47	39								
	2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39	32								
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								
20	1	55	47	53	43	45	37	46	37	56	49	54	44	47	38	47	39								
	2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39	32								
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								
25	1	55	47	53	43	45	37	46	37	56	49	54	44	47	38	47	39								
	2	47	39	42	34	37	30	37	31	49	40	44	36	38	31	39	32								
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	55	45	51	41	44	36	44	36	52	43	47	38	41	33	41	34	49	40	44	36	38	31	39	32
	2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
20	1	53	45	51	41	44	36	44	36	51	43	47	38	41	33	41	34	49	40	44	36	38	31	39	32
	2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
25	1	53	45	51	41	44	36	44	36	51	43	47	38	41	33	41	34	49	40	44	36	38	31	39	32
	2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
15	1	46	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28								
	2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
20	1	46	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28								
	2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
15	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
20	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
25	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	60	54	59	52	55	46	56	46	59	52	57	51	53	44	53	44	57	51	56	48	51	42	51	42	
	2	54	47	52	42	45	37	46	38	52	45	50	41	43	35	44	36	51	43	48	39	42	34	42	34	
	3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30	
	35	1	58	52	57	51	54	46	56	46	57	51	56	50	52	44	53	44	56	50	55	48	50	42	51	42
		2	52	46	51	42	45	37	46	38	51	45	50	41	43	35	44	36	50	43	48	39	42	34	42	34
		3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
	40	1	57	51	56	50	52	46	56	46	55	50	54	49	51	44	53	44	54	49	53	47	50	42	51	42
		2	51	45	50	42	45	37	46	38	50	44	49	41	43	35	44	36	49	43	47	39	42	34	42	34
		3	43	35	46	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
Wind Speed [mph]		110								115																
30	1	56	49	55	46	49	40	49	40	55	48	53	44	47	38	47	39									
	2	49	42	46	37	40	32	40	33	48	40	44	36	38	31	39	32									
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28									
	35	1	55	48	53	46	49	40	49	40	53	47	52	44	47	38	47	39								
		2	48	42	46	37	40	32	40	33	47	40	44	36	38	31	39	32								
		3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
	40	1	53	47	52	46	48	40	49	40	52	46	51	44	47	38	47	39								
		2	47	41	46	37	40	32	40	33	46	40	44	36	38	31	39	32								
		3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
Wind Speed [mph]		120								130																
30	1	54	47	52	43	45	37	46	37	55	48	53	44	47	38	47	39									
	2	47	39	42	34	37	30	37	31	48	40	44	36	38	31	39	32									
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28									
	35	1	52	46	51	43	45	37	46	37	53	47	52	44	47	38	47	39								
		2	46	39	42	34	37	30	37	31	47	40	44	36	38	31	39	32								
		3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								
	40	1	51	45	50	43	45	37	46	37	52	46	51	44	47	38	47	39								
		2	45	39	42	34	37	30	37	31	46	40	44	36	38	31	39	32								
		3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	52	45	51	41	44	36	44	36	50	43	47	38	41	33	41	34	48	40	44	36	38	31	39	32	
	2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26	
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	
	35	1	51	45	50	41	44	36	44	36	49	43	47	38	41	33	41	34	47	40	44	36	38	31	39	32
		2	45	37	41	33	35	29	36	30	43	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
		3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
	40	1	50	44	49	41	44	36	44	36	48	42	47	38	41	33	41	34	46	40	44	36	38	31	39	32
		2	44	37	41	33	35	29	36	30	42	35	38	31	33	27	34	28	40	33	35	29	31	25	32	26
		3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180																
30	1	46	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28									
	2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23									
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20									
	35	1	45	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28								
		2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
		3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
	40	1	44	38	41	34	36	29	36	30	43	36	39	32	34	27	34	28								
		2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23								
		3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
Wind Speed [mph]		190								200																
30	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25									
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21									
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									
	35	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
		2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
		3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								
	40	1	41	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25								
		2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21								
		3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	55	50	54	49	51	45	56	46	54	49	53	48	50	44	53	44	53	48	52	46	49	42	51	42	
	2	50	44	49	42	45	37	46	38	49	43	48	41	43	35	44	36	48	42	46	39	42	34	42	34	
	3	43	35	45	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30	
	50	1	53	49	53	48	51	44	56	46	53	48	52	47	49	43	53	44	52	47	51	46	48	42	51	42
		2	49	44	48	42	44	37	46	38	48	42	47	41	43	35	44	36	47	41	46	39	42	34	42	34
		3	43	35	44	37	39	32	40	33	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30
	60	1	51	47	51	46	49	43	56	46	50	46	50	45	48	42	53	44	49	45	49	44	46	41	51	42
		2	47	42	46	41	43	37	46	38	46	41	45	40	42	35	44	36	45	40	44	39	41	34	42	34
		3	43	35	43	37	39	32	40	33	41	33	41	35	38	31	38	31	39	32	40	34	36	29	36	30
45	Wind Speed [mph]		110								115															
	1	52	46	51	45	47	40	49	40	51	45	50	44	46	38	47	39									
	2	46	41	45	37	40	32	40	33	45	40	44	36	38	31	39	32									
	3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28									
	50	1	51	46	50	44	47	40	49	40	50	44	49	43	46	38	47	39								
		2	46	40	44	37	40	32	40	33	44	39	43	36	38	31	39	32								
		3	38	31	40	32	35	28	35	29	36	29	38	31	33	27	34	28								
	60	1	48	44	48	43	45	40	49	40	48	43	47	42	44	38	47	39								
		2	44	39	43	37	40	32	40	33	43	38	42	36	38	31	39	32								
3		38	31	39	32	35	28	35	29	36	29	38	31	33	27	34	28									
45	Wind Speed [mph]		120								130															
	1	50	44	49	43	45	37	46	37	51	45	50	44	46	38	47	39									
	2	44	39	42	34	37	30	37	31	45	40	44	36	38	31	39	32									
	3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28									
	50	1	49	43	48	42	44	37	46	37	50	44	49	43	46	38	47	39								
		2	43	38	42	34	37	30	37	31	44	39	43	36	38	31	39	32								
		3	35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28								
	60	1	47	42	46	41	43	37	46	37	48	43	47	42	44	38	47	39								
		2	42	37	41	34	37	30	37	31	43	38	42	36	38	31	39	32								
3		35	28	37	30	32	26	32	27	36	29	38	31	33	27	34	28									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	49	43	48	41	44	36	44	36	47	41	46	38	41	33	41	34	45	39	44	36	38	31	39	32	
	2	43	37	41	33	35	29	36	30	41	35	38	31	33	27	34	28	39	33	35	29	31	25	32	26	
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	
	50	1	48	43	47	41	43	36	44	36	46	41	45	38	41	33	41	34	44	39	43	36	38	31	39	32
		2	43	37	41	33	35	29	36	30	41	35	38	31	33	27	34	28	39	33	35	29	31	25	32	26
		3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
	60	1	46	41	45	40	42	36	44	36	44	39	43	38	40	33	41	34	43	38	42	36	38	31	39	32
		2	41	36	40	33	35	29	36	30	39	34	38	31	33	27	34	28	38	33	35	29	31	25	32	26
		3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180																
45	1	43	38	41	34	36	29	36	30	42	36	39	32	34	27	34	28									
	2	38	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23									
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20									
50	1	43	37	41	34	36	29	36	30	41	36	39	32	34	27	34	28									
	2	37	31	33	27	29	23	30	24	36	29	31	25	27	22	28	23									
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20									
60	1	41	36	40	34	36	29	36	30	40	35	39	32	34	27	34	28									
	2	36	31	33	27	29	23	30	24	35	29	31	25	27	22	28	23									
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20									
Wind Speed [mph]		190								200																
45	1	40	34	37	30	32	26	33	27	39	32	35	28	30	25	31	25									
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21									
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									
50	1	40	34	37	30	32	26	33	27	38	32	35	28	30	25	31	25									
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21									
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									
60	1	39	34	37	30	32	26	33	27	37	32	35	28	30	25	31	25									
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21									
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	49	45	48	44	47	42	55	46	48	44	48	43	46	41	53	44	47	43	47	43	45	40	51	42
	2	45	41	44	40	42	37	46	38	44	40	43	39	41	35	44	36	43	39	43	38	40	34	42	34
	3	42	35	41	37	38	32	40	33	41	33	40	35	37	31	38	31	39	32	39	34	36	29	36	30
80	1	47	43	47	43	46	41	54	46	46	43	46	42	45	40	53	44	45	42	45	41	44	39	51	42
	2	43	40	43	39	41	36	46	38	43	39	42	38	40	35	44	36	42	38	41	37	39	34	42	34
	3	41	35	40	36	38	32	40	33	40	33	39	35	36	31	38	31	39	32	38	34	35	29	36	30
90	1	45	42	45	42	45	40	53	46	44	41	44	41	44	39	52	44	44	41	44	40	43	38	50	42
	2	42	38	42	38	40	35	46	38	41	38	41	37	39	34	44	36	41	37	40	36	38	33	42	34
	3	40	35	39	35	37	32	40	33	39	33	38	34	36	31	38	31	38	32	37	33	35	29	36	30
70	1	46	42	46	42	44	39	49	40	46	42	45	41	43	38	47	39	46	42	45	41	43	38	47	39
	2	42	38	42	37	39	32	40	33	42	37	41	36	38	31	39	32	42	37	41	36	38	31	39	32
	3	38	31	38	32	35	28	35	29	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
80	1	45	41	44	40	43	38	49	40	44	40	44	40	42	37	47	39	44	40	44	40	42	37	47	39
	2	41	37	40	36	38	32	40	33	40	36	40	35	37	31	39	32	40	36	40	35	37	31	39	32
	3	38	31	37	32	34	28	35	29	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
90	1	43	40	43	39	42	37	49	40	43	39	42	39	41	36	47	39	43	39	42	39	41	36	47	39
	2	40	36	39	35	37	32	40	33	39	35	39	34	36	31	39	32	39	35	39	34	36	31	39	32
	3	37	31	36	32	34	28	35	29	36	29	36	31	33	27	34	28	36	29	36	31	33	27	34	28
70	1	46	42	46	42	44	39	49	40	46	42	45	41	43	38	47	39	46	42	45	41	43	38	47	39
	2	42	38	42	37	39	32	40	33	42	37	41	36	38	31	39	32	42	37	41	36	38	31	39	32
	3	38	31	38	32	35	28	35	29	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
80	1	45	41	44	40	43	38	49	40	44	40	44	40	42	37	47	39	44	40	44	40	42	37	47	39
	2	41	37	40	36	38	32	40	33	40	36	40	35	37	31	39	32	40	36	40	35	37	31	39	32
	3	38	31	37	32	34	28	35	29	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
90	1	43	40	43	39	42	37	49	40	43	39	42	39	41	36	47	39	43	39	42	39	41	36	47	39
	2	40	36	39	35	37	32	40	33	39	35	39	34	36	31	39	32	39	35	39	34	36	31	39	32
	3	37	31	36	32	34	28	35	29	36	29	36	31	33	27	34	28	36	29	36	31	33	27	34	28
70	1	45	41	44	40	42	37	46	37	46	42	45	41	43	38	47	39	46	42	45	41	43	38	47	39
	2	41	36	40	34	37	30	37	31	42	37	41	36	38	31	39	32	42	37	41	36	38	31	39	32
	3	35	28	37	30	32	26	32	27	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
80	1	43	40	43	39	41	36	46	37	44	40	44	40	42	37	47	39	44	40	44	40	42	37	47	39
	2	40	35	39	34	36	30	37	31	40	36	40	35	37	31	39	32	40	36	40	35	37	31	39	32
	3	35	28	36	30	32	26	32	27	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
90	1	42	38	42	38	40	35	46	37	43	39	42	39	41	36	47	39	43	39	42	39	41	36	47	39
	2	38	35	38	34	35	30	37	31	39	35	39	34	36	31	39	32	39	35	39	34	36	31	39	32
	3	35	28	35	30	32	26	32	27	36	29	36	31	33	27	34	28	36	29	36	31	33	27	34	28
70	1	45	41	44	40	42	37	46	37	46	42	45	41	43	38	47	39	46	42	45	41	43	38	47	39
	2	41	36	40	34	37	30	37	31	42	37	41	36	38	31	39	32	42	37	41	36	38	31	39	32
	3	35	28	37	30	32	26	32	27	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
80	1	43	40	43	39	41	36	46	37	44	40	44	40	42	37	47	39	44	40	44	40	42	37	47	39
	2	40	35	39	34	36	30	37	31	40	36	40	35	37	31	39	32	40	36	40	35	37	31	39	32
	3	35	28	36	30	32	26	32	27	36	29	37	31	33	27	34	28	36	29	37	31	33	27	34	28
90	1	42	38	42	38	40	35	46	37	43	39	42	39	41	36	47	39	43	39	42	39	41	36	47	39
	2	38	35	38	34	35	30	37	31	39	35	39	34	36	31	39	32	39	35	39	34	36	31	39	32
	3	35	28	35	30	32	26	32	27	36	29	36	31	33	27	34	28	36	29	36	31	33	27	34	28

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	44	40	44	39	41	36	44	36	43	38	42	37	39	33	41	34	41	37	41	36	38	31	39	32
	2	40	35	39	33	35	29	36	30	38	34	37	31	33	27	34	28	37	32	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
80	1	43	39	42	38	40	35	44	36	41	37	41	37	38	33	41	34	40	36	40	35	37	31	39	32
	2	39	35	38	33	35	29	36	30	37	33	37	31	33	27	34	28	36	32	35	29	31	25	32	26
	3	34	27	35	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
90	1	41	38	41	37	39	35	44	36	40	36	40	36	38	33	41	34	39	35	38	34	36	31	39	32
	2	38	34	37	33	35	29	36	30	36	32	36	31	33	27	34	28	35	31	34	29	31	25	32	26
	3	34	27	34	29	31	25	31	26	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180															
70	1	40	36	39	34	36	29	36	30	39	34	38	32	34	27	34	28	34	29	31	25	27	22	28	23
	2	36	31	33	27	29	23	30	24	34	29	31	25	27	22	28	23	34	29	31	25	27	22	28	23
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20	26	21	27	22	24	19	24	20
80	1	39	35	38	34	35	29	36	30	38	33	37	32	34	27	34	28	38	33	37	32	34	27	34	28
	2	35	30	33	27	29	23	30	24	33	29	31	25	27	22	28	23	33	29	31	25	27	22	28	23
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20	26	21	27	22	24	19	24	20
90	1	38	34	37	33	35	29	36	30	37	33	36	32	33	27	34	28	37	33	36	32	33	27	34	28
	2	34	30	33	27	29	23	30	24	33	29	31	25	27	22	28	23	33	29	31	25	27	22	28	23
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20	26	21	27	22	24	19	24	20
Wind Speed [mph]		190								200															
70	1	38	33	37	30	32	26	33	27	36	32	35	28	30	25	31	25	36	32	35	28	30	25	31	25
	2	33	28	30	24	26	21	27	22	32	26	28	23	24	20	25	21	32	26	28	23	24	20	25	21
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	23	19	24	20	21	17	22	18
80	1	37	32	36	30	32	26	33	27	36	31	35	28	30	25	31	25	36	31	35	28	30	25	31	25
	2	32	28	30	24	26	21	27	22	31	26	28	23	24	20	25	21	31	26	28	23	24	20	25	21
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	23	19	24	20	21	17	22	18
90	1	36	32	35	30	32	26	33	27	35	31	34	28	30	25	31	25	35	31	34	28	30	25	31	25
	2	32	28	30	24	26	21	27	22	31	26	28	23	24	20	25	21	31	26	28	23	24	20	25	21
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	23	19	24	20	21	17	22	18

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	43	41	43	40	43	39	52	46	43	40	43	40	43	38	51	44	42	39	42	39	42	37	50	42
	2	41	37	40	37	39	35	46	38	40	37	40	36	38	34	44	36	39	36	39	35	37	33	42	34
	3	38	35	38	34	36	32	40	33	38	33	37	33	35	31	38	31	37	32	36	33	34	29	36	30
Wind Speed [mph]		110								115															
100	1	42	39	42	38	41	37	48	40	41	38	41	38	40	36	47	39								
	2	39	35	38	35	37	32	40	33	38	34	38	34	36	31	39	32								
	3	36	31	36	32	33	28	35	29	36	29	35	31	32	27	34	28								
Wind Speed [mph]		120								130															
100	1	41	37	40	37	39	35	46	37	41	38	41	38	40	36	47	39								
	2	37	34	37	33	35	30	37	31	38	34	38	34	36	31	39	32								
	3	35	28	34	30	32	26	32	27	36	29	35	31	32	27	34	28								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	40	37	40	36	38	34	44	36	39	36	39	35	37	32	41	34	38	34	38	34	36	31	39	32
	2	37	33	36	32	34	29	36	30	36	32	35	31	32	27	34	28	34	31	34	29	31	25	32	26
	3	34	27	33	29	31	25	31	26	31	25	32	27	29	23	29	24	29	24	31	25	27	22	27	22
Wind Speed [mph]		170								180															
100	1	37	33	36	32	34	29	36	30	36	32	35	31	33	27	34	28								
	2	33	29	32	27	29	23	30	24	32	28	31	25	27	22	28	23								
	3	28	22	29	23	25	20	26	21	26	21	27	22	24	19	24	20								
Wind Speed [mph]		190								200															
100	1	35	31	34	30	32	26	33	27	34	30	33	28	30	25	31	25								
	2	31	27	30	24	26	21	27	22	30	26	28	23	24	20	25	21								
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	63	53	61	49	52	43	52	43	62	51	58	47	50	41	50	41	59	49	56	45	48	39	48	39	
	2	53	44	49	39	42	34	43	35	51	42	47	38	40	33	41	34	49	41	45	36	39	31	39	32	
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28	
	5	1	63	53	61	49	52	43	52	43	62	51	58	47	50	41	50	41	59	49	56	45	48	39	48	39
		2	53	44	49	39	42	34	43	35	51	42	47	38	40	33	41	34	49	41	45	36	39	31	39	32
		3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
	10	1	63	53	61	49	52	43	52	43	62	51	58	47	50	41	50	41	59	49	56	45	48	39	48	39
		2	53	44	49	39	42	34	43	35	51	42	47	38	40	33	41	34	49	41	45	36	39	31	39	32
		3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
0	1	57	47	53	43	46	37	46	38	55	46	51	41	44	36	44	36									
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30									
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26									
	5	1	57	47	53	43	46	37	46	38	55	46	51	41	44	36	44	36								
		2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
		3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
	10	1	57	47	53	43	46	37	46	38	55	46	51	41	44	36	44	36								
		2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
		3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
0	1	57	47	53	43	46	37	46	38	55	46	51	41	44	36	44	36									
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30									
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26									
	5	1	57	47	53	43	46	37	46	38	55	46	51	41	44	36	44	36								
		2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
		3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
	10	1	57	47	53	43	46	37	46	38	55	46	51	41	44	36	44	36								
		2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
		3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
0	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36									
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30									
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26									
	5	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36								
		2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
		3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
	10	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36								
		2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
		3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
0	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36									
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30									
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26									
	5	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36								
		2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
		3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
	10	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36								
		2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
		3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	52	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
	2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
5	1	52	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
	2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
10	1	52	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
	2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
Wind Speed [mph]		170								180															
0	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26	33	27	29	24	25	21	26	21
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21	24	20	25	21	22	18	23	18
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18	24	20	25	21	22	18	23	18
5	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26	33	27	29	24	25	21	26	21
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21	24	20	25	21	22	18	23	18
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18	24	20	25	21	22	18	23	18
10	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26	33	27	29	24	25	21	26	21
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21	24	20	25	21	22	18	23	18
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18	24	20	25	21	22	18	23	18
Wind Speed [mph]		190								200															
0	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24	30	25	26	21	23	18	24	19
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19	22	18	23	18	20	16	20	17
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17	22	18	23	18	20	16	20	17
5	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24	30	25	26	21	23	18	24	19
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19	22	18	23	18	20	16	20	17
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17	22	18	23	18	20	16	20	17
10	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24	30	25	26	21	23	18	24	19
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19	22	18	23	18	20	16	20	17
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17	22	18	23	18	20	16	20	17

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	62	53	60	49	52	43	52	43	60	51	58	47	50	41	50	41	59	49	56	45	48	39	48	39
	2	53	44	49	39	42	34	43	35	51	42	47	38	40	33	41	34	49	41	45	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
20	1	59	52	58	49	52	43	52	43	58	51	56	47	50	41	50	41	56	49	55	45	48	39	48	39
	2	52	44	49	39	42	34	43	35	51	42	47	38	40	33	41	34	49	41	45	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
25	1	59	52	58	49	52	43	52	43	58	51	56	47	50	41	50	41	56	49	55	45	48	39	48	39
	2	52	44	49	39	42	34	43	35	51	42	47	38	40	33	41	34	49	41	45	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
15	1	57	47	53	43	46	37	46	38	55	46	51	41	44	36	44	36								
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
20	1	55	47	53	43	46	37	46	38	54	46	51	41	44	36	44	36								
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
25	1	55	47	53	43	46	37	46	38	54	46	51	41	44	36	44	36								
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
15	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
20	1	52	44	49	40	42	34	43	35	54	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
25	1	52	44	49	40	42	34	43	35	54	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
15	1	53	44	49	40	42	34	43	35	55	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
20	1	52	44	49	40	42	34	43	35	54	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
25	1	52	44	49	40	42	34	43	35	54	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	52	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
	2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
20	1	51	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
	2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
25	1	51	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
	2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
Wind Speed [mph]		170								180															
15	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26								
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
20	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26								
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
25	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26								
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
Wind Speed [mph]		190								200															
15	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								
20	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								
25	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	59	52	58	49	52	43	52	43	58	51	56	47	50	41	50	41	56	49	55	45	48	39	48	39
	2	52	44	49	39	42	34	43	35	51	42	47	38	40	33	41	34	49	41	45	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
35	1	58	51	56	49	52	43	52	43	56	50	55	47	50	41	50	41	55	48	53	45	48	39	48	39
	2	51	44	49	39	42	34	43	35	50	42	47	38	40	33	41	34	48	41	45	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
40	1	56	50	55	49	51	43	52	43	55	49	54	47	49	41	50	41	54	47	52	45	48	39	48	39
	2	50	44	49	39	42	34	43	35	49	42	47	38	40	33	41	34	47	41	45	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
30	1	55	47	53	43	46	37	46	38	53	46	51	41	44	36	44	36								
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
35	1	54	47	52	43	46	37	46	38	52	46	51	41	44	36	44	36								
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
40	1	52	46	51	43	46	37	46	38	51	45	50	41	44	36	44	36								
	2	46	39	43	35	37	30	38	31	45	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
30	1	55	47	53	43	46	37	46	38	53	46	51	41	44	36	44	36								
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
35	1	54	47	52	43	46	37	46	38	52	46	51	41	44	36	44	36								
	2	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
40	1	52	46	51	43	46	37	46	38	51	45	50	41	44	36	44	36								
	2	46	39	43	35	37	30	38	31	45	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
30	1	52	44	49	40	42	34	43	35	53	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
35	1	51	44	49	40	42	34	43	35	52	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
40	1	50	44	49	40	42	34	43	35	51	45	50	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	45	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
30	1	52	44	49	40	42	34	43	35	53	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
35	1	51	44	49	40	42	34	43	35	52	46	51	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	46	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
40	1	50	44	49	40	42	34	43	35	51	45	50	41	44	36	44	36								
	2	44	36	39	32	34	28	35	29	45	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	51	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30	
	2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24	
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21	
	35	1	50	43	47	38	41	33	41	34	48	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
		2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
		3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
	40	1	49	43	47	38	41	33	41	34	47	40	44	36	38	31	38	31	45	37	41	33	36	29	36	30
		2	43	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
		3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
Wind Speed [mph]		170								180																
30	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26	41	33	36	29	32	26	32	26	
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21	33	27	29	24	25	21	26	21	
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18	24	20	25	21	22	18	23	18	
35	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26	41	33	36	29	32	26	32	26	
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21	33	27	29	24	25	21	26	21	
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18	24	20	25	21	22	18	23	18	
40	1	43	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26	41	33	36	29	32	26	32	26	
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21	33	27	29	24	25	21	26	21	
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18	24	20	25	21	22	18	23	18	
Wind Speed [mph]		190								200																
30	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24	37	30	33	26	28	23	29	24	
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19	30	25	26	21	23	18	24	19	
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17	22	18	23	18	20	16	20	17	
35	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24	37	30	33	26	28	23	29	24	
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19	30	25	26	21	23	18	24	19	
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17	22	18	23	18	20	16	20	17	
40	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24	37	30	33	26	28	23	29	24	
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19	30	25	26	21	23	18	24	19	
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17	22	18	23	18	20	16	20	17	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	55	49	54	48	50	43	52	43	54	48	52	46	49	41	50	41	52	47	51	45	47	39	48	39
	2	49	43	48	39	42	34	43	35	48	42	46	38	40	33	41	34	47	41	45	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
50	1	53	48	53	47	49	43	52	43	52	47	51	46	48	41	50	41	51	46	50	44	47	39	48	39
	2	48	42	47	39	42	34	43	35	47	41	46	38	40	33	41	34	46	40	44	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
60	1	51	46	50	45	48	42	52	43	50	45	49	44	47	41	50	41	49	44	48	43	45	39	48	39
	2	46	41	45	39	42	34	43	35	45	40	44	38	40	33	41	34	44	39	43	36	39	31	39	32
	3	40	33	42	34	37	30	37	30	38	31	40	33	35	28	36	29	37	30	39	31	33	27	34	28
Wind Speed [mph]		110								115															
45	1	51	45	50	43	46	37	46	38	50	44	49	41	44	36	44	36								
	2	45	39	43	35	37	30	38	31	44	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
50	1	50	45	49	43	45	37	46	38	49	43	48	41	44	36	44	36								
	2	45	39	43	35	37	30	38	31	43	38	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
60	1	48	43	47	42	44	37	46	38	47	42	46	41	43	36	44	36								
	2	43	38	42	35	37	30	38	31	42	37	41	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
Wind Speed [mph]		120								130															
45	1	49	43	48	40	42	34	43	35	50	44	49	41	44	36	44	36								
	2	43	36	39	32	34	28	35	29	44	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
50	1	48	42	47	40	42	34	43	35	49	43	48	41	44	36	44	36								
	2	42	36	39	32	34	28	35	29	43	38	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
60	1	46	41	45	40	42	34	43	35	47	42	46	41	43	36	44	36								
	2	41	36	39	32	34	28	35	29	42	37	41	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	48	42	47	38	41	33	41	34	46	40	44	36	38	31	38	31	44	37	41	33	36	29	36	30
	2	42	35	38	31	33	27	34	28	40	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
50	1	47	41	46	38	41	33	41	34	45	39	44	36	38	31	38	31	43	37	41	33	36	29	36	30
	2	41	35	38	31	33	27	34	28	39	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
60	1	45	40	44	38	41	33	41	34	44	38	43	36	38	31	38	31	42	37	41	33	36	29	36	30
	2	40	35	38	31	33	27	34	28	38	33	35	29	31	25	31	26	37	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
Wind Speed [mph]		170								180															
45	1	42	35	39	31	33	27	34	28	41	33	36	29	32	26	32	26								
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
50	1	42	35	39	31	33	27	34	28	40	33	36	29	32	26	32	26								
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
60	1	40	35	39	31	33	27	34	28	39	33	36	29	32	26	32	26								
	2	35	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
Wind Speed [mph]		190								200															
45	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								
50	1	38	32	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								
60	1	38	32	34	28	30	24	30	25	36	30	33	26	28	23	29	24								
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	49	45	49	44	47	41	52	43	48	44	48	43	45	40	50	41	47	43	47	42	44	39	48	39
	2	45	40	44	39	41	34	43	35	44	39	43	38	40	33	41	34	43	38	42	36	39	31	39	32
	3	40	33	41	34	37	30	37	30	38	31	39	33	35	28	36	29	37	30	38	31	33	27	34	28
80	1	47	43	47	43	45	40	52	43	46	43	46	42	44	39	50	41	46	42	45	41	43	38	48	39
	2	43	39	43	38	40	34	43	35	43	38	42	37	39	33	41	34	42	37	41	36	38	31	39	32
	3	40	33	40	34	36	30	37	30	38	31	39	33	35	28	36	29	37	30	38	31	33	27	34	28
90	1	46	42	45	42	44	39	52	43	45	41	45	41	43	38	50	41	44	41	44	40	42	37	48	39
	2	42	38	42	37	39	34	43	35	41	37	41	36	38	33	41	34	41	36	40	35	37	31	39	32
	3	39	33	39	34	36	30	37	30	38	31	38	33	35	28	36	29	37	30	37	31	33	27	34	28
70	1	46	42	46	41	43	37	46	38	46	41	45	40	42	36	44	36								
	2	42	37	41	35	37	30	38	31	41	36	40	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
80	1	45	41	44	40	42	37	46	38	44	40	44	39	41	36	44	36								
	2	41	36	40	35	37	30	38	31	40	35	39	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
90	1	44	40	43	39	41	36	46	38	43	39	42	38	40	35	44	36								
	2	40	35	39	35	36	30	38	31	39	35	38	33	35	29	36	30								
	3	35	29	36	30	32	26	33	27	34	27	35	29	31	25	31	26								
70	1	46	42	46	41	43	37	46	38	46	41	45	40	42	36	44	36								
	2	42	37	41	35	37	30	38	31	41	36	40	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
80	1	45	41	44	40	42	37	46	38	44	40	44	39	41	36	44	36								
	2	41	36	40	35	37	30	38	31	40	35	39	33	36	29	36	30								
	3	35	29	37	30	32	26	33	27	34	27	36	29	31	25	31	26								
90	1	44	40	43	39	41	36	46	38	43	39	42	38	40	35	44	36								
	2	40	35	39	35	36	30	38	31	39	35	38	33	35	29	36	30								
	3	35	29	36	30	32	26	33	27	34	27	35	29	31	25	31	26								
70	1	45	40	44	39	41	34	43	35	46	41	45	40	42	36	44	36								
	2	40	35	39	32	34	28	35	29	41	36	40	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
80	1	43	39	43	38	40	34	43	35	44	40	44	39	41	36	44	36								
	2	39	34	38	32	34	28	35	29	40	35	39	33	36	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	36	29	31	25	31	26								
90	1	42	38	42	37	39	34	43	35	43	39	42	38	40	35	44	36								
	2	38	34	37	32	34	28	35	29	39	35	38	33	35	29	36	30								
	3	32	26	34	28	30	24	30	25	34	27	35	29	31	25	31	26								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	44	39	43	38	40	33	41	34	42	38	41	36	38	31	38	31	41	36	40	33	36	29	36	30
	2	39	34	38	31	33	27	34	28	38	33	35	29	31	25	31	26	36	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
80	1	43	38	42	37	39	33	41	34	41	37	40	36	37	31	38	31	40	35	39	33	36	29	36	30
	2	38	34	37	31	33	27	34	28	37	32	35	29	31	25	31	26	35	31	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
90	1	41	37	41	37	38	33	41	34	40	36	39	35	37	31	38	31	39	35	38	33	35	29	36	30
	2	37	33	37	31	33	27	34	28	36	32	35	29	31	25	31	26	35	30	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
Wind Speed [mph]		170								180															
70	1	39	34	38	31	33	27	34	28	38	33	36	29	32	26	32	26								
	2	34	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
80	1	38	34	38	31	33	27	34	28	37	33	36	29	32	26	32	26								
	2	34	29	31	25	27	22	28	23	33	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
90	1	38	33	37	31	33	27	34	28	36	32	35	29	32	26	32	26								
	2	33	29	31	25	27	22	28	23	32	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
Wind Speed [mph]		190								200															
70	1	37	32	34	28	30	24	30	25	35	30	33	26	28	23	29	24								
	2	32	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								
80	1	36	31	34	28	30	24	30	25	35	30	33	26	28	23	29	24								
	2	31	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								
90	1	35	31	34	28	30	24	30	25	34	30	33	26	28	23	29	24								
	2	31	26	28	22	24	19	25	20	30	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	44	41	44	41	43	39	51	43	43	40	43	40	42	38	49	41	43	39	43	39	41	37	48	39
	2	41	37	41	37	39	34	43	35	40	36	40	36	38	33	41	34	39	36	39	35	37	31	39	32
	3	38	33	38	34	35	30	37	30	38	31	37	33	34	28	36	29	37	30	36	31	33	27	34	28
0	1																								
	2																								
	3																								
100	1	42	39	42	38	40	36	46	38	42	38	41	37	40	35	44	36	38	34	37	33	35	29	36	30
	2	39	35	38	34	36	30	38	31	38	34	37	33	35	29	36	30	34	27	34	29	31	25	31	26
	3	35	29	35	30	32	26	33	27	34	27	34	29	31	25	31	26								
0	1																								
	2																								
	3																								
100	1	41	37	40	37	39	34	43	35	42	38	41	37	40	35	44	36	38	34	37	33	35	29	36	30
	2	37	33	37	32	34	28	35	29	38	34	37	33	35	29	36	30	34	27	34	29	31	25	31	26
	3	32	26	34	28	30	24	30	25	34	27	34	29	31	25	31	26								
0	1																								
	2																								
	3																								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	40	37	40	36	38	33	41	34	39	35	38	34	36	31	38	31	38	34	37	33	35	29	36	30
	2	37	32	36	31	33	27	34	28	35	31	34	29	31	25	31	26	34	30	33	27	29	23	30	24
	3	31	25	33	27	29	23	29	24	29	24	31	25	27	22	27	22	27	22	29	23	25	20	26	21
Wind Speed [mph]		170								180															
100	1	37	33	36	31	33	27	34	28	36	31	35	29	32	26	32	26								
	2	33	28	31	25	27	22	28	23	31	27	29	24	25	21	26	21								
	3	26	21	27	22	23	19	24	20	24	20	25	21	22	18	23	18								
Wind Speed [mph]		190								200															
100	1	35	30	34	28	30	24	30	25	33	29	33	26	28	23	29	24								
	2	30	26	28	22	24	19	25	20	29	25	26	21	23	18	24	19								
	3	23	19	24	19	21	17	21	17	22	18	23	18	20	16	20	17								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	66	57	64	54	55	46	56	46	64	55	62	51	53	44	53	44	63	53	60	49	51	42	51	42	
	2	57	47	53	43	46	37	46	38	55	45	51	41	44	35	44	36	53	44	48	39	42	34	42	35	
	3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30	
	5	1	66	57	64	54	55	46	56	46	64	55	62	51	53	44	53	44	63	53	60	49	51	42	51	42
		2	57	47	53	43	46	37	46	38	55	45	51	41	44	35	44	36	53	44	48	39	42	34	42	35
		3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30
	10	1	65	57	64	54	55	46	56	46	64	55	62	51	53	44	53	44	63	53	60	49	51	42	51	42
		2	57	47	53	43	46	37	46	38	55	45	51	41	44	35	44	36	53	44	48	39	42	34	42	35
		3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30
0	1	61	51	58	47	49	40	49	41	59	49	56	45	47	39	48	39									
	2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32									
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28									
	5	1	61	51	58	47	49	40	49	41	59	49	56	45	47	39	48	39								
		2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32								
		3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
	10	1	61	51	58	47	49	40	49	41	59	49	56	45	47	39	48	39								
		2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32								
		3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
0	1	61	51	58	47	49	40	49	41	59	49	56	45	47	39	48	39									
	2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32									
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28									
	5	1	61	51	58	47	49	40	49	41	59	49	56	45	47	39	48	39								
		2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32								
		3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
	10	1	61	51	58	47	49	40	49	41	59	49	56	45	47	39	48	39								
		2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32								
		3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
0	1	57	47	54	43	46	37	46	38	59	49	56	45	47	39	48	39									
	2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32									
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28									
	5	1	57	47	54	43	46	37	46	38	59	49	56	45	47	39	48	39								
		2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
	10	1	57	47	54	43	46	37	46	38	59	49	56	45	47	39	48	39								
		2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
0	1	57	47	54	43	46	37	46	38	59	49	56	45	47	39	48	39									
	2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32									
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28									
	5	1	57	47	54	43	46	37	46	38	59	49	56	45	47	39	48	39								
		2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
	10	1	57	47	54	43	46	37	46	38	59	49	56	45	47	39	48	39								
		2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	55	46	51	42	44	36	44	36	52	43	48	39	41	33	41	34	49	40	45	36	39	31	39	32
	2	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
5	1	55	46	51	42	44	36	44	36	52	43	48	39	41	33	41	34	49	40	45	36	39	31	39	32
	2	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
10	1	55	46	51	42	44	36	44	36	52	43	48	39	41	33	41	34	49	40	45	36	39	31	39	32
	2	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
0	1	46	38	42	34	36	29	37	30	44	36	39	32	34	28	35	28								
	2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
5	1	46	38	42	34	36	29	37	30	44	36	39	32	34	28	35	28								
	2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
10	1	46	38	42	34	36	29	37	30	44	36	39	32	34	28	35	28								
	2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
0	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								
5	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								
10	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	63	56	62	54	55	46	56	46	62	54	60	51	53	44	53	44	60	53	59	49	51	42	51	42
	2	56	47	53	43	46	37	46	38	54	45	51	41	44	35	44	36	53	44	48	39	42	34	42	35
	3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30
20	1	60	54	59	52	55	46	56	46	59	52	58	51	53	44	53	44	57	51	56	49	51	42	51	42
	2	54	47	52	43	46	37	46	38	52	45	51	41	44	35	44	36	51	44	48	39	42	34	42	35
	3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30
25	1	60	54	59	52	55	46	56	46	59	52	58	51	53	44	53	44	57	51	56	49	51	42	51	42
	2	54	47	52	43	46	37	46	38	52	45	51	41	44	35	44	36	51	44	48	39	42	34	42	35
	3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30
15	1	59	51	57	47	49	40	49	41	57	49	56	45	47	39	48	39								
	2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32								
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
20	1	56	50	55	47	49	40	49	41	55	48	53	45	47	39	48	39								
	2	50	42	46	38	40	33	41	33	48	40	45	36	39	31	39	32								
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
25	1	56	50	55	47	49	40	49	41	55	48	53	45	47	39	48	39								
	2	50	42	46	38	40	33	41	33	48	40	45	36	39	31	39	32								
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
15	1	59	51	57	47	49	40	49	41	57	49	56	45	47	39	48	39								
	2	51	42	46	38	40	33	41	33	49	40	45	36	39	31	39	32								
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
20	1	56	50	55	47	49	40	49	41	55	48	53	45	47	39	48	39								
	2	50	42	46	38	40	33	41	33	48	40	45	36	39	31	39	32								
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
25	1	56	50	55	47	49	40	49	41	55	48	53	45	47	39	48	39								
	2	50	42	46	38	40	33	41	33	48	40	45	36	39	31	39	32								
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
15	1	56	47	54	43	46	37	46	38	57	49	56	45	47	39	48	39								
	2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32								
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
20	1	54	47	52	43	46	37	46	38	55	48	53	45	47	39	48	39								
	2	47	39	43	35	37	30	38	31	48	40	45	36	39	31	39	32								
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
25	1	54	47	52	43	46	37	46	38	55	48	53	45	47	39	48	39								
	2	47	39	43	35	37	30	38	31	48	40	45	36	39	31	39	32								
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
15	1	56	47	54	43	46	37	46	38	57	49	56	45	47	39	48	39								
	2	47	39	43	35	37	30	38	31	49	40	45	36	39	31	39	32								
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
20	1	54	47	52	43	46	37	46	38	55	48	53	45	47	39	48	39								
	2	47	39	43	35	37	30	38	31	48	40	45	36	39	31	39	32								
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
25	1	54	47	52	43	46	37	46	38	55	48	53	45	47	39	48	39								
	2	47	39	43	35	37	30	38	31	48	40	45	36	39	31	39	32								
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	55	46	51	42	44	36	44	36	52	43	48	39	41	33	41	34	49	40	45	36	39	31	39	32	
	2	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26	
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23	
	20	1	53	46	51	42	44	36	44	36	50	43	48	39	41	33	41	34	48	40	45	36	39	31	39	32
		2	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26
		3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
	25	1	53	46	51	42	44	36	44	36	50	43	48	39	41	33	41	34	48	40	45	36	39	31	39	32
		2	46	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26
		3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
Wind Speed [mph]		170								180																
15	1	46	38	42	34	36	29	37	30	44	36	39	32	34	28	35	28									
	2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23									
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20									
	20	1	46	38	42	34	36	29	37	30	44	36	39	32	34	28	35	28								
		2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23								
		3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
	25	1	46	38	42	34	36	29	37	30	44	36	39	32	34	28	35	28								
		2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23								
		3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
Wind Speed [mph]		190								200																
15	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25									
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21									
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18									
	20	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25								
		2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
		3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								
	25	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25								
		2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
		3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	59	53	58	51	54	46	56	46	57	51	56	50	52	44	53	44	56	50	55	49	51	42	51	42	
	2	53	46	51	43	46	37	46	38	51	45	50	41	44	35	44	36	50	44	48	39	42	34	42	35	
	3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30	
	35	1	57	51	56	50	53	46	56	46	56	50	55	49	51	44	53	44	54	49	53	47	50	42	51	42
		2	51	45	50	43	46	37	46	38	50	44	49	41	44	35	44	36	49	43	47	39	42	34	42	35
		3	44	35	46	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30
	40	1	55	50	54	49	52	45	56	46	54	49	53	48	50	44	53	44	53	48	52	46	49	42	51	42
		2	50	44	49	43	45	37	46	38	49	43	48	41	44	35	44	36	48	42	46	39	42	34	42	35
		3	44	35	45	37	40	32	40	33	42	34	44	36	38	31	38	31	40	32	42	34	36	29	37	30
Wind Speed [mph]		110								115																
30	1	55	49	54	47	49	40	49	41	54	47	52	45	47	39	48	39									
	2	49	42	46	38	40	33	41	33	47	40	45	36	39	31	39	32									
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28									
	35	1	53	48	52	46	48	40	49	41	52	46	51	45	47	39	48	39								
		2	48	42	46	38	40	33	41	33	46	40	45	36	39	31	39	32								
		3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
	40	1	52	46	51	45	48	40	49	41	51	45	50	44	46	39	48	39								
		2	46	41	45	38	40	33	41	33	45	40	44	36	39	31	39	32								
		3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
Wind Speed [mph]		120								130																
30	1	53	46	51	43	46	37	46	38	54	47	52	45	47	39	48	39									
	2	46	39	43	35	37	30	38	31	47	40	45	36	39	31	39	32									
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28									
	35	1	51	45	50	43	46	37	46	38	52	46	51	45	47	39	48	39								
		2	45	39	43	35	37	30	38	31	46	40	45	36	39	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
	40	1	50	44	49	43	45	37	46	38	51	45	50	44	46	39	48	39								
		2	44	39	43	35	37	30	38	31	45	40	44	36	39	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	51	45	50	42	44	36	44	36	49	43	48	39	41	33	41	34	47	40	45	36	39	31	39	32	
	2	45	38	41	33	36	29	36	30	43	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26	
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23	
	35	1	50	44	49	42	44	36	44	36	48	42	47	39	41	33	41	34	46	40	45	36	39	31	39	32
		2	44	38	41	33	36	29	36	30	42	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26
		3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
	40	1	49	43	48	42	44	36	44	36	47	41	46	39	41	33	41	34	45	40	44	36	39	31	39	32
		2	43	38	41	33	36	29	36	30	41	35	38	31	33	27	34	28	40	33	36	29	31	25	32	26
		3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
Wind Speed [mph]		170								180																
30	1	45	38	42	34	36	29	37	30	44	36	39	32	34	28	35	28	36	29	32	26	28	22	28	23	
	2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	36	29	32	26	28	22	28	23	
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20	26	21	28	22	24	19	25	20	
35	1	44	38	42	34	36	29	37	30	43	36	39	32	34	28	35	28	36	29	32	26	28	22	28	23	
	2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	36	29	32	26	28	22	28	23	
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20	26	21	28	22	24	19	25	20	
40	1	44	38	42	34	36	29	37	30	42	36	39	32	34	28	35	28	36	29	32	26	28	22	28	23	
	2	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	36	29	32	26	28	22	28	23	
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20	26	21	28	22	24	19	25	20	
Wind Speed [mph]		190								200																
30	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25	32	26	28	23	25	20	25	21	
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21	32	26	28	23	25	20	25	21	
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18	23	19	25	20	21	17	22	18	
35	1	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25	32	26	28	23	25	20	25	21	
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21	32	26	28	23	25	20	25	21	
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18	23	19	25	20	21	17	22	18	
40	1	40	34	37	30	32	26	33	27	39	32	35	29	31	25	31	25	32	26	28	23	25	20	25	21	
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21	32	26	28	23	25	20	25	21	
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18	23	19	25	20	21	17	22	18	

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	53	49	53	48	51	44	56	46	52	48	52	47	49	43	53	44	51	47	51	45	48	42	51	42	
	2	49	44	48	42	44	37	46	38	48	42	47	41	43	35	44	36	47	41	45	39	42	34	42	35	
	3	44	35	44	37	40	32	40	33	42	34	43	36	38	31	38	31	40	32	42	34	36	29	37	30	
	50	1	52	48	51	47	50	44	56	46	51	47	50	46	48	43	53	44	50	46	49	45	47	41	51	42
		2	48	43	47	42	44	37	46	38	47	42	46	41	43	35	44	36	46	41	45	39	41	34	42	35
		3	44	35	43	37	40	32	40	33	42	34	42	36	38	31	38	31	40	32	41	34	36	29	37	30
	60	1	49	45	49	45	48	43	56	46	48	45	48	44	47	41	53	44	48	44	47	43	46	40	51	42
		2	45	41	45	40	43	37	46	38	45	40	44	39	41	35	44	36	44	39	43	38	40	34	42	35
		3	42	35	42	37	39	32	40	33	42	34	41	36	38	31	38	31	40	32	40	34	36	29	37	30
Wind Speed [mph]		110								115																
45	1	50	45	50	44	47	40	49	41	50	44	49	43	46	39	48	39									
	2	45	40	44	38	40	33	41	33	44	39	43	36	39	31	39	32									
	3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28									
	50	1	49	45	49	44	46	40	49	41	48	44	48	43	45	39	48	39								
		2	45	40	44	38	40	33	41	33	44	39	43	36	39	31	39	32								
		3	38	31	40	33	35	28	35	29	37	30	39	31	33	27	34	28								
	60	1	47	43	46	42	44	39	49	41	46	42	46	41	43	38	48	39								
		2	43	38	42	37	39	33	41	33	42	37	41	36	38	31	39	32								
		3	38	31	39	33	35	28	35	29	37	30	38	31	33	27	34	28								
Wind Speed [mph]		120								130																
45	1	49	43	48	42	44	37	46	38	50	44	49	43	46	39	48	39									
	2	43	38	42	35	37	30	38	31	44	39	43	36	39	31	39	32									
	3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28									
	50	1	47	43	47	42	44	37	46	38	48	44	48	43	45	39	48	39								
		2	43	38	42	35	37	30	38	31	44	39	43	36	39	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	39	31	33	27	34	28								
	60	1	45	41	45	40	42	37	46	38	46	42	46	41	43	38	48	39								
		2	41	37	40	35	37	30	38	31	42	37	41	36	38	31	39	32								
		3	35	29	37	30	32	26	33	27	37	30	38	31	33	27	34	28								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	48	43	47	41	43	36	44	36	46	41	45	39	41	33	41	34	44	39	43	36	39	31	39	32
	2	43	37	41	33	36	29	36	30	41	35	38	31	33	27	34	28	39	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
50	1	47	42	46	41	43	36	44	36	45	40	44	39	41	33	41	34	43	38	42	36	39	31	39	32
	2	42	37	41	33	36	29	36	30	40	35	38	31	33	27	34	28	38	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
60	1	45	40	44	39	42	36	44	36	43	39	43	38	40	33	41	34	42	37	41	36	38	31	39	32
	2	40	36	39	33	36	29	36	30	39	34	38	31	33	27	34	28	37	33	36	29	31	25	32	26
	3	34	28	36	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
Wind Speed [mph]		170								180															
45	1	43	37	42	34	36	29	37	30	41	36	39	32	34	28	35	28								
	2	37	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
50	1	42	37	41	34	36	29	37	30	41	35	39	32	34	28	35	28								
	2	37	31	34	27	29	24	30	24	35	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
60	1	41	36	40	34	36	29	37	30	39	35	38	32	34	28	35	28								
	2	36	31	34	27	29	24	30	24	35	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
Wind Speed [mph]		190								200															
45	1	40	34	37	30	32	26	33	27	38	32	35	29	31	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								
50	1	39	34	37	30	32	26	33	27	38	32	35	29	31	25	31	25								
	2	34	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								
60	1	38	33	37	30	32	26	33	27	37	32	35	29	31	25	31	25								
	2	33	28	30	24	26	21	27	22	32	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	47	44	47	43	46	41	54	46	46	43	46	42	45	40	53	44	46	42	45	41	44	39	51	42
	2	44	40	43	39	41	36	46	38	43	39	42	38	40	35	44	36	42	38	41	37	39	34	42	35
	3	41	35	40	36	38	32	40	33	40	34	39	35	37	31	38	31	39	32	38	34	36	29	37	30
80	1	45	42	45	42	45	40	53	46	44	41	44	41	44	39	52	44	44	41	44	40	43	38	50	42
	2	42	39	42	38	40	36	46	38	41	38	41	37	39	35	44	36	41	37	40	36	38	34	42	35
	3	40	35	39	35	37	32	40	33	39	34	38	34	36	31	38	31	38	32	37	33	35	29	37	30
90	1	43	41	43	40	43	39	52	46	43	40	43	40	42	38	51	44	42	39	42	39	42	37	50	42
	2	41	37	40	37	39	35	46	38	40	37	40	36	38	34	44	36	39	36	39	35	37	33	42	35
	3	38	35	38	34	36	32	40	33	38	34	37	33	35	31	38	31	37	32	36	33	34	29	37	30
70	1	45	41	45	41	43	38	49	41	44	41	44	40	42	37	48	39								
	2	41	37	41	36	38	33	41	33	41	36	40	35	37	31	39	32								
	3	38	31	38	33	35	28	35	29	37	30	37	31	33	27	34	28								
80	1	43	40	43	39	42	37	49	41	43	39	42	39	41	36	48	39								
	2	40	36	39	35	37	33	41	33	39	35	39	35	36	31	39	32								
	3	37	31	37	32	34	28	35	29	37	30	36	31	33	27	34	28								
90	1	42	39	41	38	41	37	48	41	41	38	41	38	40	36	47	39								
	2	39	35	38	35	37	32	41	33	38	35	38	34	36	31	39	32								
	3	36	31	36	32	33	28	35	29	36	30	35	31	33	27	34	28								
70	1	45	41	45	41	43	38	49	41	44	41	44	40	42	37	48	39								
	2	41	37	41	36	38	33	41	33	41	36	40	35	37	31	39	32								
	3	38	31	38	33	35	28	35	29	37	30	37	31	33	27	34	28								
80	1	43	40	43	39	42	37	49	41	43	39	42	39	41	36	48	39								
	2	40	36	39	35	37	33	41	33	39	35	39	35	36	31	39	32								
	3	37	31	37	32	34	28	35	29	37	30	36	31	33	27	34	28								
90	1	42	39	41	38	41	37	48	41	41	38	41	38	40	36	47	39								
	2	39	35	38	35	37	32	41	33	38	35	38	34	36	31	39	32								
	3	36	31	36	32	33	28	35	29	36	30	35	31	33	27	34	28								
70	1	44	40	43	39	41	36	46	38	44	41	44	40	42	37	48	39								
	2	40	36	39	35	36	30	38	31	41	36	40	35	37	31	39	32								
	3	35	29	36	30	32	26	33	27	37	30	37	31	33	27	34	28								
80	1	42	39	42	38	40	36	46	38	43	39	42	39	41	36	48	39								
	2	39	35	38	34	36	30	38	31	39	35	39	35	36	31	39	32								
	3	35	29	35	30	32	26	33	27	37	30	36	31	33	27	34	28								
90	1	41	37	40	37	39	35	46	38	41	38	41	38	40	36	47	39								
	2	37	34	37	33	35	30	38	31	38	35	38	34	36	31	39	32								
	3	35	29	34	30	32	26	33	27	36	30	35	31	33	27	34	28								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	43	39	42	38	40	35	44	36	42	38	41	37	39	33	41	34	40	36	40	35	37	31	39	32
	2	39	35	38	33	35	29	36	30	38	33	37	31	33	27	34	28	36	32	35	29	31	25	32	26
	3	34	28	35	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
80	1	41	38	41	37	39	35	44	36	40	37	40	36	38	33	41	34	39	35	39	34	36	31	39	32
	2	38	34	37	33	35	29	36	30	37	33	36	31	33	27	34	28	35	31	34	29	31	25	32	26
	3	34	28	34	29	31	25	32	26	32	26	33	27	29	23	29	24	30	24	31	25	27	22	28	23
90	1	40	37	40	36	38	34	44	36	39	36	39	35	37	33	41	34	38	34	37	34	36	31	39	32
	2	37	33	36	32	34	29	36	30	36	32	35	31	33	27	34	28	34	31	34	29	31	25	32	26
	3	34	28	33	29	31	25	32	26	32	26	32	27	29	23	29	24	30	24	31	25	27	22	28	23
Wind Speed [mph]		170								180															
70	1	39	35	38	34	36	29	37	30	38	34	37	32	34	28	35	28								
	2	35	31	34	27	29	24	30	24	34	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
80	1	38	34	37	33	35	29	37	30	37	33	36	32	34	28	35	28								
	2	34	30	33	27	29	24	30	24	33	29	32	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
90	1	37	33	36	33	34	29	37	30	36	32	35	31	33	28	35	28								
	2	33	29	33	27	29	24	30	24	32	28	31	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
Wind Speed [mph]		190								200															
70	1	37	33	36	30	32	26	33	27	36	31	35	29	31	25	31	25								
	2	33	28	30	24	26	21	27	22	31	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								
80	1	36	32	35	30	32	26	33	27	35	31	34	29	31	25	31	25								
	2	32	28	30	24	26	21	27	22	31	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								
90	1	35	31	34	30	32	26	33	27	34	30	33	29	31	25	31	25								
	2	31	27	30	24	26	21	27	22	30	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19	23	19	25	20	21	17	22	18								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	42	39	42	39	42	38	52	45	41	39	41	38	41	37	50	44	41	38	41	38	41	37	49	42
	2	39	36	39	36	38	34	45	38	39	36	38	35	37	33	44	36	38	35	38	34	37	32	42	35
	3	37	34	37	33	35	31	40	33	37	33	36	33	35	30	38	31	36	32	35	32	34	29	37	30
Wind Speed [mph]		110								115															
100	1	40	38	40	37	40	36	48	41	40	37	40	37	39	35	46	39	37	34	37	33	35	31	39	32
	2	38	34	37	34	36	32	41	33	37	34	37	33	35	31	39	32	35	30	34	30	32	27	34	28
	3	35	31	35	31	33	28	35	29	35	30	34	30	32	27	34	28								
Wind Speed [mph]		120								130															
100	1	39	36	39	36	38	34	45	38	40	37	40	37	39	35	46	39	37	34	37	33	35	31	39	32
	2	36	33	36	32	34	30	38	31	37	34	37	33	35	31	39	32	35	30	34	30	32	27	34	28
	3	34	29	33	30	31	26	33	27	35	30	34	30	32	27	34	28								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	39	36	39	35	38	33	44	36	38	35	38	34	36	32	41	34	37	34	36	33	35	31	39	32
	2	36	32	35	32	33	29	36	30	35	31	34	30	32	27	34	28	34	30	33	29	31	25	32	26
	3	33	28	33	29	30	25	32	26	32	26	32	27	29	23	29	24	30	24	30	25	27	22	28	23
Wind Speed [mph]		170								180															
100	1	36	33	35	32	34	29	37	30	35	32	34	31	32	28	35	28								
	2	33	29	32	27	29	24	30	24	32	28	31	26	28	22	28	23								
	3	28	23	29	24	25	21	26	21	26	21	28	22	24	19	25	20								
Wind Speed [mph]		190								200															
100	1	34	31	34	30	31	26	33	27	33	30	33	29	30	25	31	25								
	2	31	27	30	24	26	21	27	22	30	26	28	23	25	20	25	21								
	3	25	20	26	21	23	18	23	19		23	19	25	20	21	17	22	18							

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	59	49	56	45	47	39	48	39	57	47	53	43	45	37	46	37	54	45	51	41	44	35	44	36	
	2	49	40	44	36	39	31	39	32	47	39	42	34	37	30	37	31	45	37	41	33	35	29	36	29	
	3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25	
	5	1	59	49	56	45	47	39	48	39	57	47	53	43	45	37	46	37	54	45	51	41	44	35	44	36
		2	49	40	44	36	39	31	39	32	47	39	42	34	37	30	37	31	45	37	41	33	35	29	36	29
		3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
	10	1	59	49	56	45	47	39	48	39	57	47	53	43	45	37	46	37	54	45	51	41	44	35	44	36
		2	49	40	44	36	39	31	39	32	47	39	42	34	37	30	37	31	45	37	41	33	35	29	36	29
		3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
0	1	52	43	49	39	42	34	42	34	51	42	47	38	40	33	40	33									
	2	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27									
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23									
	5	1	52	43	49	39	42	34	42	34	51	42	47	38	40	33	40	33								
		2	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27								
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23								
	10	1	52	43	49	39	42	34	42	34	51	42	47	38	40	33	40	33								
		2	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27								
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23								
0	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33									
	2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27									
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23									
	5	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
	10	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
0	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33									
	2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27									
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23									
	5	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
	10	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
0	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33									
	2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27									
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23									
	5	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
	10	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Gable
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	47	39	43	35	37	30	38	31	44	36	40	32	35	28	35	29	42	34	37	30	32	26	33	27	
	2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19	
	5	1	47	39	43	35	37	30	38	31	44	36	40	32	35	28	35	29	42	34	37	30	32	26	33	27
		2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
	10	1	47	39	43	35	37	30	38	31	44	36	40	32	35	28	35	29	42	34	37	30	32	26	33	27
		2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
Wind Speed [mph]		170								180																
0	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24	30	25	27	22	23	19	24	19	
	2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17	
	5	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24	30	25	27	22	23	19	24	19
		2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17
	10	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24	30	25	27	22	23	19	24	19
		2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17
Wind Speed [mph]		190								200																
0	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22	27	22	24	19	21	17	22	18	
	2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	20	16	21	17	18	19	19	18	
	3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19		
	5	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22	27	22	24	19	21	17	22	18
		2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	20	16	21	17	18		19	
		3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19	
	10	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22	27	22	24	19	21	17	22	18
		2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	20	16	21	17	18		19	
		3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	57	49	56	45	47	39	48	39	56	47	53	43	45	37	46	37	54	45	51	41	44	35	44	36	
	2	49	40	44	36	39	31	39	32	47	39	42	34	37	30	37	31	45	37	41	33	35	29	36	29	
	3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25	
	20	1	55	48	53	45	47	39	48	39	53	47	52	43	45	37	46	37	52	45	51	41	44	35	44	36
		2	48	40	44	36	39	31	39	32	47	39	42	34	37	30	37	31	45	37	41	33	35	29	36	29
		3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
	25	1	55	48	53	45	47	39	48	39	53	47	52	43	45	37	46	37	52	45	51	41	44	35	44	36
		2	48	40	44	36	39	31	39	32	47	39	42	34	37	30	37	31	45	37	41	33	35	29	36	29
		3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
15	1	52	43	49	39	42	34	42	34	51	42	47	38	40	33	40	33									
	2	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27									
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23									
	20	1	51	43	49	39	42	34	42	34	49	42	47	38	40	33	40	33								
		2	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27								
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23								
	25	1	51	43	49	39	42	34	42	34	49	42	47	38	40	33	40	33								
		2	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27								
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23								
15	1	49	40	45	36	39	31	39	32	51	42	47	38	40	33	40	33									
	2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27									
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23									
	20	1	48	40	45	36	39	31	39	32	49	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
	25	1	48	40	45	36	39	31	39	32	49	42	47	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	47	39	43	35	37	30	38	31	44	36	40	32	35	28	35	29	42	34	37	30	32	26	33	27	
	2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19	
	20	1	47	39	43	35	37	30	38	31	44	36	40	32	35	28	35	29	42	34	37	30	32	26	33	27
		2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
	25	1	47	39	43	35	37	30	38	31	44	36	40	32	35	28	35	29	42	34	37	30	32	26	33	27
		2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
Wind Speed [mph]		170								180																
15	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24									
	2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19									
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17									
	20	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24								
		2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19								
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
	25	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24								
		2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19								
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
Wind Speed [mph]		190								200																
15	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22									
	2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18									
	3	21	17	22	18	19		20	16	20	16	21	17	18		19										
	20	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22								
		2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18								
		3	21	17	22	18	19		20	16	20	16	21	17	18		19									
	25	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22								
		2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18								
		3	21	17	22	18	19		20	16	20	16	21	17	18		19									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	54	47	52	45	47	39	48	39	52	46	51	43	45	37	46	37	51	45	50	41	44	35	44	36	
	2	47	40	44	36	39	31	39	32	46	39	42	34	37	30	37	31	45	37	41	33	35	29	36	29	
	3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25	
	35	1	52	46	51	45	47	39	48	39	51	45	50	43	45	37	46	37	50	44	48	41	44	35	44	36
		2	46	40	44	36	39	31	39	32	45	39	42	34	37	30	37	31	44	37	41	33	35	29	36	29
		3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
	40	1	51	45	50	44	46	39	48	39	50	44	49	43	45	37	46	37	49	43	47	41	44	35	44	36
		2	45	40	44	36	39	31	39	32	44	39	42	34	37	30	37	31	43	37	41	33	35	29	36	29
		3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
30	1	50	43	48	39	42	34	42	34	49	42	47	38	40	33	40	33									
	2	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27									
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23									
	35	1	49	43	47	39	42	34	42	34	47	41	46	38	40	33	40	33								
		2	43	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23								
	40	1	47	42	46	39	42	34	42	34	46	41	45	38	40	33	40	33								
		2	42	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27								
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23								
30	1	47	40	45	36	39	31	39	32	49	42	47	38	40	33	40	33									
	2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27									
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23									
	35	1	46	40	45	36	39	31	39	32	47	41	46	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	41	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
	40	1	45	40	44	36	39	31	39	32	46	41	45	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	41	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
30	1	47	40	45	36	39	31	39	32	49	42	47	38	40	33	40	33									
	2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27									
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23									
	35	1	46	40	45	36	39	31	39	32	47	41	46	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	41	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
	40	1	45	40	44	36	39	31	39	32	46	41	45	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	41	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
30	1	47	40	45	36	39	31	39	32	49	42	47	38	40	33	40	33									
	2	40	33	36	29	31	25	32	26	42	34	37	30	32	26	33	27									
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23									
	35	1	46	40	45	36	39	31	39	32	47	41	46	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	41	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
	40	1	45	40	44	36	39	31	39	32	46	41	45	38	40	33	40	33								
		2	40	33	36	29	31	25	32	26	41	34	37	30	32	26	33	27								
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	46	39	43	35	37	30	38	31	44	36	40	32	35	28	35	29	42	34	37	30	32	26	33	27
	2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
35	1	45	39	43	35	37	30	38	31	43	36	40	32	35	28	35	29	41	34	37	30	32	26	33	27
	2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
40	1	44	39	43	35	37	30	38	31	42	36	40	32	35	28	35	29	41	34	37	30	32	26	33	27
	2	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
Wind Speed [mph]		170								180															
30	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24								
	2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
35	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24								
	2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
40	1	39	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24								
	2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
Wind Speed [mph]		190								200															
30	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22								
	2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18								
	3	21	17	22	18	19		20	16	20	16	21	17	18		19									
35	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22								
	2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18								
	3	21	17	22	18	19		20	16	20	16	21	17	18		19									
40	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22								
	2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18								
	3	21	17	22	18	19		20	16	20	16	21	17	18		19									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	50	44	49	43	46	39	48	39	48	43	48	42	44	37	46	37	47	42	46	41	43	35	44	36	
	2	44	39	43	36	39	31	39	32	43	38	42	34	37	30	37	31	42	37	41	33	35	29	36	29	
	3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25	
	50	1	48	44	48	43	45	39	48	39	47	42	47	41	44	37	46	37	46	41	45	40	42	35	44	36
		2	44	38	43	36	39	31	39	32	42	37	41	34	37	30	37	31	41	36	40	33	35	29	36	29
		3	37	30	39	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
	60	1	46	42	46	41	43	38	48	39	45	41	45	40	42	37	46	37	44	40	44	39	41	35	44	36
		2	42	37	41	36	38	31	39	32	41	36	40	34	37	30	37	31	40	35	39	33	35	29	36	29
		3	37	30	38	31	33	27	34	28	35	28	37	30	32	26	32	27	33	27	35	29	31	25	31	25
Wind Speed [mph]		110								115																
45	1	46	41	45	39	42	34	42	34	45	40	44	38	40	33	40	33	45	40	44	38	40	33	40	33	
	2	41	36	39	31	34	27	34	28	40	34	37	30	32	26	33	27	40	34	37	30	32	26	33	27	
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23	31	25	32	26	28	23	29	23	
	50	1	45	40	44	39	41	34	42	34	44	39	43	38	40	33	40	33	44	39	43	38	40	33	40	33
		2	40	35	39	31	34	27	34	28	39	34	37	30	32	26	33	27	39	34	37	30	32	26	33	27
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23	31	25	32	26	28	23	29	23
	60	1	44	39	43	38	40	34	42	34	43	38	42	37	39	33	40	33	43	38	42	37	39	33	40	33
		2	39	34	38	31	34	27	34	28	38	33	37	30	32	26	33	27	38	33	37	30	32	26	33	27
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23	31	25	32	26	28	23	29	23
Wind Speed [mph]		120								130																
45	1	44	39	43	36	39	31	39	32	45	40	44	38	40	33	40	33	45	40	44	38	40	33	40	33	
	2	39	33	36	29	31	25	32	26	40	34	37	30	32	26	33	27	40	34	37	30	32	26	33	27	
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23	31	25	32	26	28	23	29	23	
	50	1	44	38	42	36	39	31	39	32	44	39	43	38	40	33	40	33	44	39	43	38	40	33	40	33
		2	38	33	36	29	31	25	32	26	39	34	37	30	32	26	33	27	39	34	37	30	32	26	33	27
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23	31	25	32	26	28	23	29	23
	60	1	42	37	41	36	38	31	39	32	43	38	42	37	39	33	40	33	43	38	42	37	39	33	40	33
		2	37	33	36	29	31	25	32	26	38	33	37	30	32	26	33	27	38	33	37	30	32	26	33	27
		3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23	31	25	32	26	28	23	29	23

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	43	38	42	35	37	30	38	31	42	36	40	32	35	28	35	29	40	34	37	30	32	26	33	27	
	2	38	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19	
	50	1	43	38	42	35	37	30	38	31	41	36	40	32	35	28	35	29	39	34	37	30	32	26	33	27
		2	38	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
	60	1	41	36	40	35	37	30	38	31	40	35	39	32	35	28	35	29	38	33	37	30	32	26	33	27
		2	36	32	35	28	30	24	31	25	35	30	32	26	28	23	29	23	33	28	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
Wind Speed [mph]		170								180																
45	1	38	32	35	29	30	25	31	25	37	30	33	27	29	23	29	24	30	25	27	22	23	19	24	19	
	2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17	
	50	1	38	32	35	29	30	25	31	25	36	30	33	27	29	23	29	24	30	25	27	22	23	19	24	19
		2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17
	60	1	37	32	35	29	30	25	31	25	35	30	33	27	29	23	29	24	30	25	27	22	23	19	24	19
		2	32	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17
Wind Speed [mph]		190								200																
45	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22	33	27	30	24	26	21	26	22	
	2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	27	22	24	19	21	17	22	18	
	3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19		
	50	1	35	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22	33	27	30	24	26	21	26	22
		2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	27	22	24	19	21	17	22	18
		3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19	
	60	1	34	29	31	25	27	22	28	23	33	27	30	24	26	21	26	22	33	27	30	24	26	21	26	22
		2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	27	22	24	19	21	17	22	18
		3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	44	41	44	40	42	37	48	39	43	40	43	39	41	36	46	37	43	39	42	38	40	35	44	36
	2	41	36	40	35	37	31	39	32	40	35	39	34	36	30	37	31	39	34	38	33	35	29	36	29
	3	37	30	37	31	33	27	34	28	35	28	36	30	32	26	32	27	33	27	35	29	31	25	31	25
80	1	43	39	42	39	41	36	48	39	42	38	42	38	40	35	46	37	41	38	41	37	39	34	44	36
	2	39	35	39	35	36	31	39	32	38	34	38	34	35	30	37	31	38	34	37	33	34	29	36	29
	3	37	30	36	31	33	27	34	28	35	28	35	30	32	26	32	27	33	27	34	29	31	25	31	25
90	1	41	38	41	38	40	36	47	39	40	37	40	37	39	35	45	37	40	37	40	36	38	34	44	36
	2	38	34	38	34	36	31	39	32	37	34	37	33	35	30	37	31	37	33	36	32	34	29	36	29
	3	36	30	35	31	33	27	34	28	35	28	34	30	32	26	32	27	33	27	33	29	31	25	31	25
Wind Speed [mph]		110								115															
70	1	42	38	41	37	39	34	42	34	41	37	41	36	38	33	40	33								
	2	38	34	37	31	34	27	34	28	37	33	36	30	32	26	33	27								
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23								
80	1	40	37	40	36	38	33	42	34	40	36	39	35	37	33	40	33								
	2	37	33	36	31	33	27	34	28	36	32	35	30	32	26	33	27								
	3	32	26	33	27	29	24	30	24	31	25	32	26	28	23	29	23								
90	1	39	36	39	35	37	33	42	34	39	35	38	34	36	32	40	33								
	2	36	32	35	31	33	27	34	28	35	31	34	30	32	26	33	27								
	3	32	26	32	27	29	24	30	24	31	25	32	26	28	23	29	23								
Wind Speed [mph]		120								130															
70	1	40	36	40	35	37	31	39	32	41	37	41	36	38	33	40	33								
	2	36	32	35	29	31	25	32	26	37	33	36	30	32	26	33	27								
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
80	1	39	35	39	35	36	31	39	32	40	36	39	35	37	33	40	33								
	2	35	31	35	29	31	25	32	26	36	32	35	30	32	26	33	27								
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								
90	1	38	34	38	34	36	31	39	32	39	35	38	34	36	32	40	33								
	2	34	31	34	29	31	25	32	26	35	31	34	30	32	26	33	27								
	3	30	24	31	25	27	22	28	23	31	25	32	26	28	23	29	23								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Span, inches								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	40	36	39	35	36	30	38	31	38	34	38	32	35	28	35	29	37	33	36	30	32	26	33	27	
	2	36	31	35	28	30	24	31	25	34	30	32	26	28	23	29	23	33	28	30	24	26	21	27	22	
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19	
	80	1	39	35	38	34	36	30	38	31	37	33	37	32	34	28	35	29	36	32	35	30	32	26	33	27
		2	35	30	34	28	30	24	31	25	33	29	32	26	28	23	29	23	32	28	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
	90	1	37	34	37	33	35	30	38	31	36	32	36	32	33	28	35	29	35	31	34	30	32	26	33	27
		2	34	30	33	28	30	24	31	25	32	29	32	26	28	23	29	23	31	27	30	24	26	21	27	22
		3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
Wind Speed [mph]		170								180																
70	1	36	31	35	29	30	25	31	25	34	30	33	27	29	23	29	24	30	25	27	22	23	19	24	19	
	2	31	26	28	23	25	20	25	21	30	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17	
80	1	35	31	34	29	30	25	31	25	34	29	33	27	29	23	29	24	29	25	27	22	23	19	24	19	
	2	31	26	28	23	25	20	25	21	29	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17	
90	1	34	30	33	29	30	25	31	25	33	29	32	27	29	23	29	24	29	25	27	22	23	19	24	19	
	2	30	26	28	23	25	20	25	21	29	25	27	22	23	19	24	19	22	18	23	19	20	16	21	17	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17	
Wind Speed [mph]		190								200																
70	1	33	29	31	25	27	22	28	23	32	27	30	24	26	21	26	22	27	22	24	19	21	17	22	18	
	2	29	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	20	16	21	17	18	19	19	18	
	3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19		
80	1	33	28	31	25	27	22	28	23	31	27	30	24	26	21	26	22	27	22	24	19	21	17	22	18	
	2	28	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	20	16	21	17	18		19		
	3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19		
90	1	32	28	31	25	27	22	28	23	31	27	30	24	26	21	26	22	27	22	24	19	21	17	22	18	
	2	28	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	20	16	21	17	18		19		
	3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19		

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	40	37	40	37	39	35	46	39	39	36	39	36	38	34	45	37	39	36	38	35	37	33	44	36
	2	37	34	37	33	35	31	39	32	36	33	36	32	34	30	37	31	36	32	35	31	33	29	36	29
	3	35	30	34	30	32	27	34	28	34	28	33	30	31	26	32	27	33	27	33	29	30	25	31	25
Wind Speed [mph]		110								115															
100	1	38	35	38	34	37	32	42	34	37	34	37	34	36	31	40	33	37	34	37	34	36	31	40	33
	2	35	31	34	31	32	27	34	28	34	31	34	30	31	26	33	27	34	31	34	30	31	26	33	27
	3	32	26	32	27	29	24	30	24	31	25	31	26	28	23	29	23	31	25	31	26	28	23	29	23
Wind Speed [mph]		120								130															
100	1	37	34	37	33	35	31	39	32	37	34	37	34	36	31	40	33	37	34	37	34	36	31	40	33
	2	34	30	33	29	31	25	32	26	34	31	34	30	31	26	33	27	34	31	34	30	31	26	33	27
	3	30	24	30	25	27	22	28	23	31	25	31	26	28	23	29	23	31	25	31	26	28	23	29	23

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	36	33	36	32	34	30	38	31	35	32	35	31	33	28	35	29	34	31	34	30	31	26	33	27
	2	33	29	32	28	30	24	31	25	32	28	31	26	28	23	29	23	31	27	30	24	26	21	27	22
	3	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	25	20	26	21	23	18	23	19
Wind Speed [mph]		170								180															
100	1	33	30	32	29	30	25	31	25	32	28	31	27	29	23	29	24	32	28	31	27	29	23	29	24
	2	30	26	28	23	25	20	25	21	28	25	27	22	23	19	24	19	28	25	27	22	23	19	24	19
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17
Wind Speed [mph]		190								200															
100	1	31	27	30	25	27	22	28	23	30	27	29	24	26	21	26	22	30	27	29	24	26	21	26	22
	2	27	24	25	20	22	18	23	18	27	22	24	19	21	17	22	18	27	22	24	19	21	17	22	18
	3	21	17	22	18	19		20	16	20	16	21	17	18		19		20	16	21	17	18		19	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	55	45	51	41	44	36	44	36	52	43	49	39	42	34	42	34	50	42	46	37	40	32	40	33
	2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
5	1	55	45	51	41	44	36	44	36	52	43	49	39	42	34	42	34	50	42	46	37	40	32	40	33
	2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
10	1	55	45	51	41	44	36	44	36	52	43	49	39	42	34	42	34	50	42	46	37	40	32	40	33
	2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
Wind Speed [mph]		110								115															
0	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30								
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
5	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30								
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
10	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30								
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
Wind Speed [mph]		120								130															
0	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30								
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
5	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30								
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
10	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30								
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	44	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
5	1	44	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
10	1	44	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
Wind Speed [mph]		170								180															
0	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
5	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
10	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
Wind Speed [mph]		190								200															
0	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									
5	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									
10	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	54	45	51	41	44	36	44	36	52	43	49	39	42	34	42	34	50	42	46	37	40	32	40	33
	2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
20	1	52	45	51	41	44	36	44	36	51	43	49	39	42	34	42	34	49	42	46	37	40	32	40	33
	2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
25	1	52	45	51	41	44	36	44	36	51	43	49	39	42	34	42	34	49	42	46	37	40	32	40	33
	2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
15	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30								
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
20	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30								
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
25	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30								
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
15	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30								
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
20	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30								
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
25	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30								
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	44	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25	
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20	
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17	
	20	1	44	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
		2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
		3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
	25	1	44	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
		2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
		3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
Wind Speed [mph]		170								180																
15	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22									
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18									
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19										
	20	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
		2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
		3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
	25	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
		2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
		3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
Wind Speed [mph]		190								200																
15	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20									
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16									
	3	19		20	16	17		18		18		19		17		17										
	20	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
		2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
		3	19		20	16	17		18		18		19		17		17									
	25	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
		2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
		3	19		20	16	17		18		18		19		17		17									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	52	45	51	41	44	36	44	36	51	43	49	39	42	34	42	34	49	42	46	37	40	32	40	33	
	2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27	
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23	
	35	1	51	45	49	41	44	36	44	36	49	43	48	39	42	34	42	34	48	42	46	37	40	32	40	33
		2	45	37	41	33	35	29	36	29	43	36	39	31	34	27	34	28	42	34	37	30	32	26	33	27
		3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
	40	1	50	44	48	41	44	36	44	36	48	42	47	39	42	34	42	34	47	41	46	37	40	32	40	33
		2	44	37	41	33	35	29	36	29	42	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27
		3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
30	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30									
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25									
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22									
	35	1	47	40	44	36	38	31	39	32	46	38	43	35	37	30	37	30								
		2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
	40	1	46	40	44	36	38	31	39	32	45	38	43	35	37	30	37	30								
		2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
30	1	48	40	44	36	38	31	39	32	47	38	43	35	37	30	37	30									
	2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25									
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22									
	35	1	47	40	44	36	38	31	39	32	46	38	43	35	37	30	37	30								
		2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
	40	1	46	40	44	36	38	31	39	32	45	38	43	35	37	30	37	30								
		2	40	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25								
		3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
30	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30									
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25									
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22									
	35	1	45	37	41	33	35	29	36	29	46	38	43	35	37	30	37	30								
		2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
		3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
	40	1	44	37	41	33	35	29	36	29	45	38	43	35	37	30	37	30								
		2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
		3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
30	1	45	37	41	33	35	29	36	29	47	38	43	35	37	30	37	30									
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25									
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22									
	35	1	45	37	41	33	35	29	36	29	46	38	43	35	37	30	37	30								
		2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
		3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
	40	1	44	37	41	33	35	29	36	29	45	38	43	35	37	30	37	30								
		2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25								
		3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	44	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
35	1	43	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
40	1	43	36	39	32	34	28	35	28	41	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
Wind Speed [mph]		170								180															
30	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
35	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
40	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
Wind Speed [mph]		190								200															
30	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									
35	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									
40	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	49	43	47	41	44	36	44	36	47	42	46	39	42	34	42	34	46	41	45	37	40	32	40	33
	2	43	37	41	33	35	29	36	29	42	36	39	31	34	27	34	28	41	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
50	1	48	42	47	41	43	36	44	36	46	41	45	39	42	34	42	34	45	40	44	37	40	32	40	33
	2	42	37	41	33	35	29	36	29	41	36	39	31	34	27	34	28	40	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
60	1	46	41	45	40	42	36	44	36	45	40	44	39	41	34	42	34	44	39	43	37	40	32	40	33
	2	41	36	40	33	35	29	36	29	40	35	39	31	34	27	34	28	39	34	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
Wind Speed [mph]		110								115															
45	1	45	39	44	36	38	31	39	32	44	38	43	35	37	30	37	30	45	39	44	36	38	31	39	32
	2	39	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25	39	33	36	29	31	25	32	26
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22	29	24	31	25	27	22	27	22
50	1	44	39	43	36	38	31	39	32	43	38	42	35	37	30	37	30	44	39	43	36	38	31	39	32
	2	39	33	36	29	31	25	32	26	38	32	34	28	30	24	30	25	39	33	36	29	31	25	32	26
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22	29	24	31	25	27	22	27	22
60	1	43	38	42	36	38	31	39	32	42	37	41	35	37	30	37	30	43	38	42	36	38	31	39	32
	2	38	33	36	29	31	25	32	26	37	32	34	28	30	24	30	25	38	33	36	29	31	25	32	26
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22	29	24	31	25	27	22	27	22
Wind Speed [mph]		120								130															
45	1	43	37	41	33	35	29	36	29	44	38	43	35	37	30	37	30	43	37	41	33	35	29	36	29
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25	37	30	33	27	29	23	29	24
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22	27	22	29	23	25	20	25	21
50	1	42	37	41	33	35	29	36	29	43	38	42	35	37	30	37	30	42	37	41	33	35	29	36	29
	2	37	30	33	27	29	23	29	24	38	32	34	28	30	24	30	25	37	30	33	27	29	23	29	24
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22	27	22	29	23	25	20	25	21
60	1	41	36	40	33	35	29	36	29	42	37	41	35	37	30	37	30	41	36	40	33	35	29	36	29
	2	36	30	33	27	29	23	29	24	37	32	34	28	30	24	30	25	36	30	33	27	29	23	29	24
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22	27	22	29	23	25	20	25	21

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	42	36	39	32	34	28	35	28	40	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25	
	2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20	
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17	
	50	1	41	36	39	32	34	28	35	28	39	33	37	30	32	26	32	26	38	31	34	28	30	24	30	25
		2	36	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
		3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
	60	1	40	35	39	32	34	28	35	28	38	33	37	30	32	26	32	26	37	31	34	28	30	24	30	25
		2	35	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
		3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
Wind Speed [mph]		170								180																
45	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22									
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18									
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19										
	50	1	36	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
		2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
		3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
	60	1	35	30	32	26	28	23	29	23	34	28	30	25	26	21	27	22								
		2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
		3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
Wind Speed [mph]		190								200																
45	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20									
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16									
	3	19		20	16	17		18		18		19		17		17										
	50	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
		2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
		3	19		20	16	17		18		18		19		17		17									
	60	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
		2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
		3	19		20	16	17		18		18		19		17		17									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
		70	1	44	40	43	39	41	36	44	36	43	39	42	38	40	34	42	34	42	38	42	37	39	32
	2	40	35	39	33	35	29	36	29	39	34	38	31	34	27	34	28	38	33	37	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
80	1	43	39	42	38	40	35	44	36	42	38	41	37	39	34	42	34	41	37	40	36	38	32	40	33
	2	39	34	38	33	35	29	36	29	38	33	37	31	34	27	34	28	37	33	36	30	32	26	33	27
	3	34	27	35	29	31	25	31	25	32	26	34	27	29	24	30	24	31	25	32	26	28	23	29	23
90	1	41	38	41	37	39	34	44	36	40	37	40	36	38	33	42	34	40	36	39	35	37	32	40	33
	2	38	34	37	33	34	29	36	29	37	33	36	31	33	27	34	28	36	32	35	30	32	26	33	27
	3	34	27	34	29	31	25	31	25	32	26	33	27	29	24	30	24	31	25	32	26	28	23	29	23
Wind Speed [mph]		110								115															
70	1	41	37	41	36	38	31	39	32	41	36	40	35	37	30	37	30	36	31	34	28	30	24	30	25
	2	37	32	36	29	31	25	32	26	36	31	34	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22	28	23	30	24	26	21	26	22
80	1	40	36	39	35	37	31	39	32	39	35	39	34	36	30	37	30	35	31	34	28	30	24	30	25
	2	36	32	35	29	31	25	32	26	35	31	34	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22	28	23	30	24	26	21	26	22
90	1	39	35	38	34	36	31	39	32	38	34	38	34	35	30	37	30	34	30	34	28	30	24	30	25
	2	35	31	34	29	31	25	32	26	34	30	34	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22	28	23	30	24	26	21	26	22
Wind Speed [mph]		120								130															
70	1	40	35	39	33	35	29	36	29	41	36	40	35	37	30	37	30	36	31	34	28	30	24	30	25
	2	35	30	33	27	29	23	29	24	36	31	34	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22	28	23	30	24	26	21	26	22
80	1	39	34	38	33	35	29	36	29	39	35	39	34	36	30	37	30	35	31	34	28	30	24	30	25
	2	34	30	33	27	29	23	29	24	35	31	34	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22	28	23	30	24	26	21	26	22
90	1	38	34	37	33	34	29	36	29	38	34	38	34	35	30	37	30	34	30	34	28	30	24	30	25
	2	34	29	33	27	29	23	29	24	34	30	34	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22	28	23	30	24	26	21	26	22

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	39	34	38	32	34	28	35	28	37	33	36	30	32	26	32	26	36	31	34	28	30	24	30	25
	2	34	29	32	26	28	22	28	23	33	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
80	1	38	34	37	32	34	28	35	28	36	32	36	30	32	26	32	26	35	31	34	28	30	24	30	25
	2	34	29	32	26	28	22	28	23	32	27	29	24	26	21	26	22	31	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
90	1	37	33	36	32	34	28	35	28	36	31	35	30	32	26	32	26	34	30	33	28	30	24	30	25
	2	33	29	32	26	28	22	28	23	31	27	29	24	26	21	26	22	30	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
Wind Speed [mph]		170								180															
70	1	35	30	32	26	28	23	29	23	33	28	30	25	26	21	27	22								
	2	30	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
80	1	34	29	32	26	28	23	29	23	33	28	30	25	26	21	27	22								
	2	29	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
90	1	33	29	32	26	28	23	29	23	32	28	30	25	26	21	27	22								
	2	29	24	26	21	23	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
Wind Speed [mph]		190								200															
70	1	32	26	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									
80	1	31	26	29	23	25	20	26	21	30	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									
90	1	31	26	29	23	25	20	26	21	30	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	40	37	40	36	38	34	44	36	39	36	39	35	37	33	42	34	39	35	38	34	36	32	40	33
	2	37	33	36	32	34	29	36	29	36	32	35	31	33	27	34	28	35	31	34	30	32	26	33	27
	3	34	27	33	29	31	25	31	25	32	26	32	27	29	24	30	24	31	25	32	26	28	23	29	23
0	1																								
	2																								
	3																								
100	1	38	34	37	34	36	31	39	32	37	34	37	33	35	30	37	30	34	30	33	28	30	24	30	25
	2	34	31	34	29	31	25	32	26	34	30	33	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	29	24	31	25	27	22	27	22	28	23	30	24	26	21	26	22								
0	1																								
	2																								
	3																								
100	1	37	33	36	32	34	29	36	29	37	34	37	33	35	30	37	30	34	30	33	28	30	24	30	25
	2	33	29	32	27	29	23	29	24	34	30	33	28	30	24	30	25	28	23	30	24	26	21	26	22
	3	27	22	29	23	25	20	25	21	28	23	30	24	26	21	26	22								
0	1																								
	2																								
	3																								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	36	32	35	31	33	28	35	28	35	31	34	30	31	26	32	26	34	30	33	28	30	24	30	25
	2	32	28	31	26	28	22	28	23	31	27	29	24	26	21	26	22	30	26	28	22	24	19	25	20
	3	26	21	28	22	24	19	24	20	24	20	26	21	22	18	23	19	23	18	24	19	21	17	21	17
Wind Speed [mph]		170								180															
100	1	32	28	32	26	28	23	29	23	31	27	30	25	26	21	27	22								
	2	28	24	26	21	23	18	23	19	27	23	24	20	21	17	22	18								
	3	21	17	23	18	20	16	20	16	20	16	21	17	18		19									
Wind Speed [mph]		190								200															
100	1	30	26	29	23	25	20	26	21	29	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19		20	16								
	3	19		20	16	17		18		18		19		17		17									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
0	1	62	52	60	48	51	42	51	42	60	50	57	46	48	40	49	40	58	48	55	44	47	38	47	38	
	2	52	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33	48	40	44	35	38	31	38	31	
	3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27	
	5	1	62	52	60	48	51	42	51	42	60	50	57	46	48	40	49	40	58	48	55	44	47	38	47	38
		2	52	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33	48	40	44	35	38	31	38	31
		3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
	10	1	62	52	60	48	51	42	51	42	60	50	57	46	48	40	49	40	58	48	55	44	47	38	47	38
		2	52	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33	48	40	44	35	38	31	38	31
		3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
0	1	56	46	52	42	45	37	45	37	54	45	50	41	43	35	43	36									
	2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29									
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25									
	5	1	56	46	52	42	45	37	45	37	54	45	50	41	43	35	43	36								
		2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
		3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
	10	1	56	46	52	42	45	37	45	37	54	45	50	41	43	35	43	36								
		2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
		3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
0	1	52	43	48	39	42	34	42	34	54	45	50	41	43	35	43	36									
	2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29									
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25									
	5	1	52	43	48	39	42	34	42	34	54	45	50	41	43	35	43	36								
		2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
		3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								
	10	1	52	43	48	39	42	34	42	34	54	45	50	41	43	35	43	36								
		2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
		3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	50	42	46	38	40	33	40	33	47	39	43	35	37	30	38	31	44	37	40	33	35	28	35	29
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
5	1	50	42	46	38	40	33	40	33	47	39	43	35	37	30	38	31	44	37	40	33	35	28	35	29
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
10	1	50	42	46	38	40	33	40	33	47	39	43	35	37	30	38	31	44	37	40	33	35	28	35	29
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
Wind Speed [mph]		170								180															
0	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	24	19	25	20	22	18	22	18
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
5	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	24	19	25	20	22	18	22	18
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
10	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	24	19	25	20	22	18	22	18
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
Wind Speed [mph]		190								200															
0	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	29	24	26	21	22	18	23	19
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	21	17	22	18	19	16	20	16
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16
5	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	29	24	26	21	22	18	23	19
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	21	17	22	18	19	16	20	16
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16
10	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	29	24	26	21	22	18	23	19
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	21	17	22	18	19	16	20	16
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	60	52	58	48	51	42	51	42	58	50	57	46	48	40	49	40	57	48	55	44	47	38	47	38
	2	52	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33	48	40	44	35	38	31	38	31
	3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
20	1	57	51	56	48	51	42	51	42	56	49	54	46	48	40	49	40	54	48	53	44	47	38	47	38
	2	51	43	48	39	41	34	42	34	49	41	46	37	40	32	40	33	48	40	44	35	38	31	38	31
	3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
25	1	57	51	56	48	51	42	51	42	56	49	54	46	48	40	49	40	54	48	53	44	47	38	47	38
	2	51	43	48	39	41	34	42	34	49	41	46	37	40	32	40	33	48	40	44	35	38	31	38	31
	3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
15	1	55	46	52	42	45	37	45	37	54	45	50	41	43	35	43	36								
	2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
20	1	53	46	52	42	45	37	45	37	52	45	50	41	43	35	43	36								
	2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
25	1	53	46	52	42	45	37	45	37	52	45	50	41	43	35	43	36								
	2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
15	1	55	46	52	42	45	37	45	37	54	45	50	41	43	35	43	36								
	2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
20	1	53	46	52	42	45	37	45	37	52	45	50	41	43	35	43	36								
	2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
25	1	53	46	52	42	45	37	45	37	52	45	50	41	43	35	43	36								
	2	46	38	42	34	36	29	37	30	45	37	40	33	35	28	36	29								
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25								
15	1	52	43	48	39	42	34	42	34	54	45	50	41	43	35	43	36								
	2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								
20	1	51	43	48	39	42	34	42	34	52	45	50	41	43	35	43	36								
	2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								
25	1	51	43	48	39	42	34	42	34	52	45	50	41	43	35	43	36								
	2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								
15	1	52	43	48	39	42	34	42	34	54	45	50	41	43	35	43	36								
	2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								
20	1	51	43	48	39	42	34	42	34	52	45	50	41	43	35	43	36								
	2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								
25	1	51	43	48	39	42	34	42	34	52	45	50	41	43	35	43	36								
	2	43	35	39	31	34	27	34	28	45	37	40	33	35	28	36	29								
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	50	42	46	38	40	33	40	33	47	39	43	35	37	30	38	31	44	37	40	33	35	28	35	29
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
20	1	49	42	46	38	40	33	40	33	47	39	43	35	37	30	38	31	44	37	40	33	35	28	35	29
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
25	1	49	42	46	38	40	33	40	33	47	39	43	35	37	30	38	31	44	37	40	33	35	28	35	29
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
Wind Speed [mph]		170								180															
15	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
20	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
25	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
Wind Speed [mph]		190								200															
15	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	29	24	26	21	22	18	23	19
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16
20	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	29	24	26	21	22	18	23	19
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16
25	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	29	24	26	21	22	18	23	19
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	56	50	55	48	50	42	51	42	55	48	53	46	48	40	49	40	53	47	52	44	47	38	47	38	
	2	50	43	48	39	41	34	42	34	48	41	46	37	40	32	40	33	47	40	44	35	38	31	38	31	
	3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27	
	35	1	54	48	53	47	49	42	51	42	53	47	52	46	48	40	49	40	52	46	51	44	47	38	47	38
		2	48	42	47	39	41	34	42	34	47	41	46	37	40	32	40	33	46	40	44	35	38	31	38	31
		3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
	40	1	53	47	52	46	49	42	51	42	51	46	51	45	47	40	49	40	50	45	49	44	46	38	47	38
		2	47	42	46	39	41	34	42	34	46	40	45	37	40	32	40	33	45	39	44	35	38	31	38	31
		3	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
Wind Speed [mph]		110								115																
30	1	52	46	51	42	45	37	45	37	51	44	49	41	43	35	43	36									
	2	46	38	42	34	36	29	37	30	44	37	40	33	35	28	36	29									
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25									
35	1	51	45	49	42	45	37	45	37	49	44	48	41	43	35	43	36									
	2	45	38	42	34	36	29	37	30	44	37	40	33	35	28	36	29									
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25									
40	1	49	44	48	42	44	37	45	37	48	43	47	41	43	35	43	36									
	2	44	38	42	34	36	29	37	30	43	37	40	33	35	28	36	29									
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25									
Wind Speed [mph]		120								130																
30	1	50	43	48	39	42	34	42	34	51	44	49	41	43	35	43	36									
	2	43	35	39	31	34	27	34	28	44	37	40	33	35	28	36	29									
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25									
35	1	48	42	47	39	42	34	42	34	49	44	48	41	43	35	43	36									
	2	42	35	39	31	34	27	34	28	44	37	40	33	35	28	36	29									
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25									
40	1	47	42	46	39	42	34	42	34	48	43	47	41	43	35	43	36									
	2	42	35	39	31	34	27	34	28	43	37	40	33	35	28	36	29									
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	48	42	46	38	40	33	40	33	46	39	43	35	37	30	38	31	44	37	40	33	35	28	35	29	
	2	42	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24	
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	
	35	1	47	41	46	38	40	33	40	33	45	39	43	35	37	30	38	31	43	37	40	33	35	28	35	29
		2	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
		3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
	40	1	46	41	45	38	40	33	40	33	44	39	43	35	37	30	38	31	43	37	40	33	35	28	35	29
		2	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	37	30	32	26	28	23	29	24
		3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
Wind Speed [mph]		170								180																
30	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21	
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21	
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18	
35	1	42	34	38	31	33	27	33	27	40	33	36	29	31	25	31	26	33	27	29	23	25	20	26	21	
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21	
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18	
40	1	41	34	38	31	33	27	33	27	39	33	36	29	31	25	31	26	39	33	36	29	31	25	31	26	
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21	
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18	
Wind Speed [mph]		190								200																
30	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	36	29	32	26	28	22	28	23	
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19	
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16	
35	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	36	29	32	26	28	22	28	23	
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19	
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16	
40	1	38	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	36	29	32	26	28	22	28	23	
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19	
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16	

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	51	46	50	45	48	42	51	42	50	45	49	44	46	40	49	40	49	44	48	43	45	38	47	38	
	2	46	41	45	39	41	34	42	34	45	40	44	37	40	32	40	33	44	39	43	35	38	31	38	31	
	3	39	32	41	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27	
	50	1	50	45	49	44	47	41	51	42	49	44	48	43	46	40	49	40	48	43	47	42	44	38	47	38
		2	45	40	44	39	41	34	42	34	44	39	43	37	40	32	40	33	43	38	42	35	38	31	38	31
		3	39	32	41	34	36	29	36	30	38	31	40	32	34	28	35	28	36	29	38	31	33	27	33	27
	60	1	47	43	47	43	45	40	51	42	47	43	46	42	44	39	49	40	46	42	45	41	43	38	47	38
		2	43	39	43	38	40	34	42	34	43	38	42	37	39	32	40	33	42	37	41	35	38	31	38	31
		3	39	32	39	34	36	29	36	30	38	31	38	32	34	28	35	28	36	29	37	31	33	27	33	27
Wind Speed [mph]		110								115																
45	1	48	43	47	42	44	37	45	37	47	42	46	41	43	35	43	36	47	42	46	41	43	35	43	36	
	2	43	38	42	34	36	29	37	30	42	37	40	33	35	28	36	29	42	37	40	33	35	28	36	29	
	3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25	
	50	1	47	42	46	41	43	37	45	37	46	41	45	40	42	35	43	36	46	41	45	40	42	35	43	36
		2	42	37	41	34	36	29	37	30	41	36	40	33	35	28	36	29	41	36	40	33	35	28	36	29
		3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25
	60	1	45	41	44	40	42	37	45	37	44	40	44	39	41	35	43	36	44	40	44	39	41	35	43	36
		2	41	36	40	34	36	29	37	30	40	35	39	33	35	28	36	29	40	35	39	33	35	28	36	29
		3	35	28	36	29	32	26	32	26	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25
Wind Speed [mph]		120								130																
45	1	46	41	45	39	41	34	42	34	47	42	46	41	43	35	43	36	47	42	46	41	43	35	43	36	
	2	41	35	39	31	34	27	34	28	42	37	40	33	35	28	36	29	42	37	40	33	35	28	36	29	
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25	
	50	1	45	40	44	39	41	34	42	34	46	41	45	40	42	35	43	36	46	41	45	40	42	35	43	36
		2	40	35	39	31	34	27	34	28	41	36	40	33	35	28	36	29	41	36	40	33	35	28	36	29
		3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25
	60	1	43	39	43	38	40	34	42	34	44	40	44	39	41	35	43	36	44	40	44	39	41	35	43	36
		2	39	34	38	31	34	27	34	28	40	35	39	33	35	28	36	29	40	35	39	33	35	28	36	29
		3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25	33	27	35	28	30	25	31	25

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	45	40	44	38	40	33	40	33	44	38	42	35	37	30	38	31	42	36	40	33	35	28	35	29	
	2	40	34	37	30	32	26	33	27	38	32	35	28	30	24	31	25	36	30	32	26	28	23	29	24	
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20	
	50	1	44	39	43	38	40	33	40	33	43	38	42	35	37	30	38	31	41	36	40	33	35	28	35	29
		2	39	34	37	30	32	26	33	27	38	32	35	28	30	24	31	25	36	30	32	26	28	23	29	24
		3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
	60	1	43	38	42	37	39	33	40	33	41	37	40	35	37	30	38	31	40	35	39	33	35	28	35	29
		2	38	33	37	30	32	26	33	27	37	32	35	28	30	24	31	25	35	30	32	26	28	23	29	24
		3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
Wind Speed [mph]		170								180																
45	1	40	34	38	31	33	27	33	27	39	33	36	29	31	25	31	26	39	33	36	29	31	25	31	26	
	2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21	
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18	
	50	1	40	34	38	31	33	27	33	27	38	33	36	29	31	25	31	26	38	33	36	29	31	25	31	26
		2	34	28	30	25	26	21	27	22	33	27	29	23	25	20	26	21	33	27	29	23	25	20	26	21
		3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
	60	1	38	34	37	31	33	27	33	27	37	32	36	29	31	25	31	26	37	32	36	29	31	25	31	26
		2	34	28	30	25	26	21	27	22	32	27	29	23	25	20	26	21	32	27	29	23	25	20	26	21
		3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18	24	19	25	20	22	18	22	18
Wind Speed [mph]		190								200																
45	1	37	31	34	27	29	24	30	24	36	29	32	26	28	22	28	23	36	29	32	26	28	22	28	23	
	2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19	
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16	
	50	1	37	31	34	27	29	24	30	24	35	29	32	26	28	22	28	23	35	29	32	26	28	22	28	23
		2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16
	60	1	36	31	34	27	29	24	30	24	35	29	32	26	28	22	28	23	35	29	32	26	28	22	28	23
		2	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16	21	17	22	18	19	16	20	16

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	45	42	45	41	44	39	51	42	45	41	44	40	43	38	49	40	44	40	44	39	42	37	47	38	
	2	42	38	41	37	39	34	42	34	41	37	40	36	38	32	40	33	40	36	39	35	37	31	38	31	
	3	39	32	38	34	35	29	36	30	38	31	37	32	34	28	35	28	36	29	36	31	33	27	33	27	
	80	1	44	40	43	40	43	38	50	42	43	40	43	39	42	37	49	40	42	39	42	38	41	36	47	38
		2	40	37	40	36	38	33	42	34	40	36	39	35	37	32	40	33	39	35	38	34	36	31	38	31
		3	38	32	37	33	35	29	36	30	37	31	36	32	34	28	35	28	36	29	35	31	33	27	33	27
	90	1	42	39	42	39	41	37	49	42	41	38	41	38	41	36	48	40	41	38	41	37	40	35	46	38
		2	39	36	39	35	37	33	42	34	38	35	38	34	36	32	40	33	38	34	37	33	35	31	38	31
		3	37	32	36	32	34	29	36	30	36	31	35	31	33	28	35	28	35	29	35	31	32	27	33	27
Wind Speed [mph]		110								115																
70	1	43	39	43	39	41	36	45	37	43	39	42	38	40	35	43	36									
	2	39	35	39	34	36	29	37	30	39	34	38	33	35	28	36	29									
	3	35	28	35	29	32	26	32	26	33	27	35	28	30	25	31	25									
80	1	42	38	41	38	40	35	45	37	41	37	41	37	39	34	43	36									
	2	38	34	38	33	35	29	37	30	37	33	37	33	34	28	36	29									
	3	35	28	35	29	32	26	32	26	33	27	34	28	30	25	31	25									
90	1	40	37	40	37	39	34	45	37	40	36	39	36	38	34	43	36									
	2	37	33	37	33	34	29	37	30	36	33	36	32	34	28	36	29									
	3	35	28	34	29	31	26	32	26	33	27	33	28	30	25	31	25									
Wind Speed [mph]		120								130																
70	1	42	38	41	37	39	34	42	34	43	39	42	38	40	35	43	36									
	2	38	33	37	31	34	27	34	28	39	34	38	33	35	28	36	29									
	3	32	26	34	27	29	24	30	24	33	27	35	28	30	25	31	25									
80	1	40	37	40	36	38	33	42	34	41	37	41	37	39	34	43	36									
	2	37	33	36	31	33	27	34	28	37	33	37	33	34	28	36	29									
	3	32	26	33	27	29	24	30	24	33	27	34	28	30	25	31	25									
90	1	39	36	39	35	37	33	42	34	40	36	39	36	38	34	43	36									
	2	36	32	35	31	33	27	34	28	36	33	36	32	34	28	36	29									
	3	32	26	32	27	29	24	30	24	33	27	33	28	30	25	31	25									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	41	37	40	36	38	33	40	33	40	36	39	35	36	30	38	31	38	34	38	33	35	28	35	29
	2	37	33	36	30	32	26	33	27	36	31	35	28	30	24	31	25	34	30	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
80	1	40	36	39	35	37	32	40	33	39	35	38	34	36	30	38	31	37	33	37	32	34	28	35	29
	2	36	32	35	30	32	26	33	27	35	31	34	28	30	24	31	25	33	29	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
90	1	39	35	38	34	36	32	40	33	37	34	37	33	35	30	38	31	36	33	36	32	33	28	35	29
	2	35	31	34	30	32	26	33	27	34	30	33	28	30	24	31	25	33	29	32	26	28	23	29	24
	3	31	25	32	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
Wind Speed [mph]		170								180															
70	1	37	33	36	31	33	27	33	27	36	32	35	29	31	25	31	26								
	2	33	28	30	25	26	21	27	22	32	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
80	1	36	32	35	31	33	27	33	27	35	31	34	29	31	25	31	26								
	2	32	28	30	25	26	21	27	22	31	27	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
90	1	35	31	35	31	32	27	33	27	34	30	33	29	31	25	31	26								
	2	31	28	30	25	26	21	27	22	30	26	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
Wind Speed [mph]		190								200															
70	1	35	30	34	27	29	24	30	24	34	29	32	26	28	22	28	23								
	2	30	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16								
80	1	34	30	33	27	29	24	30	24	33	29	32	26	28	22	28	23								
	2	30	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16								
90	1	33	29	32	27	29	24	30	24	32	28	31	26	28	22	28	23								
	2	29	25	27	22	24	19	24	20	28	24	26	21	22	18	23	19								
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	41	38	41	38	40	36	49	42	40	37	40	37	40	36	47	40	39	37	39	36	39	35	46	38
	2	38	35	38	34	36	32	42	34	37	34	37	34	36	31	40	33	37	33	36	33	35	30	38	31
	3	36	32	35	32	33	29	36	30	35	31	35	31	33	28	35	28	34	29	34	30	32	27	33	27
Wind Speed [mph]		110								115															
100	1	39	36	39	36	38	34	44	37	38	35	38	35	37	33	43	36								
	2	36	33	36	32	34	29	37	30	35	32	35	31	33	28	36	29								
	3	34	28	33	29	31	26	32	26	33	27	32	28	30	25	31	25								
Wind Speed [mph]		120								130															
100	1	38	35	38	34	36	32	42	34	38	35	38	35	37	33	43	36								
	2	35	31	34	31	32	27	34	28	35	32	35	31	33	28	36	29								
	3	32	26	32	27	29	24	30	24	33	27	32	28	30	25	31	25								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	37	34	37	34	36	31	40	33	36	33	36	32	34	30	38	31	35	32	35	31	33	28	35	29
	2	34	31	34	30	31	26	33	27	33	29	32	28	30	24	31	25	32	28	31	26	28	23	29	24
	3	31	25	31	26	28	23	29	23	29	23	30	24	26	21	27	22	27	22	28	23	24	20	25	20
Wind Speed [mph]		170								180															
100	1	34	31	34	30	32	27	33	27	33	30	33	29	30	25	31	26								
	2	31	27	30	25	26	21	27	22	30	26	29	23	25	20	26	21								
	3	25	20	26	21	23	19	24	19	24	19	25	20	22	18	22	18								
Wind Speed [mph]		190								200															
100	1	32	29	32	27	29	24	30	24	32	28	31	26	28	22	28	23								
	2	29	25	27	22	24	19	24	20	28	24	26	21	22	18	23	19								
	3	22	18	24	19	20	17	21	17	21	17	22	18	19	16	20	16								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	55	46	51	41	44	36	44	36	53	44	49	40	42	34	42	35	51	42	47	38	40	33	41	33
	2	46	37	41	33	36	29	36	30	44	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
5	1	55	46	51	41	44	36	44	36	53	44	49	40	42	34	42	35	51	42	47	38	40	33	41	33
	2	46	37	41	33	36	29	36	30	44	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
10	1	55	46	51	41	44	36	44	36	53	44	49	40	42	34	42	35	51	42	47	38	40	33	41	33
	2	46	37	41	33	36	29	36	30	44	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
0	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
5	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
10	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
0	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
5	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
10	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
0	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
5	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
10	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
0	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
5	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
10	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Gable
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	44	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
5	1	44	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
10	1	44	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
Wind Speed [mph]		170								180															
0	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
5	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
10	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
Wind Speed [mph]		190								200															
0	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									
5	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									
10	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	54	46	51	41	44	36	44	36	53	44	49	40	42	34	42	35	51	42	47	38	40	33	41	33
	2	46	37	41	33	36	29	36	30	44	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
20	1	52	46	51	41	44	36	44	36	51	44	49	40	42	34	42	35	50	42	47	38	40	33	41	33
	2	46	37	41	33	36	29	36	30	44	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
25	1	52	46	51	41	44	36	44	36	51	44	49	40	42	34	42	35	50	42	47	38	40	33	41	33
	2	46	37	41	33	36	29	36	30	44	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
15	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
20	1	48	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
25	1	48	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
15	1	49	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
20	1	48	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
25	1	48	40	45	36	39	31	39	32	47	39	43	35	37	30	38	31								
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
15	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
20	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
25	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
15	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
20	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
25	1	45	37	41	33	36	29	36	30	47	39	43	35	37	30	38	31								
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	44	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
20	1	44	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
25	1	44	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
15	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
20	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
25	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
15	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									
20	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									
25	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									
15	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									
20	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									
25	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	51	45	50	41	44	36	44	36	50	44	49	40	42	34	42	35	49	42	47	38	40	33	41	33	
	2	45	37	41	33	36	29	36	30	44	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27	
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24	
	35	1	50	44	49	41	44	36	44	36	49	43	48	40	42	34	42	35	48	42	46	38	40	33	41	33
		2	44	37	41	33	36	29	36	30	43	36	39	32	34	28	35	28	42	34	37	30	33	26	33	27
		3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
	40	1	49	43	48	41	44	36	44	36	48	42	46	40	42	34	42	35	46	41	45	38	40	33	41	33
		2	43	37	41	33	36	29	36	30	42	36	39	32	34	28	35	28	41	34	37	30	33	26	33	27
		3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
Wind Speed [mph]		110								115																
30	1	47	40	45	36	39	31	39	32	46	39	43	35	37	30	38	31									
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25									
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22									
35	1	46	40	45	36	39	31	39	32	45	39	43	35	37	30	38	31									
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25									
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22									
40	1	45	40	44	36	39	31	39	32	44	39	43	35	37	30	38	31									
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25									
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22									
Wind Speed [mph]		120								130																
30	1	45	37	41	33	36	29	36	30	46	39	43	35	37	30	38	31									
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25									
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22									
35	1	44	37	41	33	36	29	36	30	45	39	43	35	37	30	38	31									
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25									
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22									
40	1	43	37	41	33	36	29	36	30	44	39	43	35	37	30	38	31									
	2	37	31	33	27	29	23	30	24	39	32	35	28	30	24	31	25									
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	44	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	
	35	1	43	36	40	32	34	28	35	29	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25
		2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
		3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
40	1	42	36	40	32	34	28	35	29	40	34	37	30	32	26	33	27	38	32	35	28	30	24	31	25	
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	
Wind Speed [mph]		170								180																
30	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22									
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18									
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16									
	35	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
		2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
		3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
40	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22									
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18									
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16									
Wind Speed [mph]		190								200																
30	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20									
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16									
	3	19	16	20	16	18		18		18		19	16	17		17										
	35	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
		2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
		3	19	16	20	16	18		18		18		19	16	17		17									
40	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20									
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16									
	3	19	16	20	16	18		18		18		19	16	17		17										

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	48	42	47	41	43	36	44	36	47	41	46	40	42	34	42	35	45	40	44	38	40	33	41	33
	2	42	37	41	33	36	29	36	30	41	36	39	32	34	28	35	28	40	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
50	1	47	42	46	41	43	36	44	36	46	41	45	39	41	34	42	35	45	40	44	38	40	33	41	33
	2	42	37	41	33	36	29	36	30	41	35	39	32	34	28	35	28	40	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
60	1	45	40	44	39	41	36	44	36	44	39	43	38	40	34	42	35	43	38	42	37	39	33	41	33
	2	40	36	39	33	36	29	36	30	39	35	38	32	34	28	35	28	38	34	37	30	33	26	33	27
	3	34	27	36	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
Wind Speed [mph]		110								115															
45	1	44	39	43	36	39	31	39	32	43	38	42	35	37	30	38	31	44	39	43	36	39	31	39	32
	2	39	33	36	29	31	25	32	26	38	32	35	28	30	24	31	25	39	33	36	29	31	25	32	26
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	30	24	31	25	27	22	28	23
50	1	44	38	43	36	39	31	39	32	43	37	42	35	37	30	38	31	44	38	43	36	39	31	39	32
	2	38	33	36	29	31	25	32	26	37	32	35	28	30	24	31	25	38	33	36	29	31	25	32	26
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	30	24	31	25	27	22	28	23
60	1	42	37	41	36	38	31	39	32	41	36	40	35	37	30	38	31	42	37	41	36	38	31	39	32
	2	37	33	36	29	31	25	32	26	36	32	35	28	30	24	31	25	37	33	36	29	31	25	32	26
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	30	24	31	25	27	22	28	23
Wind Speed [mph]		120								130															
45	1	42	37	41	33	36	29	36	30	43	38	42	35	37	30	38	31	42	37	41	33	36	29	36	30
	2	37	31	33	27	29	23	30	24	38	32	35	28	30	24	31	25	37	31	33	27	29	23	30	24
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22	27	22	29	23	25	20	26	21
50	1	42	37	41	33	36	29	36	30	43	37	42	35	37	30	38	31	42	37	41	33	36	29	36	30
	2	37	31	33	27	29	23	30	24	37	32	35	28	30	24	31	25	37	31	33	27	29	23	30	24
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22	27	22	29	23	25	20	26	21
60	1	40	36	39	33	36	29	36	30	41	36	40	35	37	30	38	31	40	36	39	33	36	29	36	30
	2	36	31	33	27	29	23	30	24	36	32	35	28	30	24	31	25	36	31	33	27	29	23	30	24
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22	27	22	29	23	25	20	26	21

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	41	36	40	32	34	28	35	29	40	34	37	30	32	26	33	27	38	32	35	28	30	24	31	25	
	2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	
	50	1	41	36	40	32	34	28	35	29	39	34	37	30	32	26	33	27	37	32	35	28	30	24	31	25
		2	36	30	32	26	28	23	29	23	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
		3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
	60	1	39	35	38	32	34	28	35	29	38	33	37	30	32	26	33	27	36	32	35	28	30	24	31	25
		2	35	30	32	26	28	23	29	23	33	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20
		3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
Wind Speed [mph]		170								180																
45	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22									
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18									
	3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16									
	50	1	36	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
		2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
		3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
	60	1	35	30	33	26	28	23	29	23	34	28	31	25	27	22	27	22								
		2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18								
		3	22	18	23	18	20	16	20	17	20	16	21	17	19		19	16								
Wind Speed [mph]		190								200																
45	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20									
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16									
	3	19	16	20	16	18		18		18		19	16	17		17										
	50	1	33	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
		2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
		3	19	16	20	16	18		18		18		19	16	17		17									
	60	1	32	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20								
		2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
		3	19	16	20	16	18		18		18		19	16	17		17									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	43	39	42	38	40	35	44	36	42	38	42	37	39	34	42	35	41	37	41	36	38	33	41	33
	2	39	35	38	33	35	29	36	30	38	34	37	32	34	28	35	28	37	33	36	30	33	26	33	27
	3	34	27	35	29	31	25	31	26	32	26	34	28	30	24	30	25	31	25	33	26	28	23	29	24
80	1	41	38	41	37	39	35	44	36	41	37	40	36	38	34	42	35	40	36	39	35	37	33	41	33
	2	38	34	37	33	35	29	36	30	37	33	36	32	34	28	35	28	36	32	35	30	33	26	33	27
	3	34	27	34	29	31	25	31	26	32	26	33	28	30	24	30	25	31	25	32	26	28	23	29	24
90	1	40	37	40	36	38	34	44	36	39	36	39	35	37	33	42	35	39	35	38	35	37	32	41	33
	2	37	33	36	32	34	29	36	30	36	32	35	31	33	28	35	28	35	31	35	30	32	26	33	27
	3	34	27	33	29	31	25	31	26	32	26	33	28	30	24	30	25	31	25	32	26	28	23	29	24
70	1	40	36	40	35	37	31	39	32	40	35	39	35	36	30	38	31								
	2	36	32	35	29	31	25	32	26	35	31	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
80	1	39	35	39	35	36	31	39	32	38	35	38	34	35	30	38	31								
	2	35	31	35	29	31	25	32	26	35	30	34	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
90	1	38	34	38	34	36	31	39	32	37	34	37	33	35	30	38	31								
	2	34	31	34	29	31	25	32	26	34	30	33	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
70	1	40	36	40	35	37	31	39	32	40	35	39	35	36	30	38	31								
	2	36	32	35	29	31	25	32	26	35	31	35	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
80	1	39	35	39	35	36	31	39	32	38	35	38	34	35	30	38	31								
	2	35	31	35	29	31	25	32	26	35	30	34	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
90	1	38	34	38	34	36	31	39	32	37	34	37	33	35	30	38	31								
	2	34	31	34	29	31	25	32	26	34	30	33	28	30	24	31	25								
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22								
70	1	39	35	38	33	35	29	36	30	40	35	39	35	36	30	38	31								
	2	35	30	33	27	29	23	30	24	35	31	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
80	1	38	34	37	33	35	29	36	30	38	35	38	34	35	30	38	31								
	2	34	30	33	27	29	23	30	24	35	30	34	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
90	1	37	33	36	32	34	29	36	30	37	34	37	33	35	30	38	31								
	2	33	29	32	27	29	23	30	24	34	30	33	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
70	1	39	35	38	33	35	29	36	30	40	35	39	35	36	30	38	31								
	2	35	30	33	27	29	23	30	24	35	31	35	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
80	1	38	34	37	33	35	29	36	30	38	35	38	34	35	30	38	31								
	2	34	30	33	27	29	23	30	24	35	30	34	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								
90	1	37	33	36	32	34	29	36	30	37	34	37	33	35	30	38	31								
	2	33	29	32	27	29	23	30	24	34	30	33	28	30	24	31	25								
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
70	1	38	34	37	32	34	28	35	29	37	32	36	30	32	26	33	27	35	31	34	28	30	24	31	25	
	2	34	29	32	26	28	23	29	23	32	28	30	24	26	21	27	22	31	26	28	23	24	20	25	20	
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18	
	80	1	37	33	36	32	34	28	35	29	36	32	35	30	32	26	33	27	34	30	34	28	30	24	31	25
		2	33	29	32	26	28	23	29	23	32	28	30	24	26	21	27	22	30	26	28	23	24	20	25	20
		3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
	90	1	36	32	35	32	33	28	35	29	35	31	34	30	32	26	33	27	34	30	33	28	30	24	31	25
		2	32	28	32	26	28	23	29	23	31	27	30	24	26	21	27	22	30	26	28	23	24	20	25	20
		3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
Wind Speed [mph]		170								180																
70	1	34	30	33	26	28	23	29	23	33	28	31	25	27	22	27	22									
	2	30	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18									
	3	22	18	23	18	20	16	20	17	20	16	21	17	19			19	16								
80	1	33	29	32	26	28	23	29	23	32	28	31	25	27	22	27	22									
	2	29	24	26	21	23	18	23	19	28	23	25	20	21	17	22	18									
	3	22	18	23	18	20	16	20	17	20	16	21	17	19			19	16								
90	1	33	29	32	26	28	23	29	23	31	27	31	25	27	22	27	22									
	2	29	24	26	21	23	18	23	19	27	23	25	20	21	17	22	18									
	3	22	18	23	18	20	16	20	17	20	16	21	17	19			19	16								
Wind Speed [mph]		190								200																
70	1	32	27	29	24	25	20	26	21	31	25	27	22	24	19	24	20									
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16									
	3	19	16	20	16	18		18		18		19	16	17		17										
80	1	31	27	29	24	25	20	26	21	30	25	27	22	24	19	24	20									
	2	27	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16									
	3	19	16	20	16	18		18		18		19	16	17		17										
90	1	30	26	29	24	25	20	26	21	29	25	27	22	24	19	24	20									
	2	26	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16									
	3	19	16	20	16	18		18		18		19	16	17		17										

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	39	36	39	35	38	33	44	36	38	35	38	35	37	32	42	35	38	34	37	34	36	32	41	33
	2	36	32	35	32	33	29	36	30	35	32	35	31	32	28	35	28	34	31	34	30	32	26	33	27
	3	33	27	33	29	30	25	31	26	32	26	32	28	29	24	30	25	31	25	31	26	28	23	29	24
Wind Speed [mph]		110								115															
100	1	37	34	37	33	35	31	39	32	36	33	36	32	34	30	38	31	33	29	32	28	30	24	31	25
	2	34	30	33	29	31	25	32	26	33	29	32	28	30	24	31	25	28	23	30	24	26	21	27	22
	3	30	24	30	25	27	22	28	23	28	23	30	24	26	21	27	22								
Wind Speed [mph]		120								130															
100	1	36	32	35	32	33	29	36	30	36	33	36	32	34	30	38	31	33	29	32	28	30	24	31	25
	2	32	29	32	27	29	23	30	24	33	29	32	28	30	24	31	25	28	23	30	24	26	21	27	22
	3	27	22	29	23	25	20	26	21	28	23	30	24	26	21	27	22								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	35	32	35	31	33	28	35	29	34	30	33	30	31	26	33	27	33	29	32	28	30	24	31	25
	2	32	28	31	26	28	23	29	23	30	27	30	24	26	21	27	22	29	25	28	23	24	20	25	20
	3	26	21	28	23	24	20	25	20	25	20	26	21	22	18	23	19	23	19	24	20	21	17	22	18
Wind Speed [mph]		170								180															
100	1	32	28	31	26	28	23	29	23	31	27	30	25	27	22	27	22								
	2	28	24	26	21	23	18	23	19	27	23	25	20	21	17	22	18								
	3	22	18	23	18	20	16	20	17	20	16	21	17	19	NA	19	16								
Wind Speed [mph]		190								200															
100	1	30	26	29	24	25	20	26	21	29	25	27	22	24	19	24	20								
	2	26	22	23	19	20	16	21	17	25	21	22	18	19	16	20	16								
	3	19	16	20	16	18		18		18		19	16	17		17									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	48	39	44	35	38	30	38	31
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
5	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	48	39	44	35	38	30	38	31
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
10	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	48	39	44	35	38	30	38	31
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
Wind Speed [mph]		110								115															
0	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29								
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
5	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29								
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
10	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29								
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
Wind Speed [mph]		120								130															
0	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23								
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								
5	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23								
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								
10	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23								
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
0	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
5	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
10	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
0	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
5	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
10	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
0	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
5	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
10	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedgesshallnotincludeanyoverhangdistances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
15	1	52	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	48	39	44	35	38	30	38	31	
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22	
	20	1	50	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	47	39	44	35	38	30	38	31
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22	
20	1	50	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	47	39	44	35	38	30	38	31	
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22	
	25	1	50	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	47	39	44	35	38	30	38	31
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22	
25	1	50	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	47	39	44	35	38	30	38	31	
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22	
	15	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29								
		2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
		3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
20	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
25	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
15	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
20	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
25	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
15	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
20	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
25	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
15	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
20	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
25	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
15	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
20	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
25	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
15	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
20	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
25	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
15	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
20	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
25	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
30	1	50	43	48	39	41	33	41	34	49	41	45	37	39	32	40	32	47	39	44	35	38	30	38	31	
	2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22	
	35	1	49	43	48	39	41	33	41	34	48	41	45	37	39	32	40	32	46	39	44	35	38	30	38	31
		2	43	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25
		3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
	40	1	48	42	47	39	41	33	41	34	47	41	45	37	39	32	40	32	45	39	44	35	38	30	38	31
		2	42	35	38	31	33	27	34	28	41	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25
		3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
30	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
	35	1	45	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29								
		2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
		3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
	40	1	44	38	42	34	36	29	36	30	43	36	40	32	35	28	35	29								
		2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
		3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
30	1	46	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
	35	1	45	38	42	34	36	29	36	30	44	36	40	32	35	28	35	29								
		2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
		3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
	40	1	44	38	42	34	36	29	36	30	43	36	40	32	35	28	35	29								
		2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23								
		3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
30	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
	35	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29								
		2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23								
		3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								
	40	1	42	35	38	31	33	27	34	28	43	36	40	32	35	28	35	29								
		2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23								
		3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								
30	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
	35	1	43	35	38	31	33	27	34	28	44	36	40	32	35	28	35	29								
		2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23								
		3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								
	40	1	42	35	38	31	33	27	34	28	43	36	40	32	35	28	35	29								
		2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23								
		3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
30	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
35	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
40	1	41	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
30	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
35	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
40	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
30	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
35	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
40	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge																							
45	1	47	41	46	39	41	33	41	34	46	40	45	37	39	32	40	32	45	39	43	35	38	30	38	31	
	2	41	35	38	31	33	27	34	28	40	34	36	30	32	26	32	26	39	32	35	28	30	25	31	25	
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22	
	50	1	46	41	45	39	41	33	41	34	45	40	44	37	39	32	40	32	44	38	43	35	38	30	38	31
		2	41	35	38	31	33	27	34	28	40	34	36	30	32	26	32	26	38	32	35	28	30	25	31	25
		3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
	60	1	44	40	43	38	40	33	41	34	43	38	42	37	39	32	40	32	42	37	41	35	38	30	38	31
		2	40	35	38	31	33	27	34	28	38	33	36	30	32	26	32	26	37	32	35	28	30	25	31	25
		3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
Wind Speed [mph]		110								115																
45	1	43	38	42	34	36	29	36	30	42	36	40	32	35	28	35	29									
	2	38	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
50	1	43	37	41	34	36	29	36	30	42	36	40	32	35	28	35	29									
	2	37	31	33	27	29	24	30	24	36	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
60	1	41	36	40	34	36	29	36	30	40	35	39	32	35	28	35	29									
	2	36	31	33	27	29	24	30	24	35	30	32	26	28	23	29	23									
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20									
Wind Speed [mph]		120								130																
45	1	41	35	38	31	33	27	34	28	42	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
50	1	41	35	38	31	33	27	34	28	42	36	40	32	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									
60	1	39	34	38	31	33	27	34	28	40	35	39	32	35	28	35	29									
	2	34	29	31	25	27	22	28	23	35	30	32	26	28	23	29	23									
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
45	1	40	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
50	1	40	34	37	30	32	26	33	27	38	32	34	28	30	24	30	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
60	1	39	34	37	30	32	26	33	27	37	32	34	28	30	24	30	25	35	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
45	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
50	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
60	1	34	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
45	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
50	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
60	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	43	38	42	37	39	33	41	34	42	37	41	36	38	32	40	32	41	36	40	35	37	30	38	31
	2	38	34	37	31	33	27	34	28	37	33	36	30	32	26	32	26	36	32	35	28	30	25	31	25
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
80	1	41	37	41	37	39	33	41	34	41	36	40	36	37	32	40	32	40	36	39	35	36	30	38	31
	2	37	33	37	31	33	27	34	28	36	32	36	30	32	26	32	26	36	31	35	28	30	25	31	25
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
90	1	40	36	40	36	38	33	41	34	39	36	39	35	37	32	40	32	39	35	38	34	36	30	38	31
	2	36	32	36	31	33	27	34	28	36	32	35	30	32	26	32	26	35	31	34	28	30	25	31	25
	3	32	26	33	27	29	23	29	24	30	24	32	26	27	22	28	23	29	23	30	25	26	21	27	22
Wind Speed [mph]		110								115															
70	1	40	36	39	34	36	29	36	30	39	35	38	32	35	28	35	29								
	2	36	31	33	27	29	24	30	24	35	30	32	26	28	23	29	23								
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
80	1	39	35	38	34	35	29	36	30	38	34	37	32	34	28	35	29								
	2	35	30	33	27	29	24	30	24	34	29	32	26	28	23	29	23								
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
90	1	38	34	37	33	35	29	36	30	37	33	36	32	34	28	35	29								
	2	34	30	33	27	29	24	30	24	33	29	32	26	28	23	29	23								
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20								
Wind Speed [mph]		120								130															
70	1	38	34	37	31	33	27	34	28	39	35	38	32	35	28	35	29								
	2	34	29	31	25	27	22	28	23	35	30	32	26	28	23	29	23								
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								
80	1	37	33	37	31	33	27	34	28	38	34	37	32	34	28	35	29								
	2	33	29	31	25	27	22	28	23	34	29	32	26	28	23	29	23								
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								
90	1	36	32	36	31	33	27	34	28	37	33	36	32	34	28	35	29								
	2	32	28	31	25	27	22	28	23	33	29	32	26	28	23	29	23								
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
70	1	38	33	37	30	32	26	33	27	36	31	34	28	30	24	30	25	35	30	32	26	28	23	29	23
	2	33	28	30	24	26	21	27	22	31	26	28	22	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
80	1	37	32	36	30	32	26	33	27	35	31	34	28	30	24	30	25	34	29	32	26	28	23	29	23
	2	32	28	30	24	26	21	27	22	31	26	28	22	24	20	25	20	29	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
90	1	36	32	35	30	32	26	33	27	34	30	34	28	30	24	30	25	33	29	32	26	28	23	29	23
	2	32	28	30	24	26	21	27	22	30	26	28	22	24	20	25	20	29	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
70	1	33	28	30	25	26	21	27	22	32	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
80	1	32	28	30	25	26	21	27	22	31	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
90	1	32	28	30	25	26	21	27	22	31	26	29	23	25	20	25	21								
	2	28	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
70	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
80	1	30	25	27	22	23	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
90	1	30	25	27	22	23	19	24	20	28	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	39	36	39	35	37	33	41	34	38	35	38	34	36	32	40	32	38	34	37	33	35	30	38	31
	2	36	32	35	31	33	27	34	28	35	31	34	30	32	26	32	26	34	30	33	28	30	25	31	25
	3	32	26	32	27	29	23	29	24	30	24	31	26	27	22	28	23	29	23	30	25	26	21	27	22
0	1																								
	2																								
	3																								
100	1	37	33	36	32	34	29	36	30	36	33	36	32	33	28	35	29	33	29	32	27	29	24	30	24
	2	33	29	32	27	29	24	30	24	33	29	32	26	28	23	29	23	33	29	32	26	28	23	29	23
	3	28	22	29	24	25	20	26	21	27	21	28	23	24	20	25	20	27	21	28	23	24	20	25	20
0	1																								
	2																								
	3																								
100	1	36	32	35	31	32	27	34	28	36	33	36	32	33	28	35	29	33	29	32	27	29	24	30	24
	2	32	28	31	25	27	22	28	23	33	29	32	26	28	23	29	23	33	29	32	26	28	23	29	23
	3	25	21	27	22	23	19	24	19	27	21	28	23	24	20	25	20	27	21	28	23	24	20	25	20
0	1																								
	2																								
	3																								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge																						
100	1	35	31	34	30	32	26	33	27	34	30	33	28	30	24	30	25	32	28	32	26	28	23	29	23
	2	31	27	30	24	26	21	27	22	30	26	28	22	24	20	25	20	28	24	26	21	23	18	23	19
	3	25	20	26	21	22	18	23	19	23	19	24	20	21	17	21	17	21	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
100	1	31	27	30	25	26	21	27	22	30	26	29	23	25	20	25	21								
	2	27	23	24	20	21	17	22	18	26	21	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
100	1	29	25	27	22	23	19	24	20	28	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	64	54	62	51	52	43	53	44	62	52	59	48	50	41	51	42	60	50	57	46	48	40	49	40
	2	54	45	50	41	43	35	44	36	52	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28
5	1	64	54	62	51	52	43	53	44	62	52	59	48	50	41	51	42	60	50	57	46	48	40	49	40
	2	54	45	50	41	43	35	44	36	52	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28
10	1	63	54	62	51	52	43	53	44	62	52	59	48	50	41	51	42	60	50	57	46	48	40	49	40
	2	54	45	50	41	43	35	44	36	52	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28
0	1	58	48	55	44	46	38	47	38	56	46	53	43	45	37	45	37								
	2	48	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
5	1	58	48	55	44	46	38	47	38	56	46	53	43	45	37	45	37								
	2	48	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
10	1	58	48	55	44	46	38	47	38	56	46	53	43	45	37	45	37								
	2	48	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
0	1	54	45	51	41	43	35	43	36	56	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
5	1	54	45	51	41	43	35	43	36	56	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
10	1	54	45	51	41	43	35	43	36	56	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
0	1	54	45	51	41	43	35	43	36	56	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
5	1	54	45	51	41	43	35	43	36	56	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
10	1	54	45	51	41	43	35	43	36	56	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	52	43	49	39	42	34	42	34	49	40	45	37	39	32	39	32	46	38	42	34	37	30	37	30
	2	43	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25
	3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
5	1	52	43	49	39	42	34	42	34	49	40	45	37	39	32	39	32	46	38	42	34	37	30	37	30
	2	43	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25
	3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
10	1	52	43	49	39	42	34	42	34	49	40	45	37	39	32	39	32	46	38	42	34	37	30	37	30
	2	43	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25
	3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
0	1	44	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27								
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22								
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19								
5	1	44	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27								
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22								
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19								
10	1	44	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27								
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22								
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19								
0	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24								
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
5	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24								
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
10	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24								
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	60	53	59	51	52	43	53	44	58	51	57	48	50	41	51	42	57	50	55	46	48	40	49	40
	2	53	45	50	41	43	35	44	36	51	43	48	39	41	34	42	34	50	41	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28
20	1	57	51	56	50	52	43	53	44	56	50	54	48	50	41	51	42	54	48	53	46	48	40	49	40
	2	51	45	50	41	43	35	44	36	50	43	48	39	41	34	42	34	48	41	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28
25	1	57	51	56	50	52	43	53	44	56	50	54	48	50	41	51	42	54	48	53	46	48	40	49	40
	2	51	45	50	41	43	35	44	36	50	43	48	39	41	34	42	34	48	41	46	37	40	32	40	33
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28
15	1	56	48	54	44	46	38	47	38	54	46	53	43	45	37	45	37								
	2	48	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
20	1	53	47	52	44	46	38	47	38	52	46	51	43	45	37	45	37								
	2	47	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
25	1	53	47	52	44	46	38	47	38	52	46	51	43	45	37	45	37								
	2	47	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
15	1	56	48	54	44	46	38	47	38	54	46	53	43	45	37	45	37								
	2	48	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
20	1	53	47	52	44	46	38	47	38	52	46	51	43	45	37	45	37								
	2	47	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
25	1	53	47	52	44	46	38	47	38	52	46	51	43	45	37	45	37								
	2	47	40	44	36	38	31	38	32	46	38	42	34	37	30	37	30								
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
15	1	53	45	51	41	43	35	43	36	54	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
20	1	51	45	49	41	43	35	43	36	52	46	51	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
25	1	51	45	49	41	43	35	43	36	52	46	51	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
15	1	53	45	51	41	43	35	43	36	54	46	53	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
20	1	51	45	49	41	43	35	43	36	52	46	51	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
25	1	51	45	49	41	43	35	43	36	52	46	51	43	45	37	45	37								
	2	45	37	41	33	35	28	36	29	46	38	42	34	37	30	37	30								
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Span, inches								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
15	1	52	43	49	39	42	34	42	34	49	40	45	37	39	32	39	32	46	38	42	34	37	30	37	30	
	2	43	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25	
	3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21	
	20	1	50	43	48	39	42	34	42	34	48	40	45	37	39	32	39	32	46	38	42	34	37	30	37	30
		2	43	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25
		3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
	25	1	50	43	48	39	42	34	42	34	48	40	45	37	39	32	39	32	46	38	42	34	37	30	37	30
		2	43	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25
		3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
Wind Speed [mph]		170								180																
15	1	44	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27									
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22									
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19									
20	1	44	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27									
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22									
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19									
25	1	44	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27									
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22									
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19									
Wind Speed [mph]		190								200																
15	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24									
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20									
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17									
20	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24									
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20									
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17									
25	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24									
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20									
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	56	50	55	49	51	43	53	44	54	49	53	47	49	41	51	42	53	47	52	46	48	40	49	40	
	2	50	44	49	41	43	35	44	36	49	43	47	39	41	34	42	34	47	41	46	37	40	32	40	33	
	3	41	33	44	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28	
	35	1	54	49	53	47	50	43	53	44	53	47	52	46	48	41	51	42	52	46	51	45	47	40	49	40
		2	49	43	47	41	43	35	44	36	47	42	46	39	41	34	42	34	46	41	45	37	40	32	40	33
		3	41	33	43	35	38	31	38	31	39	32	42	34	36	29	36	30	38	31	40	32	34	28	35	28
	40	1	52	47	51	46	49	43	53	44	51	46	50	45	48	41	51	42	50	45	49	44	46	40	49	40
		2	47	42	46	41	43	35	44	36	46	41	45	39	41	34	42	34	45	40	44	37	40	32	40	33
		3	41	33	42	35	38	31	38	31	39	32	41	34	36	29	36	30	38	31	40	32	34	28	35	28
Wind Speed [mph]		110								115																
30	1	52	46	51	44	46	38	47	38	51	45	50	43	45	37	45	37									
	2	46	40	44	36	38	31	38	32	45	38	42	34	37	30	37	30									
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26									
	35	1	50	45	49	44	46	38	47	38	49	44	48	43	45	37	45	37								
		2	45	39	44	36	38	31	38	32	44	38	42	34	37	30	37	30								
		3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
	40	1	49	44	48	43	45	38	47	38	48	43	47	42	44	37	45	37								
		2	44	39	43	36	38	31	38	32	43	38	42	34	37	30	37	30								
		3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26								
Wind Speed [mph]		120								130																
30	1	50	44	49	41	43	35	43	36	51	45	50	43	45	37	45	37									
	2	44	37	41	33	35	28	36	29	45	38	42	34	37	30	37	30									
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26									
	35	1	48	43	47	41	43	35	43	36	49	44	48	43	45	37	45	37								
		2	43	37	41	33	35	28	36	29	44	38	42	34	37	30	37	30								
		3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								
	40	1	47	42	46	41	43	35	43	36	48	43	47	42	44	37	45	37								
		2	42	37	41	33	35	28	36	29	43	38	42	34	37	30	37	30								
		3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	49	43	47	39	42	34	42	34	47	40	45	37	39	32	39	32	45	38	42	34	37	30	37	30	
	2	43	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25	
	3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21	
	35	1	47	42	46	39	42	34	42	34	46	40	44	37	39	32	39	32	44	38	42	34	37	30	37	30
		2	42	36	39	32	34	27	34	28	40	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25
		3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
	40	1	46	41	45	39	42	34	42	34	45	39	43	37	39	32	39	32	43	38	42	34	37	30	37	30
		2	41	36	39	32	34	27	34	28	39	33	36	29	31	26	32	26	38	31	34	27	29	24	30	25
		3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
Wind Speed [mph]		170								180																
30	1	43	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27									
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22									
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19									
35	1	42	36	40	32	34	28	35	28	41	34	37	30	32	26	33	27									
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22									
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19									
40	1	41	36	40	32	34	28	35	28	40	34	37	30	32	26	33	27									
	2	36	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22									
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19									
Wind Speed [mph]		190								200																
30	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24									
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20									
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17									
35	1	39	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24									
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20									
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17									
40	1	38	32	35	29	31	25	31	25	37	31	33	27	29	24	30	24									
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20									
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	50	46	50	45	48	42	53	44	50	45	49	44	47	41	51	42	49	44	48	43	45	40	49	40	
	2	46	41	45	40	42	35	44	36	45	40	44	39	41	34	42	34	44	39	43	37	40	32	40	33	
	3	41	33	42	35	38	31	38	31	39	32	40	34	36	29	36	30	38	31	39	32	34	28	35	28	
	50	1	49	45	49	44	47	41	53	44	48	44	48	43	46	40	51	42	47	43	47	42	45	39	49	40
		2	45	40	44	39	41	35	44	36	44	39	43	38	40	34	42	34	43	38	42	37	39	32	40	33
		3	41	33	41	35	38	31	38	31	39	32	40	34	36	29	36	30	38	31	39	32	34	28	35	28
	60	1	47	43	46	42	45	40	53	44	46	42	46	42	44	39	51	42	45	41	45	41	43	38	49	40
		2	43	39	42	38	40	35	44	36	42	38	42	37	39	34	42	34	41	37	41	36	38	32	40	33
		3	40	33	39	35	37	31	38	31	39	32	38	34	36	29	36	30	38	31	38	32	34	28	35	28
Wind Speed [mph]		110								115																
45	1	48	43	47	42	44	38	47	38	47	42	46	41	43	37	45	37	42	37	41	34	37	30	37	30	
	2	43	38	42	36	38	31	38	32	42	37	41	34	37	30	37	30	42	37	41	34	37	30	37	30	
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26	35	28	37	30	32	26	32	26	
50	1	47	42	46	41	43	38	47	38	46	41	45	40	42	37	45	37	46	41	45	40	42	37	45	37	
	2	42	37	41	36	38	31	38	32	41	36	40	34	37	30	37	30	41	36	40	34	37	30	37	30	
	3	36	29	38	31	33	27	33	27	35	28	37	30	32	26	32	26	35	28	37	30	32	26	32	26	
60	1	44	41	44	40	42	37	47	38	44	40	43	39	41	36	45	37	44	40	43	39	41	36	45	37	
	2	41	36	40	35	37	31	38	32	40	35	39	34	36	30	37	30	40	35	39	34	36	30	37	30	
	3	36	29	37	31	33	27	33	27	35	28	36	30	32	26	32	26	35	28	36	30	32	26	32	26	
Wind Speed [mph]		120								130																
45	1	46	41	45	40	42	35	43	36	47	42	46	41	43	37	45	37	46	41	45	40	42	35	43	36	
	2	41	36	40	33	35	28	36	29	42	37	41	34	37	30	37	30	42	37	41	34	37	30	37	30	
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26	35	28	37	30	32	26	32	26	
50	1	45	40	44	39	41	35	43	36	46	41	45	40	42	37	45	37	46	41	45	40	42	35	43	36	
	2	40	36	39	33	35	28	36	29	41	36	40	34	37	30	37	30	41	36	40	34	37	30	37	30	
	3	33	27	35	28	30	25	31	25	35	28	37	30	32	26	32	26	35	28	37	30	32	26	32	26	
60	1	43	39	42	38	40	35	43	36	44	40	43	39	41	36	45	37	44	40	43	39	41	36	45	37	
	2	39	35	38	33	35	28	36	29	40	35	39	34	36	30	37	30	40	35	39	34	36	30	37	30	
	3	33	27	35	28	30	25	31	25	35	28	36	30	32	26	32	26	35	28	36	30	32	26	32	26	

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	45	40	44	39	41	34	42	34	44	39	43	37	39	32	39	32	42	37	41	34	37	30	37	30	
	2	40	35	39	32	34	27	34	28	39	33	36	29	31	26	32	26	37	31	34	27	29	24	30	25	
	3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21	
	50	1	44	40	43	38	40	34	42	34	43	38	42	37	39	32	39	32	41	36	40	34	37	30	37	30
		2	40	35	38	32	34	27	34	28	38	33	36	29	31	26	32	26	36	31	34	27	29	24	30	25
		3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
	60	1	42	38	42	37	39	34	42	34	41	37	40	36	38	32	39	32	40	35	39	34	36	30	37	30
		2	38	34	37	32	34	27	34	28	37	32	36	29	31	26	32	26	35	31	34	27	29	24	30	25
		3	32	26	34	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
Wind Speed [mph]		170								180																
45	1	40	35	39	32	34	28	35	28	39	34	37	30	32	26	33	27	34	28	30	24	26	21	27	22	
	2	35	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22	25	20	26	21	23	18	23	19	
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19	25	20	26	21	23	18	23	19	
	50	1	40	35	39	32	34	28	35	28	38	34	37	30	32	26	33	27	34	28	30	24	26	21	27	22
		2	35	29	32	26	28	22	28	23	34	28	30	24	26	21	27	22	34	28	30	24	26	21	27	22
		3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19	25	20	26	21	23	18	23	19
	60	1	38	34	37	32	34	28	35	28	37	33	36	30	32	26	33	27	37	33	36	30	32	26	33	27
		2	34	29	32	26	28	22	28	23	33	28	30	24	26	21	27	22	33	28	30	24	26	21	27	22
		3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19	25	20	26	21	23	18	23	19
Wind Speed [mph]		190								200																
45	1	38	32	35	29	31	25	31	25	36	31	33	27	29	24	30	24	31	25	27	22	23	19	24	20	
	2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20	22	18	23	19	20	16	21	17	
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17	
	50	1	37	32	35	29	31	25	31	25	36	31	33	27	29	24	30	24	31	25	27	22	23	19	24	20
		2	32	26	28	23	25	20	25	21	31	25	27	22	23	19	24	20	31	25	27	22	23	19	24	20
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17
	60	1	36	31	35	29	31	25	31	25	35	30	33	27	29	24	30	24	35	30	33	27	29	24	30	24
		2	31	26	28	23	25	20	25	21	30	25	27	22	23	19	24	20	30	25	27	22	23	19	24	20
		3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17	22	18	23	19	20	16	21	17

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	44	41	44	41	44	39	52	44	44	41	44	40	43	38	50	42	43	40	43	39	42	37	49	40
	2	41	38	41	37	39	34	44	36	41	37	40	36	38	33	42	34	40	36	39	35	37	32	40	33
	3	39	33	38	34	36	31	38	31	38	32	37	33	35	29	36	30	37	31	36	32	34	28	35	28
80	1	42	40	42	39	42	38	51	44	42	39	42	39	41	37	49	42	41	38	41	38	41	36	48	40
	2	40	37	39	36	38	34	44	36	39	36	39	35	37	33	42	34	38	35	38	34	36	32	40	33
	3	38	33	37	33	35	31	38	31	37	32	36	32	34	29	36	30	36	31	35	31	33	28	35	28
90	1	41	38	41	38	41	37	50	43	40	38	40	38	40	36	48	42	40	37	40	37	39	35	47	40
	2	38	35	38	35	37	33	43	36	38	35	38	34	36	32	42	34	37	34	37	33	35	31	40	33
	3	36	33	36	32	34	30	38	31	36	32	35	32	33	29	36	30	35	31	34	31	32	28	35	28
70	1	43	39	42	38	41	36	47	38	42	38	42	38	40	35	45	37								
	2	39	35	38	34	36	31	38	32	38	34	38	34	35	30	37	30								
	3	36	29	36	31	33	27	33	27	35	28	35	30	32	26	32	26								
80	1	41	38	41	37	40	35	46	38	40	37	40	37	39	35	45	37								
	2	38	34	37	33	35	31	38	32	37	34	37	33	35	30	37	30								
	3	35	29	35	31	32	27	33	27	35	28	34	30	31	26	32	26								
90	1	39	37	39	36	39	35	46	38	39	36	39	36	38	34	44	37								
	2	37	33	36	33	35	30	38	32	36	33	36	32	34	30	37	30								
	3	34	29	34	30	32	27	33	27	34	28	33	29	31	26	32	26								
70	1	43	39	42	38	41	36	47	38	42	38	42	38	40	35	45	37								
	2	39	35	38	34	36	31	38	32	38	34	38	34	35	30	37	30								
	3	36	29	36	31	33	27	33	27	35	28	35	30	32	26	32	26								
80	1	41	38	41	37	40	35	46	38	40	37	40	37	39	35	45	37								
	2	38	34	37	33	35	31	38	32	37	34	37	33	35	30	37	30								
	3	35	29	35	31	32	27	33	27	35	28	34	30	31	26	32	26								
90	1	39	37	39	36	39	35	46	38	39	36	39	36	38	34	44	37								
	2	37	33	36	33	35	30	38	32	36	33	36	32	34	30	37	30								
	3	34	29	34	30	32	27	33	27	34	28	33	29	31	26	32	26								
70	1	41	38	41	37	39	34	43	36	42	38	42	38	40	35	45	37								
	2	38	34	37	33	34	28	36	29	38	34	38	34	35	30	37	30								
	3	33	27	34	28	30	25	31	25	35	28	35	30	32	26	32	26								
80	1	40	36	39	36	38	34	43	36	40	37	40	37	39	35	45	37								
	2	36	33	36	32	34	28	36	29	37	34	37	33	35	30	37	30								
	3	33	27	33	28	30	25	31	25	35	28	34	30	31	26	32	26								
90	1	38	35	38	35	37	33	43	36	39	36	39	36	38	34	44	37								
	2	35	32	35	31	33	28	36	29	36	33	36	32	34	30	37	30								
	3	33	27	32	28	30	25	31	25	34	28	33	29	31	26	32	26								
70	1	41	38	41	37	39	34	43	36	42	38	42	38	40	35	45	37								
	2	38	34	37	33	34	28	36	29	38	34	38	34	35	30	37	30								
	3	33	27	34	28	30	25	31	25	35	28	35	30	32	26	32	26								
80	1	40	36	39	36	38	34	43	36	40	37	40	37	39	35	45	37								
	2	36	33	36	32	34	28	36	29	37	34	37	33	35	30	37	30								
	3	33	27	33	28	30	25	31	25	35	28	34	30	31	26	32	26								
90	1	38	35	38	35	37	33	43	36	39	36	39	36	38	34	44	37								
	2	35	32	35	31	33	28	36	29	36	33	36	32	34	30	37	30								
	3	33	27	32	28	30	25	31	25	34	28	33	29	31	26	32	26								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	41	37	40	36	38	34	42	34	39	36	39	35	37	32	39	32	38	34	38	33	35	30	37	30
	2	37	33	36	32	34	27	34	28	36	31	35	29	31	26	32	26	34	30	33	27	29	24	30	25
	3	32	26	33	27	29	24	30	24	30	24	32	26	27	22	28	23	28	23	29	24	26	21	26	21
80	1	39	36	39	35	37	33	42	34	38	35	38	34	36	31	39	32	37	33	36	33	34	30	37	30
	2	36	32	35	31	33	27	34	28	35	31	34	29	31	26	32	26	33	30	33	27	29	24	30	25
	3	32	26	32	27	29	24	30	24	30	24	31	26	27	22	28	23	28	23	29	24	26	21	26	21
90	1	38	35	38	34	36	32	42	34	37	34	37	33	35	31	39	32	36	33	35	32	34	29	37	30
	2	35	31	34	31	32	27	34	28	34	30	33	29	31	26	32	26	33	29	32	27	29	24	30	25
	3	32	26	32	27	29	24	30	24	30	24	30	26	27	22	28	23	28	23	29	24	26	21	26	21
Wind Speed [mph]		170								180															
70	1	37	33	36	32	34	28	35	28	36	32	35	30	32	26	33	27								
	2	33	29	32	26	28	22	28	23	32	28	30	24	26	21	27	22								
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19								
80	1	36	32	35	31	33	28	35	28	35	31	34	30	32	26	33	27								
	2	32	28	31	26	28	22	28	23	31	27	30	24	26	21	27	22								
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19								
90	1	35	32	34	31	32	28	35	28	34	30	33	30	31	26	33	27								
	2	32	28	31	26	28	22	28	23	30	27	30	24	26	21	27	22								
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19								
Wind Speed [mph]		190								200															
70	1	35	31	34	29	31	25	31	25	34	30	33	27	29	24	30	24								
	2	31	26	28	23	25	20	25	21	30	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
80	1	34	30	33	29	31	25	31	25	33	29	32	27	29	24	30	24								
	2	30	26	28	23	25	20	25	21	29	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								
90	1	33	30	32	29	30	25	31	25	32	29	32	27	29	24	30	24								
	2	30	26	28	23	25	20	25	21	29	25	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	39	37	39	37	40	36	49	43	39	37	39	36	39	35	47	41	38	36	38	36	38	35	46	40
	2	37	34	37	34	36	32	43	36	37	34	36	33	35	32	41	34	36	33	36	33	35	31	40	33
	3	35	32	35	32	34	30	38	31	35	32	34	31	33	29	36	30	34	31	34	30	32	28	35	28
Wind Speed [mph]		110								115															
100	1	38	36	38	35	38	34	45	38	38	35	37	35	37	33	44	37								
	2	36	33	35	32	34	30	38	32	35	32	35	31	33	29	37	30								
	3	33	29	33	29	31	27	33	27	33	28	32	29	30	26	32	26								
Wind Speed [mph]		120								130															
100	1	37	34	37	34	36	32	43	36	38	35	37	35	37	33	44	37								
	2	34	31	34	31	32	28	36	29	35	32	35	31	33	29	37	30								
	3	32	27	32	28	30	25	31	25	33	28	32	29	30	26	32	26								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	37	34	36	33	36	32	42	34	36	33	36	32	34	30	39	32	35	32	35	31	33	29	37	30
	2	34	31	33	30	32	27	34	28	33	29	32	29	30	26	32	26	32	28	31	27	29	24	30	25
	3	32	26	31	27	29	24	30	24	30	24	30	26	27	22	28	23	28	23	29	24	26	21	26	21
Wind Speed [mph]		170								180															
100	1	34	31	34	30	32	28	35	28	33	30	33	29	31	26	33	27								
	2	31	27	30	26	28	22	28	23	30	26	29	24	26	21	27	22								
	3	26	21	28	22	24	19	25	20	25	20	26	21	23	18	23	19								
Wind Speed [mph]		190								200															
100	1	32	29	32	28	30	25	31	25	31	28	31	27	29	24	30	24								
	2	29	25	28	23	25	20	25	21	28	24	27	22	23	19	24	20								
	3	23	19	25	20	21	17	22	18	22	18	23	19	20	16	21	17								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	56	46	53	42	45	37	45	37	54	44	50	41	43	35	43	35	51	43	48	39	41	34	41	34
	2	46	38	42	34	36	30	37	30	44	37	40	33	35	28	35	29	43	35	38	31	33	27	34	28
	3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
5	1	56	46	53	42	45	37	45	37	54	44	50	41	43	35	43	35	51	43	48	39	41	34	41	34
	2	46	38	42	34	36	30	37	30	44	37	40	33	35	28	35	29	43	35	38	31	33	27	34	28
	3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
10	1	56	46	53	42	45	37	45	37	54	44	50	41	43	35	43	35	51	43	48	39	41	34	41	34
	2	46	38	42	34	36	30	37	30	44	37	40	33	35	28	35	29	43	35	38	31	33	27	34	28
	3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
0	1	50	41	46	37	40	32	40	33	48	39	44	36	38	31	38	31								
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
5	1	50	41	46	37	40	32	40	33	48	39	44	36	38	31	38	31								
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
10	1	50	41	46	37	40	32	40	33	48	39	44	36	38	31	38	31								
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
0	1	50	41	46	37	40	32	40	33	48	39	44	36	38	31	38	31								
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
5	1	50	41	46	37	40	32	40	33	48	39	44	36	38	31	38	31								
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
10	1	50	41	46	37	40	32	40	33	48	39	44	36	38	31	38	31								
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
0	1	46	38	42	34	37	30	37	30	48	39	44	36	38	31	38	31								
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
5	1	46	38	42	34	37	30	37	30	48	39	44	36	38	31	38	31								
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
10	1	46	38	42	34	37	30	37	30	48	39	44	36	38	31	38	31								
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
0	1	46	38	42	34	37	30	37	30	48	39	44	36	38	31	38	31								
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
5	1	46	38	42	34	37	30	37	30	48	39	44	36	38	31	38	31								
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
10	1	46	38	42	34	37	30	37	30	48	39	44	36	38	31	38	31								
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Gable
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
0	1	45	37	41	33	35	29	36	29	42	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
5	1	45	37	41	33	35	29	36	29	42	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
10	1	45	37	41	33	35	29	36	29	42	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
Wind Speed [mph]		170								180															
0	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
5	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
10	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
Wind Speed [mph]		190								200															
0	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
5	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
10	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																					
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
15	1	54	46	53	42	45	37	45	37	53	44	50	41	43	35	43	35	51	43	48	39	41	34	41	34		
	2	46	38	42	34	36	30	37	30	44	37	40	33	35	28	35	29	43	35	38	31	33	27	34	28		
	3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24		
	20	1	52	46	51	42	45	37	45	37	51	44	49	41	43	35	43	35	49	43	48	39	41	34	41	34	
		2	46	38	42	34	36	30	37	30	44	37	40	33	35	28	35	29	43	35	38	31	33	27	34	28	
		3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24	
	25	1	52	46	51	42	45	37	45	37	51	44	49	41	43	35	43	35	49	43	48	39	41	34	41	34	
		2	46	38	42	34	36	30	37	30	44	37	40	33	35	28	35	29	43	35	38	31	33	27	34	28	
		3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24	
15	Wind Speed [mph]		110								115																
	1	50	41	46	37	40	32	40	33	48	39	44	36	38	31	38	31										
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26										
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22										
	20	1	48	41	46	37	40	32	40	33	47	39	44	36	38	31	38	31									
		2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26									
		3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22									
	25	1	48	41	46	37	40	32	40	33	47	39	44	36	38	31	38	31									
		2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26									
3		30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22										
15	Wind Speed [mph]		120								130																
	1	46	38	42	34	37	30	37	30	48	39	44	36	38	31	38	31										
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26										
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22										
	20	1	46	38	42	34	37	30	37	30	47	39	44	36	38	31	38	31									
		2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26									
		3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22									
	25	1	46	38	42	34	37	30	37	30	47	39	44	36	38	31	38	31									
		2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26									
3		28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22										

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
15	1	45	37	41	33	35	29	36	29	42	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
20	1	44	37	41	33	35	29	36	29	42	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
25	1	44	37	41	33	35	29	36	29	42	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
15	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
20	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
25	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
15	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
20	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
25	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
15	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
20	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
25	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	51	45	50	42	45	37	45	37	50	44	48	41	43	35	43	35	48	42	47	39	41	34	41	34	
	2	45	38	42	34	36	30	37	30	44	37	40	33	35	28	35	29	42	35	38	31	33	27	34	28	
	3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24	
	35	1	49	44	48	42	45	37	45	37	48	43	47	41	43	35	43	35	47	41	46	39	41	34	41	34
		2	44	38	42	34	36	30	37	30	43	37	40	33	35	28	35	29	41	35	38	31	33	27	34	28
		3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
	40	1	48	43	47	42	44	37	45	37	47	42	46	41	42	35	43	35	46	41	45	39	41	34	41	34
		2	43	38	42	34	36	30	37	30	42	36	40	33	35	28	35	29	41	35	38	31	33	27	34	28
		3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
Wind Speed [mph]		110								115																
30	1	47	41	46	37	40	32	40	33	46	39	44	36	38	31	38	31									
	2	41	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26									
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22									
35	1	46	40	45	37	40	32	40	33	45	39	44	36	38	31	38	31									
	2	40	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26									
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22									
40	1	45	40	44	37	40	32	40	33	44	39	43	36	38	31	38	31									
	2	40	34	37	30	32	26	33	27	39	32	35	29	31	25	31	26									
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22									
Wind Speed [mph]		120								130																
30	1	45	38	42	34	37	30	37	30	46	39	44	36	38	31	38	31									
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26									
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22									
35	1	44	38	42	34	37	30	37	30	45	39	44	36	38	31	38	31									
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26									
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22									
40	1	43	38	42	34	37	30	37	30	44	39	43	36	38	31	38	31									
	2	38	31	34	28	29	24	30	25	39	32	35	29	31	25	31	26									
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
30	1	44	37	41	33	35	29	36	29	42	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
35	1	43	37	41	33	35	29	36	29	41	34	38	31	33	27	33	27	39	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
40	1	42	37	41	33	35	29	36	29	40	34	38	31	33	27	33	27	38	32	35	29	31	25	31	25
	2	37	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
Wind Speed [mph]		170								180															
30	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
35	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
40	1	37	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19		20	16								
Wind Speed [mph]		190								200															
30	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
35	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
40	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	47	42	46	41	43	37	45	37	46	41	45	40	42	35	43	35	45	40	44	39	41	34	41	34
	2	42	37	41	34	36	30	37	30	41	36	40	33	35	28	35	29	40	35	38	31	33	27	34	28
	3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
50	1	46	41	45	40	42	37	45	37	45	40	44	39	41	35	43	35	44	39	43	38	40	34	41	34
	2	41	36	40	34	36	30	37	30	40	35	39	33	35	28	35	29	39	34	38	31	33	27	34	28
	3	35	28	37	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
60	1	44	40	43	39	41	36	45	37	43	39	42	38	40	35	43	35	42	38	41	37	39	34	41	34
	2	40	35	39	34	36	30	37	30	39	34	38	33	35	28	35	29	38	33	37	31	33	27	34	28
	3	35	28	36	30	32	26	32	26	33	27	35	28	30	24	31	25	32	26	33	27	29	23	29	24
45	1	44	39	43	37	39	32	40	33	43	38	42	36	38	31	38	31								
	2	39	34	37	30	32	26	33	27	38	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
50	1	43	38	42	37	39	32	40	33	42	37	41	36	38	31	38	31								
	2	38	33	37	30	32	26	33	27	37	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
60	1	41	37	41	36	38	32	40	33	40	36	40	35	37	31	38	31								
	2	37	33	36	30	32	26	33	27	36	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
45	1	44	39	43	37	39	32	40	33	43	38	42	36	38	31	38	31								
	2	39	34	37	30	32	26	33	27	38	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
50	1	43	38	42	37	39	32	40	33	42	37	41	36	38	31	38	31								
	2	38	33	37	30	32	26	33	27	37	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
60	1	41	37	41	36	38	32	40	33	40	36	40	35	37	31	38	31								
	2	37	33	36	30	32	26	33	27	36	32	35	29	31	25	31	26								
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22								
45	1	42	37	41	34	37	30	37	30	43	38	42	36	38	31	38	31								
	2	37	31	34	28	29	24	30	25	38	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
50	1	41	36	40	34	37	30	37	30	42	37	41	36	38	31	38	31								
	2	36	31	34	28	29	24	30	25	37	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
60	1	40	35	39	34	36	30	37	30	40	36	40	35	37	31	38	31								
	2	35	31	34	28	29	24	30	25	36	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
45	1	42	37	41	34	37	30	37	30	43	38	42	36	38	31	38	31								
	2	37	31	34	28	29	24	30	25	38	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
50	1	41	36	40	34	37	30	37	30	42	37	41	36	38	31	38	31								
	2	36	31	34	28	29	24	30	25	37	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								
60	1	40	35	39	34	36	30	37	30	40	36	40	35	37	31	38	31								
	2	35	31	34	28	29	24	30	25	36	32	35	29	31	25	31	26								
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	41	36	40	33	35	29	36	29	39	34	38	31	33	27	33	27	38	32	35	29	31	25	31	25	
	2	36	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21	
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18	
	50	1	40	36	39	33	35	29	36	29	39	34	38	31	33	27	33	27	37	32	35	29	31	25	31	25
		2	36	30	33	27	28	23	29	24	34	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
		3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
	60	1	39	35	38	33	35	29	36	29	37	33	37	31	33	27	33	27	36	32	35	29	31	25	31	25
		2	35	30	33	27	28	23	29	24	33	28	30	25	26	21	27	22	32	26	28	23	25	20	25	21
		3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
Wind Speed [mph]		170								180																
45	1	36	30	33	27	29	23	29	24	35	29	31	25	27	22	28	23									
	2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18									
	3	22	18	23	19	20	16	21	17	21	17	22	18	19			20	16								
	50	1	36	30	33	27	29	23	29	24	34	29	31	25	27	22	28	23								
		2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
		3	22	18	23	19	20	16	21	17	21	17	22	18	19			20	16							
	60	1	35	30	33	27	29	23	29	24	33	29	31	25	27	22	28	23								
		2	30	25	27	22	23	19	24	20	29	24	25	20	22	18	23	18								
		3	22	18	23	19	20	16	21	17	21	17	22	18	19			20	16							
Wind Speed [mph]		190								200																
45	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20									
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17									
	3	20	16	21	17	18		19		19		20	16	17		18										
	50	1	33	27	30	24	26	21	26	21	32	26	28	23	24	20	25	20								
		2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
		3	20	16	21	17	18		19		19		20	16	17		18									
	60	1	32	27	30	24	26	21	26	21	31	26	28	23	24	20	25	20								
		2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
		3	20	16	21	17	18		19		19		20	16	17		18									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
70	1	42	38	42	38	40	35	45	37	41	38	41	37	39	34	43	35	40	37	40	36	38	33	41	34	
	2	38	34	38	34	35	30	37	30	38	33	37	33	34	28	35	29	37	33	36	31	33	27	34	28	
	3	35	28	35	30	32	26	32	26	33	27	34	28	30	24	31	25	32	26	33	27	29	23	29	24	
	80	1	40	37	40	37	39	34	45	37	40	36	39	36	38	33	43	35	39	36	39	35	37	33	41	34
		2	37	33	37	33	34	30	37	30	36	33	36	32	33	28	35	29	36	32	35	31	33	27	34	28
		3	35	28	34	30	31	26	32	26	33	27	33	28	30	24	31	25	32	26	32	27	29	23	29	24
	90	1	39	36	39	36	38	34	44	37	38	35	38	35	37	33	43	35	38	35	37	34	36	32	41	34
		2	36	33	36	32	34	30	37	30	35	32	35	31	33	28	35	29	35	31	34	30	32	27	34	28
		3	34	28	33	29	31	26	32	26	33	27	32	28	30	24	31	25	32	26	31	27	29	23	29	24
Wind Speed [mph]		110								115																
70	1	40	36	39	35	37	32	40	33	39	35	38	34	36	31	38	31	39	35	37	34	36	32	40	33	
	2	36	32	35	30	32	26	33	27	35	31	34	29	31	25	31	26	35	31	34	29	31	25	31	26	
	3	30	25	32	26	28	22	28	23	29	24	31	25	27	22	27	22	29	24	31	25	27	22	27	22	
80	1	38	35	38	34	36	32	40	33	38	34	37	33	35	31	38	31	38	34	37	33	35	31	38	31	
	2	35	31	34	30	32	26	33	27	34	30	33	29	31	25	31	26	34	30	33	29	31	25	31	26	
	3	30	25	31	26	28	22	28	23	29	24	31	25	27	22	27	22	29	24	31	25	27	22	27	22	
90	1	37	34	37	33	35	31	40	33	37	33	36	33	35	30	38	31	37	33	36	33	35	30	38	31	
	2	34	30	33	30	31	26	33	27	33	30	33	29	30	25	31	26	33	30	33	29	30	25	31	26	
	3	30	25	31	26	28	22	28	23	29	24	30	25	27	22	27	22	29	24	30	25	27	22	27	22	
Wind Speed [mph]		120								130																
70	1	38	34	38	33	35	30	37	30	39	35	38	34	36	31	38	31	39	35	38	34	36	32	40	33	
	2	34	30	33	28	29	24	30	25	35	31	34	29	31	25	31	26	35	31	34	29	31	25	31	26	
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22	29	24	31	25	27	22	27	22	
80	1	37	33	37	33	34	30	37	30	38	34	37	33	35	31	38	31	38	34	37	33	35	31	38	31	
	2	33	30	33	28	29	24	30	25	34	30	33	29	31	25	31	26	34	30	33	29	31	25	31	26	
	3	28	23	30	24	26	21	26	21	29	24	31	25	27	22	27	22	29	24	31	25	27	22	27	22	
90	1	36	33	35	32	34	29	37	30	37	33	36	33	35	30	38	31	37	33	36	33	35	30	38	31	
	2	33	29	32	28	29	24	30	25	33	30	33	29	30	25	31	26	33	30	33	29	30	25	31	26	
	3	28	23	29	24	26	21	26	21	29	24	30	25	27	22	27	22	29	24	30	25	27	22	27	22	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
70	1	38	34	37	33	34	29	36	29	36	32	36	31	33	27	33	27	35	31	34	29	31	25	31	25
	2	34	29	33	27	28	23	29	24	32	28	30	25	26	21	27	22	31	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
80	1	36	33	36	32	34	29	36	29	35	31	35	31	32	27	33	27	34	30	33	29	31	25	31	25
	2	33	29	32	27	28	23	29	24	31	27	30	25	26	21	27	22	30	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
90	1	35	32	35	31	33	29	36	29	34	31	34	30	32	27	33	27	33	30	33	29	30	25	31	25
	2	32	28	31	27	28	23	29	24	31	27	30	25	26	21	27	22	30	26	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
Wind Speed [mph]		170								180															
70	1	34	30	33	27	29	23	29	24	33	28	31	25	27	22	28	23								
	2	30	25	27	22	23	19	24	20	28	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19			20	16							
80	1	33	29	32	27	29	23	29	24	32	28	31	25	27	22	28	23								
	2	29	25	27	22	23	19	24	20	28	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19			20	16							
90	1	32	28	31	27	29	23	29	24	31	27	30	25	27	22	28	23								
	2	28	25	27	22	23	19	24	20	27	24	25	20	22	18	23	18								
	3	22	18	23	19	20	16	21	17	21	17	22	18	19			20	16							
Wind Speed [mph]		190								200															
70	1	31	27	30	24	26	21	26	21	30	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
80	1	31	27	30	24	26	21	26	21	30	26	28	23	24	20	25	20								
	2	27	22	24	19	21	17	21	17	26	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
90	1	30	26	29	24	26	21	26	21	29	25	28	23	24	20	25	20								
	2	26	22	24	19	21	17	21	17	25	21	23	18	20	16	20	17								
	3	20	16	21	17	18		19		19		20	16	17		18									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	38	35	37	35	37	33	44	37	37	34	37	34	36	32	42	35	36	34	36	33	35	31	41	34
	2	35	32	35	31	33	29	37	30	34	31	34	30	32	28	35	29	34	30	33	30	31	27	34	28
	3	33	28	32	29	30	26	32	26	32	27	32	28	29	24	31	25	31	26	31	27	29	23	29	24
Wind Speed [mph]		110								115															
100	1	36	33	36	33	35	31	40	33	35	32	35	32	34	30	38	31								
	2	33	30	33	29	31	26	33	27	32	29	32	28	30	25	31	26								
	3	30	25	30	26	28	22	28	23	29	24	29	25	27	22	27	22								
Wind Speed [mph]		120								130															
100	1	35	32	35	31	33	29	37	30	35	32	35	32	34	30	38	31								
	2	32	28	31	28	29	24	30	25	32	29	32	28	30	25	31	26								
	3	28	23	29	24	26	21	26	21	29	24	29	25	27	22	27	22								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	34	31	34	31	32	28	36	29	33	30	33	29	31	27	33	27	32	29	32	28	30	25	31	25
	2	31	28	31	27	28	23	29	24	30	27	29	25	26	21	27	22	29	25	28	23	25	20	25	21
	3	27	22	28	23	25	20	25	21	25	20	26	21	23	19	24	19	24	19	25	20	21	17	22	18
Wind Speed [mph]		170								180															
100	1	31	28	31	27	28	23	29	24	30	27	30	25	27	22	28	23	31	28	31	27	28	23	29	24
	2	28	24	27	22	23	19	24	20	27	23	25	20	22	18	23	18	21	18	23	19	20	16	21	17
	3	22	18	23	19	20	16	21	17	21	17	22	18	19	NA	20	16	21	17	22	18	19	16	21	17
Wind Speed [mph]		190								200															
100	1	30	26	29	24	26	21	26	21	29	25	28	23	24	20	25	20	30	26	29	24	26	21	26	21
	2	26	22	24	19	21	17	21	17	25	21	23	18	20	16	20	17	26	22	24	19	21	17	21	17
	3	20	16	21	17	18		19		19		20	16	17		18		20	16	21	17	18		19	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	52	43	48	39	41	34	41	34	50	41	46	37	40	32	40	33	48	39	44	35	38	31	38	31
	2	43	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
5	1	52	43	48	39	41	34	41	34	50	41	46	37	40	32	40	33	48	39	44	35	38	31	38	31
	2	43	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
10	1	52	43	48	39	41	34	41	34	50	41	46	37	40	32	40	33	48	39	44	35	38	31	38	31
	2	43	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
0	1	46	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
5	1	46	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
10	1	46	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
0	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
5	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
10	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
0	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
5	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
10	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
5	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
10	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
0	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
5	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
10	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
0	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
5	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
10	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	51	43	48	39	41	34	41	34	50	41	46	37	40	32	40	33	48	39	44	35	38	31	38	31
	2	43	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
20	1	49	43	48	39	41	34	41	34	48	41	46	37	40	32	40	33	47	39	44	35	38	31	38	31
	2	43	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
25	1	49	43	48	39	41	34	41	34	48	41	46	37	40	32	40	33	47	39	44	35	38	31	38	31
	2	43	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
15	1	46	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
20	1	45	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
25	1	45	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
15	1	46	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
20	1	45	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
25	1	45	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29								
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
15	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
20	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
25	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
15	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
20	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
25	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29								
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Span, inches								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
15	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19	
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16	
	20	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
		2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
	25	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
		2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
170	15	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21	26	22	23	19	20	16	21	17
		2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17	26	22	23	19	20	16	21	17
		3	20	16	21	17	18		19		19		20	16	17		18		19		20	16	17		18	
	20	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21	26	22	23	19	20	16	21	17
		2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17	26	22	23	19	20	16	21	17
		3	20	16	21	17	18		19		19		20	16	17		18		19		20	16	17		18	
	25	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21	26	22	23	19	20	16	21	17
		2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17	26	22	23	19	20	16	21	17
		3	20	16	21	17	18		19		19		20	16	17		18		19		20	16	17		18	
180	15	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
	20	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
	25	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
190	15	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
	20	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
	25	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
200	15	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
	20	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
	25	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	49	43	48	39	41	34	41	34	48	41	46	37	40	32	40	33	47	39	44	35	38	31	38	31	
	2	43	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26	
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22	
	35	1	48	42	47	39	41	34	41	34	47	41	46	37	40	32	40	33	46	39	44	35	38	31	38	31
		2	42	35	39	31	33	27	34	28	41	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
		3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
	40	1	47	41	46	39	41	34	41	34	46	40	45	37	40	32	40	33	45	39	43	35	38	31	38	31
		2	41	35	39	31	33	27	34	28	40	34	37	30	32	26	33	27	39	32	35	28	31	25	31	26
		3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
Wind Speed [mph]		110								115																
30	1	45	38	42	34	36	29	37	30	44	36	40	33	35	28	35	29	44	36	40	33	35	28	35	29	
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24	36	30	32	26	28	23	29	24	
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
35	1	44	38	42	34	36	29	37	30	43	36	40	33	35	28	35	29	43	36	40	33	35	28	35	29	
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24	36	30	32	26	28	23	29	24	
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
40	1	44	38	42	34	36	29	37	30	42	36	40	33	35	28	35	29	42	36	40	33	35	28	35	29	
	2	38	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24	36	30	32	26	28	23	29	24	
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
Wind Speed [mph]		120								130																
30	1	43	35	39	31	34	27	34	28	44	36	40	33	35	28	35	29	44	36	40	33	35	28	35	29	
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24	36	30	32	26	28	23	29	24	
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
35	1	42	35	39	31	34	27	34	28	43	36	40	33	35	28	35	29	43	36	40	33	35	28	35	29	
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24	36	30	32	26	28	23	29	24	
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
40	1	41	35	39	31	34	27	34	28	42	36	40	33	35	28	35	29	42	36	40	33	35	28	35	29	
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24	36	30	32	26	28	23	29	24	
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
35	1	41	34	37	30	32	26	33	27	39	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
40	1	40	34	37	30	32	26	33	27	38	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
30	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
35	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
40	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
30	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
35	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
40	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	46	41	45	39	41	34	41	34	45	40	44	37	40	32	40	33	44	38	43	35	38	31	38	31	
	2	41	35	39	31	33	27	34	28	40	34	37	30	32	26	33	27	38	32	35	28	31	25	31	26	
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22	
	50	1	45	40	44	39	41	34	41	34	44	39	43	37	39	32	40	33	43	38	42	35	38	31	38	31
		2	40	35	39	31	33	27	34	28	39	34	37	30	32	26	33	27	38	32	35	28	31	25	31	26
		3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
	60	1	43	39	43	38	40	34	41	34	42	38	42	37	39	32	40	33	41	37	41	35	37	31	38	31
		2	39	34	38	31	33	27	34	28	38	33	37	30	32	26	33	27	37	32	35	28	31	25	31	26
		3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
Wind Speed [mph]		110								115																
45	1	43	37	42	34	36	29	37	30	42	36	40	33	35	28	35	29									
	2	37	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24									
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20									
	50	1	42	37	41	34	36	29	37	30	41	36	40	33	35	28	35	29								
		2	37	31	34	27	29	24	30	24	36	30	32	26	28	23	29	24								
		3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
	60	1	41	36	40	34	36	29	37	30	40	35	39	33	35	28	35	29								
		2	36	31	34	27	29	24	30	24	35	30	32	26	28	23	29	24								
		3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
Wind Speed [mph]		120								130																
45	1	41	35	39	31	34	27	34	28	42	36	40	33	35	28	35	29									
	2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24									
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20									
	50	1	40	35	39	31	34	27	34	28	41	36	40	33	35	28	35	29								
		2	35	29	31	25	27	22	28	23	36	30	32	26	28	23	29	24								
		3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
	60	1	39	34	38	31	34	27	34	28	40	35	39	33	35	28	35	29								
		2	34	29	31	25	27	22	28	23	35	30	32	26	28	23	29	24								
		3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	40	34	37	30	32	26	33	27	38	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23	
	2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19	
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16	
	50	1	39	34	37	30	32	26	33	27	37	32	35	28	30	24	31	25	36	30	32	26	28	23	29	23
		2	34	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
	60	1	38	33	37	30	32	26	33	27	36	32	35	28	30	24	31	25	35	30	32	26	28	23	29	23
		2	33	28	30	24	26	21	27	22	32	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
Wind Speed [mph]		170								180																
45	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21	32	26	29	23	25	20	26	21	
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17	26	22	23	19	20	16	21	17	
	3	20	16	21	17	18		19		19		20	16	17		18		19		20	16	17		18		
	50	1	34	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21	32	26	29	23	25	20	26	21
		2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17	26	22	23	19	20	16	21	17
		3	20	16	21	17	18		19		19		20	16	17		18		19		20	16	17		18	
	60	1	33	28	31	25	26	21	27	22	32	26	29	23	25	20	26	21	32	26	29	23	25	20	26	21
		2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17	26	22	23	19	20	16	21	17
		3	20	16	21	17	18		19		19		20	16	17		18		19		20	16	17		18	
Wind Speed [mph]		190								200																
45	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19	
	2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19		
	3	18		19		16		17		17		18		16		16		17		18		16		16		
	50	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	
	60	1	31	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19	29	24	26	21	22	18	23	19
		2	25	20	22	18	19		20	16	24	19	21	17	18		19		24	19	21	17	18		19	
		3	18		19		16		17		17		18		16		16		17		18		16		16	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
70	1	42	38	41	37	39	34	41	34	41	37	40	36	38	32	40	33	40	36	39	35	37	31	38	31	
	2	38	33	37	31	33	27	34	28	37	32	36	30	32	26	33	27	36	31	35	28	31	25	31	26	
	3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22	
	80	1	40	37	40	36	38	33	41	34	40	36	39	35	37	32	40	33	39	35	38	34	36	31	38	31
		2	37	33	36	31	33	27	34	28	36	32	35	30	32	26	33	27	35	31	34	28	31	25	31	26
		3	32	26	33	27	29	24	30	24	30	25	32	26	28	22	28	23	29	24	31	25	26	21	27	22
	90	1	39	36	39	35	37	33	41	34	38	35	38	34	36	32	40	33	38	34	37	33	35	31	38	31
		2	36	32	35	31	33	27	34	28	35	31	34	30	32	26	33	27	34	30	33	28	31	25	31	26
		3	32	26	32	27	29	24	30	24	30	25	31	26	28	22	28	23	29	24	30	25	26	21	27	22
Wind Speed [mph]		110								115																
70	1	39	35	38	34	36	29	37	30	38	34	38	33	35	28	35	29	34	30	32	26	28	23	29	24	
	2	35	31	34	27	29	24	30	24	34	30	32	26	28	23	29	24	27	22	28	23	24	20	25	20	
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
80	1	38	34	37	33	35	29	37	30	37	33	37	32	34	28	35	29	33	29	32	26	28	23	29	24	
	2	34	30	33	27	29	24	30	24	33	29	32	26	28	23	29	24	27	22	28	23	24	20	25	20	
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
90	1	37	33	36	33	34	29	37	30	36	33	36	32	33	28	35	29	33	29	32	26	28	23	29	24	
	2	33	29	33	27	29	24	30	24	33	29	32	26	28	23	29	24	27	22	28	23	24	20	25	20	
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
Wind Speed [mph]		120								130																
70	1	38	33	37	31	34	27	34	28	38	34	38	33	35	28	35	29	34	30	32	26	28	23	29	24	
	2	33	29	31	25	27	22	28	23	34	30	32	26	28	23	29	24	27	22	28	23	24	20	25	20	
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
80	1	37	33	36	31	33	27	34	28	37	33	37	32	34	28	35	29	33	29	32	26	28	23	29	24	
	2	33	28	31	25	27	22	28	23	33	29	32	26	28	23	29	24	27	22	28	23	24	20	25	20	
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	
90	1	36	32	35	31	33	27	34	28	36	33	36	32	33	28	35	29	33	29	32	26	28	23	29	24	
	2	32	28	31	25	27	22	28	23	33	29	32	26	28	23	29	24	27	22	28	23	24	20	25	20	
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20	27	22	28	23	24	20	25	20	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

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 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
70	1	37	32	36	30	32	26	33	27	35	31	34	28	30	24	31	25	34	30	32	26	28	23	29	23
	2	32	28	30	24	26	21	27	22	31	26	28	23	24	20	25	20	30	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
80	1	36	32	35	30	32	26	33	27	35	30	34	28	30	24	31	25	33	29	32	26	28	23	29	23
	2	32	28	30	24	26	21	27	22	30	26	28	23	24	20	25	20	29	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
90	1	35	31	34	30	32	26	33	27	34	30	33	28	30	24	31	25	32	29	32	26	28	23	29	23
	2	31	27	30	24	26	21	27	22	30	26	28	23	24	20	25	20	29	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
70	1	33	28	31	25	26	21	27	22	31	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
80	1	32	28	31	25	26	21	27	22	31	26	29	23	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
90	1	31	27	30	25	26	21	27	22	30	26	29	23	25	20	26	21								
	2	27	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
70	1	30	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
80	1	30	25	27	22	24	19	24	20	29	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									
90	1	29	25	27	22	24	19	24	20	28	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	38	35	38	34	36	32	41	34	37	34	37	33	35	31	40	33	37	33	36	33	35	30	38	31
	2	35	31	34	30	32	27	34	28	34	30	33	30	31	26	33	27	33	30	33	28	30	25	31	26
	3	32	26	32	27	29	24	30	24	30	25	31	26	28	22	28	23	29	24	30	25	26	21	27	22
0	1																								
	2																								
	3																								
100	1	36	33	35	32	34	29	37	30	35	32	35	31	33	28	35	29	32	28	31	26	28	23	29	24
	2	33	29	32	27	29	24	30	24	32	28	31	26	28	23	29	24	27	22	28	23	24	20	25	20
	3	28	23	29	24	25	21	26	21	27	22	28	23	24	20	25	20								
0	1																								
	2																								
	3																								
100	1	35	31	34	30	32	27	34	28	35	32	35	31	33	28	35	29	32	28	31	26	28	23	29	24
	2	31	27	30	25	27	22	28	23	32	28	31	26	28	23	29	24	27	22	28	23	24	20	25	20
	3	26	21	27	22	23	19	24	20	27	22	28	23	24	20	25	20								
0	1																								
	2																								
	3																								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	34	31	34	30	31	26	33	27	33	29	32	28	30	24	31	25	32	28	31	26	28	23	29	23
	2	31	27	30	24	26	21	27	22	29	26	28	23	24	20	25	20	28	24	26	21	23	18	23	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	17	23	18	20	16	20	16
Wind Speed [mph]		170								180															
100	1	31	27	30	25	26	21	27	22	30	26	29	23	25	20	26	21								
	2	27	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	16	21	17	18		19		19		20	16	17		18									
Wind Speed [mph]		190								200															
100	1	29	25	27	22	24	19	24	20	28	24	26	21	22	18	23	19								
	2	25	20	22	18	19		20	16	24	19	21	17	18		19									
	3	18		19		16		17		17		18		16		16									

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	59	49	56	46	48	39	48	40	57	47	54	44	46	38	46	38	55	46	52	42	44	36	44	36
	2	49	41	45	37	39	32	40	32	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
5	1	59	49	56	46	48	39	48	40	57	47	54	44	46	38	46	38	55	46	52	42	44	36	44	36
	2	49	41	45	37	39	32	40	32	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
10	1	59	49	56	46	48	39	48	40	57	47	54	44	46	38	46	38	55	46	52	42	44	36	44	36
	2	49	41	45	37	39	32	40	32	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
Wind Speed [mph]		110								115															
0	1	53	44	50	40	42	35	43	35	51	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
5	1	53	44	50	40	42	35	43	35	51	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
10	1	53	44	50	40	42	35	43	35	51	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
Wind Speed [mph]		120								130															
0	1	49	41	46	37	39	32	40	32	51	42	48	38	41	33	41	34								
	2	41	34	37	30	32	26	32	26	42	35	38	31	33	27	34	28								
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24								
5	1	49	41	46	37	39	32	40	32	51	42	48	38	41	33	41	34								
	2	41	34	37	30	32	26	32	26	42	35	38	31	33	27	34	28								
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24								
10	1	49	41	46	37	39	32	40	32	51	42	48	38	41	33	41	34								
	2	41	34	37	30	32	26	32	26	42	35	38	31	33	27	34	28								
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	48	39	44	36	38	31	38	31	45	37	41	33	35	29	36	29	42	35	38	31	33	27	33	27
	2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
5	1	48	39	44	36	38	31	38	31	45	37	41	33	35	29	36	29	42	35	38	31	33	27	33	27
	2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
10	1	48	39	44	36	38	31	38	31	45	37	41	33	35	29	36	29	42	35	38	31	33	27	33	27
	2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
0	1	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24								
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17								
5	1	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24								
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17								
10	1	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24								
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20								
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17								
0	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22								
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19									
5	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22								
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19									
10	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22								
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	57	49	55	46	48	39	48	40	55	47	54	44	46	38	46	38	54	46	52	42	44	36	44	36
	2	49	41	45	37	39	32	40	32	47	39	43	35	37	30	38	31	46	38	41	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
20	1	54	48	53	46	48	39	48	40	53	47	51	44	46	38	46	38	51	45	50	42	44	36	44	36
	2	48	41	45	37	39	32	40	32	47	39	43	35	37	30	38	31	45	38	41	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
25	1	54	48	53	46	48	39	48	40	53	47	51	44	46	38	46	38	51	45	50	42	44	36	44	36
	2	48	41	45	37	39	32	40	32	47	39	43	35	37	30	38	31	45	38	41	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
15	1	52	44	50	40	42	35	43	35	51	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
20	1	50	44	49	40	42	35	43	35	49	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
25	1	50	44	49	40	42	35	43	35	49	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
15	1	52	44	50	40	42	35	43	35	51	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
20	1	50	44	49	40	42	35	43	35	49	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
25	1	50	44	49	40	42	35	43	35	49	42	48	38	41	33	41	34								
	2	44	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
15	1	49	41	46	37	39	32	40	32	51	42	48	38	41	33	41	34								
	2	41	34	37	30	32	26	32	26	42	35	38	31	33	27	34	28								
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24								
20	1	48	41	46	37	39	32	40	32	49	42	48	38	41	33	41	34								
	2	41	34	37	30	32	26	32	26	42	35	38	31	33	27	34	28								
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24								
25	1	48	41	46	37	39	32	40	32	49	42	48	38	41	33	41	34								
	2	41	34	37	30	32	26	32	26	42	35	38	31	33	27	34	28								
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
15	1	48	39	44	36	38	31	38	31	45	37	41	33	35	29	36	29	42	35	38	31	33	27	33	27	
	2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22	
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19	
	20	1	47	39	44	36	38	31	38	31	45	37	41	33	35	29	36	29	42	35	38	31	33	27	33	27
		2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22
		3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
	25	1	47	39	44	36	38	31	38	31	45	37	41	33	35	29	36	29	42	35	38	31	33	27	33	27
		2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22
		3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
Wind Speed [mph]		170								180																
15	1	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24	31	25	27	22	24	19	24	20	
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20	22	18	24	19	20	17	21	17	
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17	22	18	24	19	20	17	21	17	
20	1	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24	31	25	27	22	24	19	24	20	
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20	22	18	24	19	20	17	21	17	
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17	22	18	24	19	20	17	21	17	
25	1	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24	31	25	27	22	24	19	24	20	
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20	22	18	24	19	20	17	21	17	
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17	22	18	24	19	20	17	21	17	
Wind Speed [mph]		190								200																
15	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22	28	23	24	20	21	17	22	18	
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18	20	16	21	17	18	19	19	18	
	3	21	17	22	18	19	16	20	16	20	16	21	17	18	19	19	18	20	16	21	17	18	19	19	18	
20	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22	28	23	24	20	21	17	22	18	
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18	20	16	21	17	18	19	19	18	
	3	21	17	22	18	19	16	20	16	20	16	21	17	18	19	19	18	20	16	21	17	18	19	19	18	
25	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22	28	23	24	20	21	17	22	18	
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18	20	16	21	17	18	19	19	18	
	3	21	17	22	18	19	16	20	16	20	16	21	17	18	19	19	18	20	16	21	17	18	19	19	18	

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	53	47	52	46	48	39	48	40	52	46	50	44	46	38	46	38	50	44	49	42	44	36	44	36	
	2	47	41	45	37	39	32	40	32	46	39	43	35	37	30	38	31	44	38	41	33	36	29	36	30	
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26	
	35	1	51	46	50	45	47	39	48	40	50	45	49	43	45	38	46	38	49	43	48	42	44	36	44	36
		2	46	40	45	37	39	32	40	32	45	39	43	35	37	30	38	31	43	38	41	33	36	29	36	30
		3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
	40	1	50	45	49	44	46	39	48	40	49	44	48	43	45	38	46	38	48	43	47	41	43	36	44	36
		2	45	39	44	37	39	32	40	32	44	38	43	35	37	30	38	31	43	37	41	33	36	29	36	30
		3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
Wind Speed [mph]		110								115																
30	1	49	43	48	40	42	35	43	35	48	42	47	38	41	33	41	34									
	2	43	36	40	32	34	28	35	29	42	35	38	31	33	27	34	28									
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24									
35	1	48	42	47	40	42	35	43	35	47	41	46	38	41	33	41	34									
	2	42	36	40	32	34	28	35	29	41	35	38	31	33	27	34	28									
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24									
40	1	47	41	46	40	42	35	43	35	46	40	45	38	41	33	41	34									
	2	41	36	40	32	34	28	35	29	40	35	38	31	33	27	34	28									
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24									
Wind Speed [mph]		120								130																
30	1	47	41	46	37	39	32	40	32	48	42	47	38	41	33	41	34									
	2	41	34	37	30	32	26	32	26	42	35	38	31	33	27	34	28									
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24									
35	1	46	40	45	37	39	32	40	32	47	41	46	38	41	33	41	34									
	2	40	34	37	30	32	26	32	26	41	35	38	31	33	27	34	28									
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24									
40	1	45	39	44	37	39	32	40	32	46	40	45	38	41	33	41	34									
	2	39	34	37	30	32	26	32	26	40	35	38	31	33	27	34	28									
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	46	39	44	36	38	31	38	31	44	37	41	33	35	29	36	29	42	35	38	31	33	27	33	27	
	2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22	
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19	
	35	1	45	39	44	36	38	31	38	31	43	37	41	33	35	29	36	29	41	35	38	31	33	27	33	27
		2	39	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22
		3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
	40	1	44	38	43	36	38	31	38	31	42	37	41	33	35	29	36	29	40	35	38	31	33	27	33	27
		2	38	32	35	29	31	25	31	26	37	30	33	27	28	23	29	24	35	28	31	25	27	22	27	22
		3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
Wind Speed [mph]		170								180																
30	1	40	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24	38	31	34	27	29	24	30	24	
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20	31	25	27	22	24	19	24	20	
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17	22	18	24	19	20	17	21	17	
35	1	39	33	36	29	31	25	32	26	38	31	34	27	29	24	30	24	38	31	34	27	29	24	30	24	
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20	31	25	27	22	24	19	24	20	
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17	22	18	24	19	20	17	21	17	
40	1	39	33	36	29	31	25	32	26	37	31	34	27	29	24	30	24	37	31	34	27	29	24	30	24	
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20	31	25	27	22	24	19	24	20	
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17	22	18	24	19	20	17	21	17	
Wind Speed [mph]		190								200																
30	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18	28	23	24	20	21	17	22	18	
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19		20	16	21	17	18		19		
35	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18	28	23	24	20	21	17	22	18	
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19		20	16	21	17	18		19		
40	1	36	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18	28	23	24	20	21	17	22	18	
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19		20	16	21	17	18		19		

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	48	44	48	43	45	39	48	40	47	43	47	42	44	38	46	38	47	42	46	41	43	36	44	36
	2	44	39	43	37	39	32	40	32	43	38	42	35	37	30	38	31	42	37	41	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	38	30	33	26	33	27	34	28	36	29	31	25	32	26
50	1	47	43	47	42	44	39	48	40	46	42	46	41	43	38	46	38	45	41	45	40	42	36	44	36
	2	43	38	42	37	39	32	40	32	42	37	41	35	37	30	38	31	41	36	40	33	36	29	36	30
	3	37	30	39	32	34	28	34	28	36	29	37	30	33	26	33	27	34	28	36	29	31	25	32	26
60	1	45	41	45	40	43	38	48	40	44	40	44	39	42	37	46	38	43	39	43	39	41	36	44	36
	2	41	37	40	36	38	32	40	32	40	36	39	35	37	30	38	31	39	35	39	33	36	29	36	30
	3	37	30	37	32	34	28	34	28	36	29	36	30	33	26	33	27	34	28	35	29	31	25	32	26
45	1	46	41	45	40	41	35	43	35	45	40	44	38	40	33	41	34	40	35	38	31	33	27	34	28
	2	41	36	40	32	34	28	35	29	40	35	38	31	33	27	34	28	31	25	33	27	29	23	29	24
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24	31	25	33	27	29	23	29	24
50	1	45	40	44	39	41	35	43	35	44	39	43	38	40	33	41	34	39	34	38	31	33	27	34	28
	2	40	35	39	32	34	28	35	29	39	34	38	31	33	27	34	28	31	25	33	27	29	23	29	24
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24	31	25	33	27	29	23	29	24
60	1	43	39	42	38	40	35	43	35	42	38	41	37	39	33	41	34	38	33	37	31	33	27	34	28
	2	39	34	38	32	34	28	35	29	38	33	37	31	33	27	34	28	31	25	33	27	29	23	29	24
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24	31	25	33	27	29	23	29	24
45	1	44	39	43	37	39	32	40	32	45	40	44	38	40	33	41	34	40	35	38	31	33	27	34	28
	2	39	34	37	30	32	26	32	26	40	35	38	31	33	27	34	28	31	25	33	27	29	23	29	24
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24	31	25	33	27	29	23	29	24
50	1	43	38	42	37	39	32	40	32	44	39	43	38	40	33	41	34	39	34	38	31	33	27	34	28
	2	38	33	37	30	32	26	32	26	39	34	38	31	33	27	34	28	31	25	33	27	29	23	29	24
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24	31	25	33	27	29	23	29	24
60	1	41	37	40	36	38	32	40	32	42	38	41	37	39	33	41	34	38	33	37	31	33	27	34	28
	2	37	32	36	30	32	26	32	26	38	33	37	31	33	27	34	28	31	25	33	27	29	23	29	24
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24	31	25	33	27	29	23	29	24

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	43	38	42	36	38	31	38	31	41	36	40	33	35	29	36	29	40	34	38	31	33	27	33	27	
	2	38	32	35	29	31	25	31	26	36	30	33	27	28	23	29	24	34	28	31	25	27	22	27	22	
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19	
	50	1	42	37	41	36	38	31	38	31	40	36	39	33	35	29	36	29	39	34	38	31	33	27	33	27
		2	37	32	35	29	31	25	31	26	36	30	33	27	28	23	29	24	34	28	31	25	27	22	27	22
		3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
	60	1	40	36	40	35	37	31	38	31	39	35	38	33	35	29	36	29	38	33	37	31	33	27	33	27
		2	36	32	35	29	31	25	31	26	35	30	33	27	28	23	29	24	33	28	31	25	27	22	27	22
		3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
Wind Speed [mph]		170								180																
45	1	38	33	36	29	31	25	32	26	37	31	34	27	29	24	30	24									
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20									
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17									
50	1	37	33	36	29	31	25	32	26	36	31	34	27	29	24	30	24									
	2	33	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20									
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17									
60	1	36	32	35	29	31	25	32	26	35	31	34	27	29	24	30	24									
	2	32	27	29	23	25	20	26	21	31	25	27	22	24	19	24	20									
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17									
Wind Speed [mph]		190								200																
45	1	35	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22									
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18									
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19										
50	1	35	29	32	26	28	22	28	23	34	28	30	25	26	21	27	22									
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18									
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19										
60	1	34	29	32	26	28	22	28	23	33	28	30	25	26	21	27	22									
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18									
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19										

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	43	40	43	39	42	37	48	40	42	39	42	38	41	36	46	38	42	38	41	37	40	35	44	36
	2	40	36	39	35	37	32	40	32	39	35	38	34	36	30	38	31	38	34	37	33	35	29	36	30
	3	37	30	36	32	34	28	34	28	36	29	35	30	32	26	33	27	34	28	34	29	31	25	32	26
80	1	41	38	41	38	40	36	47	40	41	38	40	37	39	35	46	38	40	37	40	36	39	34	44	36
	2	38	35	38	34	36	32	40	32	38	34	37	33	35	30	38	31	37	33	36	32	34	29	36	30
	3	36	30	35	31	33	28	34	28	35	29	34	30	32	26	33	27	34	28	34	29	31	25	32	26
90	1	40	37	40	37	39	35	47	40	39	36	39	36	38	34	45	38	39	36	38	35	38	33	44	36
	2	37	34	37	33	35	31	40	32	36	33	36	32	34	30	38	31	36	32	35	32	33	29	36	30
	3	35	30	34	31	32	28	34	28	34	29	34	30	31	26	33	27	33	28	33	29	30	25	32	26
Wind Speed [mph]		110								115															
70	1	41	37	40	37	39	34	43	35	40	37	40	36	38	33	41	34								
	2	37	33	37	32	34	28	35	29	37	32	36	31	33	27	34	28								
	3	33	26	34	28	30	24	30	25	31	25	33	27	29	23	29	24								
80	1	39	36	39	36	38	33	43	35	39	35	38	35	37	32	41	34								
	2	36	32	36	32	33	28	35	29	35	32	35	31	32	27	34	28								
	3	33	26	33	28	30	24	30	25	31	25	32	27	29	23	29	24								
90	1	38	35	38	35	37	33	43	35	38	34	37	34	36	32	41	34								
	2	35	32	35	31	33	28	35	29	34	31	34	30	32	27	34	28								
	3	33	26	32	28	30	24	30	25	31	25	31	27	29	23	29	24								
Wind Speed [mph]		120								130															
70	1	40	36	39	35	37	32	40	32	40	37	40	36	38	33	41	34								
	2	36	32	35	30	32	26	32	26	37	32	36	31	33	27	34	28								
	3	30	24	32	26	28	22	28	23	31	25	33	27	29	23	29	24								
80	1	38	35	38	34	36	32	40	32	39	35	38	35	37	32	41	34								
	2	35	31	34	30	32	26	32	26	35	32	35	31	32	27	34	28								
	3	30	24	31	26	28	22	28	23	31	25	32	27	29	23	29	24								
90	1	37	34	37	33	35	31	40	32	38	34	37	34	36	32	41	34								
	2	34	30	33	29	31	26	32	26	34	31	34	30	32	27	34	28								
	3	30	24	31	26	28	22	28	23	31	25	31	27	29	23	29	24								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	39	35	38	34	36	31	38	31	38	34	37	33	34	29	36	29	36	32	36	31	33	27	33	27
	2	35	31	34	29	31	25	31	26	34	29	33	27	28	23	29	24	32	28	31	25	27	22	27	22
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
80	1	38	34	37	33	35	31	38	31	36	33	36	32	34	29	36	29	35	32	35	31	32	27	33	27
	2	34	30	33	29	31	25	31	26	33	29	32	27	28	23	29	24	32	28	31	25	27	22	27	22
	3	29	24	31	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
90	1	36	33	36	33	34	30	38	31	35	32	35	31	33	29	36	29	34	31	34	30	32	27	33	27
	2	33	30	33	29	30	25	31	26	32	28	31	27	28	23	29	24	31	27	30	25	27	22	27	22
	3	29	24	30	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
Wind Speed [mph]		170								180															
70	1	35	31	34	29	31	25	32	26	34	30	33	27	29	24	30	24								
	2	31	27	29	23	25	20	26	21	30	25	27	22	24	19	24	20								
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17								
80	1	34	30	34	29	31	25	32	26	33	29	32	27	29	24	30	24								
	2	30	26	29	23	25	20	26	21	29	25	27	22	24	19	24	20								
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17								
90	1	33	30	33	29	30	25	32	26	32	29	32	27	29	24	30	24								
	2	30	26	29	23	25	20	26	21	29	25	27	22	24	19	24	20								
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17								
Wind Speed [mph]		190								200															
70	1	33	29	32	26	28	22	28	23	32	28	30	25	26	21	27	22								
	2	29	24	26	21	22	18	23	19	28	23	24	20	21	17	22	18								
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19									
80	1	32	28	31	26	28	22	28	23	31	27	30	25	26	21	27	22								
	2	28	24	26	21	22	18	23	19	27	23	24	20	21	17	22	18								
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19									
90	1	31	28	31	26	28	22	28	23	30	27	30	25	26	21	27	22								
	2	28	24	26	21	22	18	23	19	27	23	24	20	21	17	22	18								
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	38	36	38	36	38	34	46	40	38	35	38	35	37	34	45	38	37	35	37	34	37	33	43	36
	2	36	33	36	32	34	31	40	32	35	32	35	32	34	30	38	31	35	32	34	31	33	29	36	30
	3	34	30	33	30	32	28	34	28	33	29	33	29	31	26	33	27	33	28	32	28	30	25	32	26
Wind Speed [mph]		110								115															
100	1	37	34	37	34	36	32	42	35	36	34	36	33	35	31	41	34								
	2	34	31	34	30	32	28	35	29	34	30	33	30	31	27	34	28								
	3	32	26	31	28	29	24	30	25	31	25	31	27	28	23	29	24								
Wind Speed [mph]		120								130															
100	1	36	33	36	32	34	30	40	32	36	34	36	33	35	31	41	34								
	2	33	30	32	29	30	26	32	26	34	30	33	30	31	27	34	28								
	3	30	24	30	26	28	22	28	23	31	25	31	27	28	23	29	24								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	35	32	35	32	34	30	38	31	34	31	34	31	32	28	36	29	33	30	33	30	31	27	33	27
	2	32	29	32	28	30	25	31	26	31	28	31	27	28	23	29	24	30	27	30	25	27	22	27	22
	3	29	24	29	25	27	22	27	22	27	22	28	23	25	20	25	21	25	21	27	22	23	19	24	19
Wind Speed [mph]		170								180															
100	1	33	29	32	28	30	25	32	26	32	28	31	27	29	24	30	24								
	2	29	26	28	23	25	20	26	21	28	25	27	22	24	19	24	20								
	3	24	19	25	20	22	18	22	18	22	18	24	19	20	17	21	17								
Wind Speed [mph]		190								200															
100	1	31	27	30	26	28	22	28	23	30	26	29	25	26	21	27	22								
	2	27	24	26	21	22	18	23	19	26	23	24	20	21	17	22	18								
	3	21	17	22	18	19	16	20	16	20	16	21	17	18		19									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	52	43	49	39	42	34	42	34	50	41	46	37	40	32	40	33	48	40	44	36	38	31	38	31
	2	43	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	40	33	35	29	31	25	31	26
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
5	1	52	43	49	39	42	34	42	34	50	41	46	37	40	32	40	33	48	40	44	36	38	31	38	31
	2	43	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	40	33	35	29	31	25	31	26
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
10	1	52	43	49	39	42	34	42	34	50	41	46	37	40	32	40	33	48	40	44	36	38	31	38	31
	2	43	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	40	33	35	29	31	25	31	26
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
Wind Speed [mph]		110								115															
0	1	46	38	42	34	37	30	37	30	45	37	41	33	35	29	36	29								
	2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
5	1	46	38	42	34	37	30	37	30	45	37	41	33	35	29	36	29								
	2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
10	1	46	38	42	34	37	30	37	30	45	37	41	33	35	29	36	29								
	2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
Wind Speed [mph]		120								130															
0	1	43	35	39	32	34	27	34	28	45	37	41	33	35	29	36	29								
	2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
5	1	43	35	39	32	34	27	34	28	45	37	41	33	35	29	36	29								
	2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
10	1	43	35	39	32	34	27	34	28	45	37	41	33	35	29	36	29								
	2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Gable
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	42	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24	
	2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19	
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17	
	5	1	42	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24
		2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
	10	1	42	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24
		2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
Wind Speed [mph]		170								180																
0	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17									
	3	20	17	22	17	19		19	16	19	16	20	16	18		18										
	5	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
		2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17								
		3	20	17	22	17	19		19	16	19	16	20	16	18		18									
	10	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
		2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17								
		3	20	17	22	17	19		19	16	19	16	20	16	18		18									
Wind Speed [mph]		190								200																
0	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19									
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19										
	3	18		19	16	17		17		17		18		16		16										
	5	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19								
		2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
		3	18		19	16	17		17		17		18		16		16									
	10	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19								
		2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
		3	18		19	16	17		17		17		18		16		16									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
15	1	52	43	49	39	42	34	42	34	50	41	46	37	40	32	40	33	48	40	44	36	38	31	38	31	
	2	43	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	40	33	35	29	31	25	31	26	
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22	
	20	1	50	43	48	39	42	34	42	34	48	41	46	37	40	32	40	33	47	40	44	36	38	31	38	31
		2	43	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	40	33	35	29	31	25	31	26
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
	25	1	50	43	48	39	42	34	42	34	48	41	46	37	40	32	40	33	47	40	44	36	38	31	38	31
		2	43	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	40	33	35	29	31	25	31	26
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
15	Wind Speed [mph]		110								115															
	1	46	38	42	34	37	30	37	30	45	37	41	33	35	29	36	29									
	2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24									
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21									
	20	1	46	38	42	34	37	30	37	30	44	37	41	33	35	29	36	29								
		2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
		3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
	25	1	46	38	42	34	37	30	37	30	44	37	41	33	35	29	36	29								
		2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24								
3		28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21									
15	Wind Speed [mph]		120								130															
	1	43	35	39	32	34	27	34	28	45	37	41	33	35	29	36	29									
	2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24									
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21									
	20	1	43	35	39	32	34	27	34	28	44	37	41	33	35	29	36	29								
		2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24								
		3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
	25	1	43	35	39	32	34	27	34	28	44	37	41	33	35	29	36	29								
		2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24								
3		26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
15	1	42	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24	
	2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19	
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17	
	20	1	42	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24
		2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
	25	1	42	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24
		2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
Wind Speed [mph]		170								180																
15	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17									
	3	20	17	22	17	19		19	16	19	16	20	16	18		18										
20	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17									
	3	20	17	22	17	19		19	16	19	16	20	16	18		18										
25	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17									
	3	20	17	22	17	19		19	16	19	16	20	16	18		18										
Wind Speed [mph]		190								200																
15	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19									
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19										
	3	18		19	16	17		17		17		18		16		16										
20	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19									
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19										
	3	18		19	16	17		17		17		18		16		16										
25	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19									
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19										
	3	18		19	16	17		17		17		18		16		16										

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	49	43	47	39	42	34	42	34	47	41	46	37	40	32	40	33	46	40	44	36	38	31	38	31	
	2	43	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	40	33	35	29	31	25	31	26	
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22	
	35	1	47	42	46	39	42	34	42	34	46	41	45	37	40	32	40	33	45	39	44	36	38	31	38	31
		2	42	35	39	31	34	27	34	28	41	34	37	30	32	26	33	27	39	33	35	29	31	25	31	26
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
	40	1	46	41	45	39	42	34	42	34	45	40	44	37	40	32	40	33	44	39	43	36	38	31	38	31
		2	41	35	39	31	34	27	34	28	40	34	37	30	32	26	33	27	39	33	35	29	31	25	31	26
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
Wind Speed [mph]		110								115																
30	1	45	38	42	34	37	30	37	30	44	37	41	33	35	29	36	29									
	2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24									
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21									
35	1	44	38	42	34	37	30	37	30	43	37	41	33	35	29	36	29									
	2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24									
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21									
40	1	43	38	42	34	37	30	37	30	42	37	41	33	35	29	36	29									
	2	38	31	34	28	30	24	30	25	37	30	33	26	28	23	29	24									
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21									
Wind Speed [mph]		120								130																
30	1	43	35	39	32	34	27	34	28	44	37	41	33	35	29	36	29									
	2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24									
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21									
35	1	42	35	39	32	34	27	34	28	43	37	41	33	35	29	36	29									
	2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24									
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21									
40	1	41	35	39	32	34	27	34	28	42	37	41	33	35	29	36	29									
	2	35	29	31	25	27	22	28	23	37	30	33	26	28	23	29	24									
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
30	1	42	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24	
	2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19	
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17	
	35	1	41	34	38	31	33	26	33	27	39	32	35	28	30	25	31	25	37	30	33	27	28	23	29	24
		2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
	40	1	40	34	38	31	33	26	33	27	38	32	35	28	30	25	31	25	36	30	33	27	28	23	29	24
		2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
		3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
Wind Speed [mph]		170								180																
30	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17									
	3	20	17	22	17	19		19	16	19	16	20	16	18		18										
35	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17									
	3	20	17	22	17	19		19	16	19	16	20	16	18		18										
40	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21									
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17									
	3	20	17	22	17	19		19	16	19	16	20	16	18		18										
Wind Speed [mph]		190								200																
30	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19									
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19										
	3	18		19	16	17		17		17		18		16		16										
35	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19									
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19										
	3	18		19	16	17		17		17		18		16		16										
40	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19									
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19										
	3	18		19	16	17		17		17		18		16		16										

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	45	40	44	39	41	34	42	34	44	39	43	37	40	32	40	33	43	38	42	36	38	31	38	31	
	2	40	35	39	31	34	27	34	28	39	34	37	30	32	26	33	27	38	33	35	29	31	25	31	26	
	3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22	
	50	1	44	39	43	38	40	34	42	34	43	38	42	37	39	32	40	33	42	37	41	36	38	31	38	31
		2	39	35	38	31	34	27	34	28	38	34	37	30	32	26	33	27	37	33	35	29	31	25	31	26
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
	60	1	42	38	42	37	39	34	42	34	41	37	41	36	38	32	40	33	41	36	40	35	37	31	38	31
		2	38	34	37	31	34	27	34	28	37	33	36	30	32	26	33	27	36	32	35	29	31	25	31	26
		3	32	26	34	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
Wind Speed [mph]		110								115																
45	1	42	37	41	34	37	30	37	30	41	36	40	33	35	29	36	29	36	31	35	28	30	24	30	25	
	2	37	31	34	28	30	24	30	25	36	30	33	26	28	23	29	24	36	31	35	28	30	24	30	25	
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21	27	22	28	23	25	20	25	21	
50	1	41	36	40	34	37	30	37	30	40	35	39	33	35	29	36	29	36	31	35	28	30	24	30	25	
	2	36	31	34	28	30	24	30	25	35	30	33	26	28	23	29	24	36	31	35	28	30	24	30	25	
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21	27	22	28	23	25	20	25	21	
60	1	40	35	39	34	36	30	37	30	39	34	38	33	35	29	36	29	36	31	35	28	30	24	30	25	
	2	35	31	34	28	30	24	30	25	34	30	33	26	28	23	29	24	36	31	35	28	30	24	30	25	
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21	27	22	28	23	25	20	25	21	
Wind Speed [mph]		120								130																
45	1	40	35	39	32	34	27	34	28	41	36	40	33	35	29	36	29	36	31	35	28	30	24	30	25	
	2	35	29	31	25	27	22	28	23	36	30	33	26	28	23	29	24	36	31	35	28	30	24	30	25	
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21	27	22	28	23	25	20	25	21	
50	1	39	35	38	32	34	27	34	28	40	35	39	33	35	29	36	29	36	31	35	28	30	24	30	25	
	2	35	29	31	25	27	22	28	23	35	30	33	26	28	23	29	24	36	31	35	28	30	24	30	25	
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21	27	22	28	23	25	20	25	21	
60	1	38	34	37	32	34	27	34	28	39	34	38	33	35	29	36	29	36	31	35	28	30	24	30	25	
	2	34	29	31	25	27	22	28	23	34	30	33	26	28	23	29	24	36	31	35	28	30	24	30	25	
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21	27	22	28	23	25	20	25	21	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72" 64" to 71" 48" to 63" x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
45	1	39	34	38	31	33	26	33	27	38	32	35	28	30	25	31	25	36	30	33	27	28	23	29	24
	2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
50	1	39	34	37	31	33	26	33	27	37	32	35	28	30	25	31	25	35	30	33	27	28	23	29	24
	2	34	28	30	25	26	21	27	22	32	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
60	1	37	33	36	31	33	26	33	27	36	31	35	28	30	25	31	25	34	30	33	27	28	23	29	24
	2	33	28	30	25	26	21	27	22	31	26	28	23	24	20	25	21	30	25	26	21	23	19	24	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
Wind Speed [mph]		170								180															
45	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17								
	3	20	17	22	17	19		19	16	19	16	20	16	18		18									
50	1	34	28	31	25	27	22	27	22	33	27	29	24	25	20	26	21								
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17								
	3	20	17	22	17	19		19	16	19	16	20	16	18		18									
60	1	33	28	31	25	27	22	27	22	32	27	29	24	25	20	26	21								
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17								
	3	20	17	22	17	19		19	16	19	16	20	16	18		18									
Wind Speed [mph]		190								200															
45	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19								
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
	3	18		19	16	17		17		17		18		16		16									
50	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19								
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
	3	18		19	16	17		17		17		18		16		16									
60	1	31	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19								
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
	3	18		19	16	17		17		17		18		16		16									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	41	37	40	36	38	33	42	34	40	36	39	35	37	32	40	33	39	35	38	34	36	31	38	31
	2	37	33	36	31	33	27	34	28	36	32	35	30	32	26	33	27	35	31	34	29	31	25	31	26
	3	32	26	33	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
80	1	39	36	39	35	37	33	42	34	38	35	38	34	36	32	40	33	38	34	37	33	35	31	38	31
	2	36	32	35	31	33	27	34	28	35	31	34	30	32	26	33	27	34	30	33	29	31	25	31	26
	3	32	26	32	27	29	24	30	24	31	25	32	26	28	23	28	23	29	24	31	25	27	22	27	22
90	1	38	35	38	34	36	32	42	34	37	34	37	33	35	31	40	33	37	33	36	33	35	30	38	31
	2	35	31	34	31	32	27	34	28	34	31	33	30	31	26	33	27	33	30	33	29	30	25	31	26
	3	32	26	32	27	29	24	30	24	31	25	31	26	28	23	28	23	29	24	30	25	27	22	27	22
70	1	38	34	38	33	35	30	37	30	38	34	37	33	34	29	36	29								
	2	34	30	33	28	30	24	30	25	34	29	33	26	28	23	29	24								
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
80	1	37	33	37	33	34	30	37	30	36	33	36	32	34	29	36	29								
	2	33	30	33	28	30	24	30	25	33	29	32	26	28	23	29	24								
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
90	1	36	33	36	32	34	30	37	30	35	32	35	31	33	29	36	29								
	2	33	29	32	28	30	24	30	25	32	28	31	26	28	23	29	24								
	3	28	23	29	24	26	21	26	21	27	22	28	23	25	20	25	21								
70	1	38	34	38	33	35	30	37	30	38	34	37	33	34	29	36	29								
	2	34	30	33	28	30	24	30	25	34	29	33	26	28	23	29	24								
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
80	1	37	33	37	33	34	30	37	30	36	33	36	32	34	29	36	29								
	2	33	30	33	28	30	24	30	25	33	29	32	26	28	23	29	24								
	3	28	23	30	24	26	21	26	21	27	22	28	23	25	20	25	21								
90	1	36	33	36	32	34	30	37	30	35	32	35	31	33	29	36	29								
	2	33	29	32	28	30	24	30	25	32	28	31	26	28	23	29	24								
	3	28	23	29	24	26	21	26	21	27	22	28	23	25	20	25	21								
70	1	37	33	36	32	33	27	34	28	38	34	37	33	34	29	36	29								
	2	33	29	31	25	27	22	28	23	34	29	33	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
80	1	36	32	35	31	33	27	34	28	36	33	36	32	34	29	36	29								
	2	32	28	31	25	27	22	28	23	33	29	32	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
90	1	35	31	34	31	32	27	34	28	35	32	35	31	33	29	36	29								
	2	31	28	31	25	27	22	28	23	32	28	31	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
70	1	37	33	36	32	33	27	34	28	38	34	37	33	34	29	36	29								
	2	33	29	31	25	27	22	28	23	34	29	33	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
80	1	36	32	35	31	33	27	34	28	36	33	36	32	34	29	36	29								
	2	32	28	31	25	27	22	28	23	33	29	32	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								
90	1	35	31	34	31	32	27	34	28	35	32	35	31	33	29	36	29								
	2	31	28	31	25	27	22	28	23	32	28	31	26	28	23	29	24								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	36	32	35	31	33	26	33	27	35	31	34	28	30	25	31	25	33	29	33	27	28	23	29	24
	2	32	28	30	25	26	21	27	22	31	26	28	23	24	20	25	21	29	25	26	21	23	19	24	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
80	1	35	31	34	30	32	26	33	27	34	30	33	28	30	25	31	25	33	29	32	27	28	23	29	24
	2	31	27	30	25	26	21	27	22	30	26	28	23	24	20	25	21	29	25	26	21	23	19	24	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
90	1	34	31	34	30	31	26	33	27	33	29	32	28	30	25	31	25	32	28	31	27	28	23	29	24
	2	31	27	30	25	26	21	27	22	29	26	28	23	24	20	25	21	28	24	26	21	23	19	24	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
Wind Speed [mph]		170								180															
70	1	32	28	31	25	27	22	27	22	31	27	29	24	25	20	26	21								
	2	28	23	25	20	21	17	22	18	27	22	23	19	20	16	21	17								
	3	20	17	22	17	19		19	16	19	16	20	16	18		18									
80	1	31	28	31	25	27	22	27	22	30	26	29	24	25	20	26	21								
	2	28	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	17	22	17	19		19	16	19	16	20	16	18		18									
90	1	31	27	30	25	27	22	27	22	30	26	29	24	25	20	26	21								
	2	27	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17								
	3	20	17	22	17	19		19	16	19	16	20	16	18		18									
Wind Speed [mph]		190								200															
70	1	30	25	27	22	24	19	24	20	29	24	26	21	23	18	23	19								
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
	3	18		19	16	17		17		17		18		16		16									
80	1	29	25	27	22	24	19	24	20	28	24	26	21	23	18	23	19								
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
	3	18		19	16	17		17		17		18		16		16									
90	1	29	25	27	22	24	19	24	20	28	24	26	21	23	18	23	19								
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19									
	3	18		19	16	17		17		17		18		16		16									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	37	34	36	33	36	32	42	34	36	33	36	33	35	31	40	33	35	32	35	32	34	30	38	31
	2	34	31	33	30	32	27	34	28	33	30	33	29	31	26	33	27	32	29	32	28	30	25	31	26
	3	32	26	31	27	29	24	30	24	31	25	30	26	28	23	28	23	29	24	29	25	27	22	27	22
Wind Speed [mph]		110								115															
100	1	35	32	35	31	33	29	37	30	34	31	34	31	32	28	36	29	31	28	31	26	28	23	29	24
	2	32	28	31	28	29	24	30	25	31	28	31	26	28	23	29	24	27	22	28	23	25	20	25	21
	3	28	23	29	24	26	21	26	21	27	22	28	23	25	20	25	21								
Wind Speed [mph]		120								130															
100	1	34	31	33	30	32	27	34	28	34	31	34	31	32	28	36	29	31	28	31	26	28	23	29	24
	2	31	27	30	25	27	22	28	23	27	22	28	23	25	20	25	21								
	3	26	21	27	22	24	19	24	20	27	22	28	23	25	20	25	21								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"
64" to 71"
48" to 63"
x ≤ 47"

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	33	30	33	29	31	26	33	27	32	29	32	28	29	25	31	25	31	28	30	27	28	23	29	24
	2	30	26	29	25	26	21	27	22	29	25	28	23	24	20	25	21	28	24	26	21	23	19	24	19
	3	25	20	26	21	23	18	23	19	23	19	24	20	21	17	22	18	22	18	23	19	20	16	20	17
Wind Speed [mph]		170								180															
100	1	30	27	29	25	27	22	27	22	29	26	28	24	25	20	26	21	29	26	28	24	25	20	26	21
	2	27	23	25	20	21	17	22	18	26	22	23	19	20	16	21	17	26	22	23	19	20	16	21	17
	3	20	17	22	17	19	NA	19	16	19	16	20	16	18	NA	18	NA	19	16	20	16	18	NA	18	NA
Wind Speed [mph]		190								200															
100	1	28	25	27	22	24	19	24	20	27	24	26	21	23	18	23	19	27	24	26	21	23	18	23	19
	2	25	21	22	18	19	16	20	16	24	20	21	17	18		19		24	20	21	17	18		19	
	3	18		19	16	17		17		17		18		16		16		17		18		16		16	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
0	1	49	40	45	36	39	32	39	32	47	39	43	35	37	30	37	31	45	37	41	33	36	29	36	29
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
5	1	49	40	45	36	39	32	39	32	47	39	43	35	37	30	37	31	45	37	41	33	36	29	36	29
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
10	1	49	40	45	36	39	32	39	32	47	39	43	35	37	30	37	31	45	37	41	33	36	29	36	29
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
Wind Speed [mph]		110								115															
0	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19
5	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19
10	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19
Wind Speed [mph]		120								130															
0	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19
5	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19
10	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
5	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
10	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
0	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
5	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
10	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
0	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
5	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
10	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
15	1	49	40	45	36	39	32	39	32	47	39	43	35	37	30	37	31	45	37	41	33	36	29	36	29	
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24	
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21	
	20	1	47	40	45	36	39	32	39	32	46	39	43	35	37	30	37	31	45	37	41	33	36	29	36	29
		2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
		3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
	25	1	47	40	45	36	39	32	39	32	46	39	43	35	37	30	37	31	45	37	41	33	36	29	36	29
		2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
		3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
Wind Speed [mph]		110								115																
15	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27	
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19	
20	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27	
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19	
25	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27	
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19	
Wind Speed [mph]		120								130																
15	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27	
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19	
20	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27	
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19	
25	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27	42	34	38	31	33	27	33	27	
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22	34	28	30	25	26	21	27	22	
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19	

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
20	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
25	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
15	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
20	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
15	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
20	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
25	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	47	40	45	36	39	32	39	32	46	39	43	35	37	30	37	31	45	37	41	33	36	29	36	29
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
35	1	46	40	45	36	39	32	39	32	45	39	43	35	37	30	37	31	44	37	41	33	36	29	36	29
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
40	1	45	40	44	36	39	32	39	32	44	39	43	35	37	30	37	31	43	37	41	33	36	29	36	29
	2	40	33	36	29	31	25	32	26	39	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
30	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
35	1	43	36	39	32	34	28	35	28	41	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
40	1	42	36	39	32	34	28	35	28	41	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
30	1	43	36	39	32	34	28	35	28	42	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
35	1	43	36	39	32	34	28	35	28	41	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
40	1	42	36	39	32	34	28	35	28	41	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
30	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
35	1	40	33	36	29	32	26	32	26	41	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
40	1	40	33	36	29	32	26	32	26	41	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
30	1	40	33	36	29	32	26	32	26	42	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
35	1	40	33	36	29	32	26	32	26	41	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
40	1	40	33	36	29	32	26	32	26	41	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22	
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18	
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19		
	35	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
		2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
		3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
	40	1	39	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
		2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
		3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
Wind Speed [mph]		170								180																
30	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20	25	20	22	18	19		20	16	
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16	25	20	22	18	19		20	16	
	3	19		20	16	17		18		18		19		16		17		18		19		16		17		
35	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20	25	20	22	18	19		20	16	
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16	25	20	22	18	19		20	16	
	3	19		20	16	17		18		18		19		16		17		18		19		16		17		
40	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20	25	20	22	18	19		20	16	
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16	25	20	22	18	19		20	16	
	3	19		20	16	17		18		18		19		16		17		18		19		16		17		
Wind Speed [mph]		190								200																
30	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18	27	22	24	20	21	17	22	18	
	2	24	19	21	17	18		19		22	18	19	16	17		18		22	18	19	16	17		18		
	3	17		18				16		16		17						16		17						
35	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18	27	22	24	20	21	17	22	18	
	2	24	19	21	17	18		19		22	18	19	16	17		18		22	18	19	16	17		18		
	3	17		18				16		16		17						16		17						
40	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18	27	22	24	20	21	17	22	18	
	2	24	19	21	17	18		19		22	18	19	16	17		18		22	18	19	16	17		18		
	3	17		18				16		16		17						16		17						

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
45	1	44	39	43	36	39	32	39	32	43	38	42	35	37	30	37	31	42	37	41	33	36	29	36	29
	2	39	33	36	29	31	25	32	26	38	32	35	28	30	24	31	25	37	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
50	1	44	39	43	36	39	32	39	32	42	37	41	35	37	30	37	31	41	36	40	33	36	29	36	29
	2	39	33	36	29	31	25	32	26	37	32	35	28	30	24	31	25	36	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
60	1	42	37	41	36	38	32	39	32	41	36	40	35	37	30	37	31	40	35	39	33	36	29	36	29
	2	37	33	36	29	31	25	32	26	36	32	35	28	30	24	31	25	35	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
45	1	41	36	39	32	34	28	35	28	40	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
50	1	40	35	39	32	34	28	35	28	39	34	38	31	33	27	33	27								
	2	35	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
60	1	39	34	38	32	34	28	35	28	38	34	37	31	33	27	33	27								
	2	34	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
45	1	41	36	39	32	34	28	35	28	40	34	38	31	33	27	33	27								
	2	36	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
50	1	40	35	39	32	34	28	35	28	39	34	38	31	33	27	33	27								
	2	35	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
60	1	39	34	38	32	34	28	35	28	38	34	37	31	33	27	33	27								
	2	34	29	32	26	27	22	28	23	34	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
45	1	39	33	36	29	32	26	32	26	40	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
50	1	38	33	36	29	32	26	32	26	39	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
60	1	37	33	36	29	32	26	32	26	38	34	37	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
45	1	39	33	36	29	32	26	32	26	40	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
50	1	38	33	36	29	32	26	32	26	39	34	38	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
60	1	37	33	36	29	32	26	32	26	38	34	37	31	33	27	33	27								
	2	33	27	29	24	25	21	26	21	34	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	38	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
50	1	38	32	35	28	30	25	31	25	36	30	33	26	28	23	29	24	34	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
60	1	37	32	35	28	30	25	31	25	35	30	33	26	28	23	29	24	33	28	30	25	26	21	27	22
	2	32	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
45	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
50	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
60	1	32	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
45	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
50	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
60	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Span, inches							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
70	1	41	36	40	35	37	32	39	32	40	35	39	34	36	30	37	31	39	35	38	33	35	29	36	29
	2	36	32	35	29	31	25	32	26	35	31	34	28	30	24	31	25	35	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
80	1	39	35	39	35	36	32	39	32	38	35	38	34	35	30	37	31	38	34	37	33	34	29	36	29
	2	35	31	35	29	31	25	32	26	35	30	34	28	30	24	31	25	34	30	33	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
90	1	38	35	38	34	36	31	39	32	37	34	37	33	35	30	37	31	37	33	36	32	34	29	36	29
	2	35	31	34	29	31	25	32	26	34	30	33	28	30	24	31	25	33	29	32	27	29	23	29	24
	3	30	24	31	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
Wind Speed [mph]		110								115															
70	1	38	34	37	32	34	28	35	28	37	33	36	31	33	27	33	27								
	2	34	29	32	26	27	22	28	23	33	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
80	1	37	33	36	32	34	28	35	28	36	32	35	31	33	27	33	27								
	2	33	29	32	26	27	22	28	23	32	28	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
90	1	36	32	35	31	33	28	35	28	35	31	35	31	32	27	33	27								
	2	32	28	31	26	27	22	28	23	31	27	30	25	26	21	27	22								
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
Wind Speed [mph]		120								130															
70	1	36	32	35	29	32	26	32	26	37	33	36	31	33	27	33	27								
	2	32	27	29	24	25	21	26	21	33	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
80	1	35	31	35	29	32	26	32	26	36	32	35	31	33	27	33	27								
	2	31	27	29	24	25	21	26	21	32	28	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								
90	1	35	31	34	29	31	26	32	26	35	31	35	31	32	27	33	27								
	2	31	27	29	24	25	21	26	21	31	27	30	25	26	21	27	22								
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Span, inches															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	36	31	35	28	30	25	31	25	34	30	33	26	28	23	29	24	33	28	30	25	26	21	27	22
	2	31	26	28	23	24	20	25	21	30	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
80	1	35	31	34	28	30	25	31	25	33	29	32	26	28	23	29	24	32	28	30	25	26	21	27	22
	2	31	26	28	23	24	20	25	21	29	24	26	21	23	18	24	19	28	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
90	1	34	30	33	28	30	25	31	25	33	29	32	26	28	23	29	24	31	27	30	25	26	21	27	22
	2	30	26	28	23	24	20	25	21	29	24	26	21	23	18	24	19	27	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
70	1	31	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
80	1	31	26	29	23	25	20	25	21	30	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
90	1	30	26	29	23	25	20	25	21	29	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
70	1	29	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
80	1	28	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													
90	1	28	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	37	34	37	33	35	31	39	32	36	33	36	32	34	30	37	31	36	32	35	31	33	29	36	29
	2	34	30	33	29	31	25	32	26	33	29	32	28	30	24	31	25	32	29	31	27	29	23	29	24
	3	30	24	30	25	27	22	28	23	28	23	30	24	26	21	27	22	27	22	29	23	25	20	25	21
0	1																								
	2																								
	3																								
100	1	35	31	34	31	32	28	35	28	34	31	34	30	32	27	33	27	31	27	30	25	26	21	27	22
	2	31	28	31	26	27	22	28	23	31	27	30	25	26	21	27	22	25	20	26	21	23	19	23	19
	3	26	21	28	22	24	19	24	20	25	20	26	21	23	19	23	19								
0	1																								
	2																								
	3																								
100	1	34	30	33	29	31	26	32	26	34	31	34	30	32	27	33	27	34	31	34	30	32	27	33	27
	2	30	26	29	24	25	21	26	21	31	27	30	25	26	21	27	22	31	27	30	25	26	21	27	22
	3	24	20	25	21	22	18	23	18	25	20	26	21	23	19	23	19	25	20	26	21	23	19	23	19
0	1																								
	2																								
	3																								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Span, inches																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	33	29	32	28	30	25	31	25	32	28	31	26	28	23	29	24	31	27	30	25	26	21	27	22
	2	29	26	28	23	24	20	25	21	28	24	26	21	23	18	24	19	27	23	25	20	21	17	22	18
	3	23	19	24	20	21	17	22	18	22	18	23	18	20	16	20	17	20	16	21	17	18		19	
Wind Speed [mph]		170								180															
100	1	30	26	29	23	25	20	25	21	29	25	27	22	23	19	24	20								
	2	26	22	23	19	20	16	21	17	25	20	22	18	19		20	16								
	3	19		20	16	17		18		18		19		16		17									
Wind Speed [mph]		190								200															
100	1	28	24	26	21	22	18	23	19	27	22	24	20	21	17	22	18								
	2	24	19	21	17	18		19		22	18	19	16	17		18									
	3	17		18				16		16		17													

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	0	1	255 / 158 / 45	224 / 319 / 40	254 / 158 / 52	254 / 222 / 52	250 / 174 / 67	241 / 267 / 65	255 / 158 / 45	218 / 342 / 39	254 / 158 / 52	254 / 246 / 52	250 / 193 / 67	232 / 284 / 63	245 / 270 / 43	212 / 364 / 38	254 / 169 / 52	248 / 265 / 51	250 / 213 / 67	226 / 304 / 61
2		233 / 296 / 41	196 / 388 / 35	254 / 215 / 52	229 / 307 / 47	250 / 222 / 67	223 / 311 / 60	227 / 318 / 40	187 / 407 / 33	254 / 238 / 52	223 / 329 / 46	250 / 245 / 67	214 / 329 / 58	218 / 335 / 39	178 / 423 / 32	251 / 259 / 51	214 / 347 / 44	241 / 260 / 65	208 / 350 / 56	
3		206 / 375 / 36	166 / 465 / 29	223 / 326 / 46	184 / 415 / 38	208 / 356 / 56	167 / 438 / 45	193 / 388 / 34	157 / 482 / 28	214 / 345 / 44	174 / 433 / 36	199 / 375 / 54	161 / 463 / 44	187 / 411 / 33	151 / 506 / 27	208 / 367 / 43	168 / 457 / 34	190 / 392 / 51	152 / 478 / 41	
5		1	278 / 156 / 44	248 / 319 / 40	275 / 157 / 54	275 / 220 / 54	250 / 174 / 83	241 / 267 / 80	278 / 156 / 44	241 / 342 / 39	275 / 157 / 54	275 / 243 / 54	250 / 193 / 83	232 / 284 / 77	271 / 270 / 43	234 / 364 / 38	275 / 167 / 54	272 / 265 / 53	250 / 213 / 83	226 / 304 / 76
		2	258 / 296 / 41	217 / 388 / 35	275 / 212 / 54	252 / 307 / 49	250 / 222 / 83	223 / 311 / 75	251 / 318 / 40	207 / 407 / 33	275 / 235 / 54	245 / 329 / 48	250 / 245 / 83	214 / 329 / 72	241 / 335 / 39	197 / 423 / 32	275 / 259 / 54	235 / 347 / 46	241 / 260 / 80	208 / 350 / 70
		3	227 / 375 / 36	183 / 465 / 29	245 / 326 / 48	202 / 415 / 40	208 / 356 / 70	167 / 438 / 56	214 / 388 / 34	173 / 482 / 28	235 / 345 / 46	192 / 433 / 38	199 / 375 / 67	161 / 463 / 54	207 / 411 / 33	166 / 506 / 27	228 / 367 / 45	185 / 457 / 36	190 / 392 / 64	152 / 478 / 51
10		1	331 / 147 / 42	314 / 319 / 40	327 / 147 / 63	327 / 206 / 63	281 / 170 / 106	277 / 267 / 105	331 / 147 / 42	306 / 342 / 39	327 / 147 / 63	327 / 229 / 63	281 / 189 / 106	267 / 284 / 101	331 / 147 / 42	297 / 364 / 38	327 / 157 / 63	327 / 252 / 63	281 / 208 / 106	260 / 304 / 98
		2	327 / 296 / 41	275 / 388 / 35	327 / 199 / 63	318 / 307 / 61	281 / 216 / 106	257 / 311 / 97	318 / 318 / 40	263 / 407 / 33	327 / 221 / 63	310 / 329 / 59	281 / 239 / 106	246 / 329 / 93	306 / 335 / 39	250 / 423 / 32	327 / 243 / 63	297 / 347 / 57	277 / 260 / 105	240 / 350 / 90
		3	288 / 375 / 36	232 / 465 / 29	310 / 326 / 59	255 / 415 / 49	240 / 356 / 90	192 / 438 / 72	271 / 388 / 34	220 / 482 / 28	297 / 345 / 57	242 / 433 / 46	229 / 375 / 87	185 / 463 / 70	263 / 411 / 33	211 / 506 / 27	289 / 367 / 55	233 / 457 / 45	219 / 392 / 83	175 / 478 / 66
0	1	239 / 289 / 42	203 / 381 / 36	254 / 187 / 52	239 / 280 / 49	250 / 234 / 67	217 / 319 / 59	230 / 303 / 41	193 / 395 / 34	254 / 205 / 52	232 / 297 / 47	247 / 253 / 67	211 / 337 / 57							
	2	212 / 356 / 38	172 / 445 / 31	242 / 274 / 49	208 / 368 / 43	235 / 278 / 63	199 / 366 / 54	203 / 371 / 36	163 / 458 / 29	235 / 291 / 48	199 / 382 / 41	229 / 295 / 62	193 / 386 / 52							
	3	178 / 426 / 32	144 / 528 / 26	199 / 383 / 41	159 / 471 / 33	181 / 407 / 49	146 / 500 / 40	172 / 447 / 31	138 / 548 / 25	190 / 397 / 39	153 / 491 / 31	172 / 421 / 47	140 / 520 / 38							
	5	1	265 / 289 / 42	224 / 381 / 36	275 / 184 / 54	262 / 280 / 51	250 / 234 / 83	217 / 319 / 73	255 / 303 / 41	214 / 395 / 34	275 / 202 / 54	255 / 297 / 50	247 / 253 / 82	211 / 337 / 71						
		2	234 / 356 / 38	190 / 445 / 31	265 / 274 / 52	228 / 368 / 45	235 / 278 / 78	199 / 366 / 67	224 / 371 / 36	180 / 458 / 29	259 / 291 / 51	218 / 382 / 43	229 / 295 / 77	193 / 386 / 65						
		3	197 / 426 / 32	160 / 528 / 26	218 / 383 / 43	175 / 471 / 34	181 / 407 / 61	146 / 500 / 49	190 / 447 / 31	153 / 548 / 25	208 / 397 / 41	168 / 491 / 33	172 / 421 / 58	140 / 520 / 47						
	10	1	331 / 147 / 42	284 / 381 / 36	327 / 173 / 63	327 / 276 / 63	281 / 228 / 106	250 / 319 / 94	323 / 303 / 41	271 / 395 / 34	327 / 190 / 63	322 / 297 / 62	281 / 250 / 106	243 / 337 / 92						
		2	297 / 356 / 38	241 / 445 / 31	327 / 267 / 63	289 / 368 / 55	270 / 278 / 102	229 / 366 / 87	284 / 371 / 36	228 / 458 / 29	327 / 291 / 63	276 / 382 / 53	263 / 295 / 99	222 / 386 / 84						
		3	250 / 426 / 32	202 / 528 / 26	276 / 383 / 53	221 / 471 / 42	209 / 407 / 79	168 / 500 / 63	241 / 447 / 31	194 / 548 / 25	263 / 397 / 51	212 / 491 / 41	199 / 421 / 75	161 / 520 / 61						
0	1	224 / 320 / 40	184 / 408 / 33	254 / 223 / 52	226 / 315 / 46	241 / 268 / 65	205 / 356 / 55	230 / 303 / 41	193 / 395 / 34	254 / 205 / 52	232 / 297 / 47	247 / 253 / 67	211 / 337 / 57							
	2	196 / 390 / 35	157 / 477 / 28	229 / 308 / 47	190 / 395 / 39	223 / 312 / 60	184 / 399 / 50	203 / 371 / 36	163 / 458 / 29	235 / 291 / 48	199 / 382 / 41	229 / 295 / 62	193 / 386 / 52							
	3	163 / 458 / 29	132 / 567 / 24	184 / 417 / 38	147 / 510 / 30	167 / 440 / 45	134 / 538 / 36	172 / 447 / 31	138 / 548 / 25	190 / 397 / 39	153 / 491 / 31	172 / 421 / 47	140 / 520 / 38							
	5	1	248 / 320 / 40	204 / 408 / 33	275 / 221 / 54	249 / 315 / 49	241 / 268 / 80	205 / 356 / 69	255 / 303 / 41	214 / 395 / 34	275 / 202 / 54	255 / 297 / 50	247 / 253 / 82	211 / 337 / 71						
		2	217 / 390 / 35	173 / 477 / 28	252 / 308 / 49	208 / 395 / 41	223 / 312 / 75	184 / 399 / 62	224 / 371 / 36	180 / 458 / 29	259 / 291 / 51	218 / 382 / 43	229 / 295 / 77	193 / 386 / 65						
		3	180 / 458 / 29	146 / 567 / 24	202 / 417 / 40	161 / 510 / 32	167 / 440 / 56	134 / 538 / 45	190 / 447 / 31	153 / 548 / 25	208 / 397 / 41	168 / 491 / 33	172 / 421 / 58	140 / 520 / 47						
	10	1	314 / 320 / 40	258 / 408 / 33	327 / 207 / 63	314 / 315 / 60	277 / 268 / 105	236 / 356 / 89	323 / 303 / 41	271 / 395 / 34	327 / 190 / 63	322 / 297 / 62	281 / 250 / 106	243 / 337 / 92						
		2	275 / 390 / 35	220 / 477 / 28	318 / 308 / 61	263 / 395 / 51	257 / 312 / 97	212 / 399 / 80	284 / 371 / 36	228 / 458 / 29	327 / 291 / 63	276 / 382 / 53	263 / 295 / 99	222 / 386 / 84						
		3	228 / 458 / 29	185 / 567 / 24	255 / 417 / 49	204 / 510 / 39	192 / 440 / 72	154 / 538 / 58	241 / 447 / 31	194 / 548 / 25	263 / 397 / 51	212 / 491 / 41	199 / 421 / 75	161 / 520 / 61						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 70in x 41in | Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	218 / 337 / 39	178 / 426 / 32	254 / 243 / 52	220 / 332 / 45	232 / 280 / 63	199 / 373 / 54	206 / 370 / 36	166 / 459 / 29	245 / 274 / 50	208 / 364 / 43	220 / 309 / 59	184 / 400 / 50	193 / 399 / 34	154 / 486 / 27	232 / 301 / 47	196 / 393 / 40	211 / 341 / 57	176 / 429 / 47	
	2	187 / 401 / 33	151 / 494 / 27	223 / 325 / 46	184 / 414 / 38	217 / 329 / 59	178 / 417 / 48	175 / 434 / 31	141 / 536 / 25	211 / 357 / 43	171 / 447 / 35	205 / 361 / 55	164 / 441 / 44	163 / 463 / 29	132 / 572 / 24	199 / 386 / 41	159 / 475 / 33	190 / 384 / 51	158 / 478 / 42	
	3	157 / 476 / 28	129 / 597 / 23	174 / 428 / 36	141 / 527 / 29	161 / 457 / 44	131 / 567 / 36	147 / 517 / 26	120 / 638 / 21	162 / 460 / 33	132 / 569 / 27	149 / 489 / 40	122 / 609 / 33	138 / 554 / 25	111 / 673 / 20	153 / 496 / 31	123 / 604 / 25	140 / 525 / 38	115 / 644 / 31	
	5	1	241 / 337 / 39	197 / 426 / 32	275 / 240 / 54	242 / 332 / 47	232 / 280 / 77	199 / 373 / 67	227 / 370 / 36	183 / 459 / 29	269 / 274 / 53	228 / 364 / 45	220 / 309 / 74	184 / 400 / 62	214 / 399 / 34	170 / 486 / 27	255 / 301 / 50	215 / 393 / 42	211 / 341 / 71	176 / 429 / 58
	2	207 / 401 / 33	166 / 494 / 27	245 / 325 / 48	202 / 414 / 40	217 / 329 / 73	178 / 417 / 60	194 / 434 / 31	156 / 536 / 25	232 / 357 / 45	188 / 447 / 37	205 / 361 / 69	164 / 441 / 55	180 / 463 / 29	146 / 572 / 24	218 / 386 / 43	175 / 475 / 34	190 / 384 / 64	158 / 478 / 52	
	3	173 / 476 / 28	143 / 597 / 23	192 / 428 / 38	155 / 527 / 30	161 / 457 / 54	131 / 567 / 44	163 / 517 / 26	133 / 638 / 21	178 / 460 / 35	145 / 569 / 28	149 / 489 / 50	122 / 609 / 41	153 / 554 / 25	122 / 673 / 20	168 / 496 / 33	135 / 604 / 27	140 / 525 / 47	115 / 644 / 38	
	10	1	306 / 337 / 39	250 / 426 / 32	327 / 225 / 63	305 / 332 / 59	267 / 280 / 101	229 / 373 / 87	288 / 370 / 36	232 / 459 / 29	327 / 264 / 63	289 / 364 / 55	253 / 309 / 96	212 / 400 / 80	271 / 399 / 34	215 / 486 / 27	322 / 301 / 62	272 / 393 / 52	243 / 341 / 92	201 / 429 / 75
	2	263 / 401 / 33	211 / 494 / 27	310 / 325 / 59	255 / 414 / 49	250 / 329 / 94	205 / 417 / 78	245 / 434 / 31	198 / 536 / 25	293 / 357 / 56	238 / 447 / 46	236 / 361 / 89	188 / 441 / 71	228 / 463 / 29	185 / 572 / 24	276 / 386 / 53	221 / 475 / 42	219 / 384 / 83	180 / 478 / 67	
	3	220 / 476 / 28	181 / 597 / 23	242 / 428 / 46	195 / 527 / 38	185 / 457 / 70	151 / 567 / 57	207 / 517 / 26	168 / 638 / 21	225 / 460 / 43	183 / 569 / 35	171 / 489 / 65	141 / 609 / 53	194 / 554 / 25	155 / 673 / 20	212 / 496 / 41	170 / 604 / 33	161 / 525 / 61	132 / 644 / 49	
5	1	181 / 425 / 32	144 / 519 / 26	223 / 330 / 46	181 / 413 / 37	199 / 367 / 54	180 / 453 / 44	169 / 448 / 30	138 / 559 / 25	214 / 358 / 44	171 / 442 / 35	187 / 389 / 51	187 / 482 / 41	ASCE Group Zone						
	2	154 / 495 / 27	123 / 603 / 22	184 / 406 / 38	150 / 508 / 31	178 / 409 / 48	164 / 510 / 40	144 / 525 / 26	117 / 644 / 21	174 / 435 / 36	141 / 537 / 29	169 / 438 / 46	169 / 539 / 37	Mono Slope						
	3	129 / 586 / 23	105 / 719 / 19	144 / 529 / 30	116 / 650 / 24	131 / 557 / 36	120 / 691 / 29	123 / 628 / 22	98 / 760 / 18	135 / 558 / 28	110 / 692 / 23	125 / 598 / 34	125 / 733 / 28	1 = 1' / 1						
	1	200 / 425 / 32	160 / 519 / 26	245 / 330 / 48	198 / 413 / 39	199 / 367 / 67	180 / 453 / 54	187 / 448 / 30	153 / 559 / 25	235 / 358 / 46	188 / 442 / 37	187 / 389 / 63	187 / 482 / 51	2 = 2						
	2	170 / 495 / 27	136 / 603 / 22	202 / 406 / 40	165 / 508 / 32	178 / 409 / 60	164 / 510 / 49	160 / 525 / 26	129 / 644 / 21	192 / 435 / 38	155 / 537 / 30	169 / 438 / 57	169 / 539 / 46	3 = 3						
	3	143 / 586 / 23	116 / 719 / 19	158 / 529 / 31	128 / 650 / 25	131 / 557 / 44	120 / 691 / 36	136 / 628 / 22	109 / 760 / 18	148 / 558 / 29	121 / 692 / 24	125 / 598 / 42	125 / 733 / 34	1 = 1						
	1	254 / 425 / 32	202 / 519 / 26	310 / 330 / 59	250 / 413 / 48	229 / 367 / 87	200 / 453 / 70	237 / 448 / 30	194 / 559 / 25	297 / 358 / 57	238 / 442 / 46	216 / 389 / 81	201 / 482 / 66	2 = 2' / 2						
	2	215 / 495 / 27	172 / 603 / 22	255 / 406 / 49	208 / 508 / 40	205 / 409 / 78	181 / 510 / 63	202 / 525 / 26	164 / 644 / 21	242 / 435 / 46	195 / 537 / 38	195 / 438 / 74	181 / 539 / 60	3 = 3' / 3						
	3	181 / 586 / 23	147 / 719 / 19	200 / 529 / 38	161 / 650 / 31	151 / 557 / 57	133 / 691 / 47	172 / 628 / 22	138 / 760 / 18	187 / 558 / 36	153 / 692 / 30	144 / 598 / 54	134 / 733 / 44	1 = 1						
10	1	160 / 474 / 28	137 / 583 / 23	202 / 380 / 41	172 / 469 / 33	178 / 416 / 48	192 / 508 / 39	151 / 497 / 27	142 / 617 / 22	190 / 398 / 39	176 / 492 / 31	178 / 440 / 46	201 / 541 / 37	2 = 2						
	2	135 / 549 / 24	118 / 682 / 20	165 / 462 / 34	140 / 561 / 27	161 / 465 / 44	172 / 564 / 35	129 / 583 / 23	120 / 715 / 19	156 / 486 / 32	145 / 595 / 26	160 / 489 / 41	179 / 597 / 33	3 = 3						
	3	114 / 649 / 20	98 / 796 / 17	129 / 595 / 26	111 / 730 / 22	116 / 621 / 32	128 / 770 / 26	108 / 682 / 19	103 / 854 / 16	120 / 614 / 25	113 / 763 / 20	116 / 654 / 30	131 / 801 / 24	1 = 1						
	1	177 / 474 / 28	149 / 583 / 23	222 / 380 / 43	186 / 469 / 35	178 / 416 / 60	192 / 508 / 48	166 / 497 / 27	150 / 617 / 22	208 / 398 / 41	186 / 492 / 33	178 / 440 / 57	201 / 541 / 46	2 = 2						
	2	150 / 549 / 24	128 / 682 / 20	182 / 462 / 36	151 / 561 / 28	161 / 465 / 54	172 / 564 / 43	143 / 583 / 23	128 / 715 / 19	171 / 486 / 34	152 / 595 / 27	160 / 489 / 51	179 / 597 / 41	3 = 3						
	3	126 / 649 / 20	106 / 796 / 17	141 / 595 / 28	119 / 730 / 23	116 / 621 / 39	128 / 770 / 32	119 / 682 / 19	109 / 854 / 16	131 / 614 / 26	119 / 763 / 21	116 / 654 / 37	131 / 801 / 30	1 = 1						
	1	224 / 474 / 28	187 / 583 / 23	280 / 380 / 54	233 / 469 / 43	205 / 416 / 78	202 / 508 / 62	211 / 497 / 27	186 / 617 / 22	263 / 398 / 51	230 / 492 / 41	202 / 440 / 74	206 / 541 / 60	2 = 2						
	2	190 / 549 / 24	160 / 682 / 20	229 / 462 / 44	189 / 561 / 35	185 / 465 / 70	181 / 564 / 56	181 / 583 / 23	158 / 715 / 19	217 / 486 / 42	188 / 595 / 34	181 / 489 / 66	184 / 597 / 53	3 = 3						
	3	159 / 649 / 20	134 / 796 / 17	178 / 595 / 34	149 / 730 / 28	134 / 621 / 51	135 / 770 / 42	151 / 682 / 19	135 / 854 / 16	166 / 614 / 32	147 / 763 / 26	131 / 654 / 48	134 / 801 / 39	1 = 1						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	380 / 139 / 41	380 / 154 / 41	379 / 141 / 72	379 / 198 / 72	311 / 164 / 126	311 / 260 / 126	380 / 139 / 41	370 / 342 / 40	379 / 141 / 72	379 / 220 / 72	311 / 182 / 126	307 / 284 / 124	380 / 139 / 41	360 / 364 / 39	379 / 151 / 72	379 / 242 / 72	311 / 201 / 126	299 / 304 / 121
2		380 / 285 / 41	334 / 388 / 36	379 / 191 / 72	379 / 303 / 72	311 / 208 / 126	295 / 311 / 119	380 / 314 / 41	318 / 407 / 34	379 / 212 / 72	374 / 329 / 71	311 / 230 / 126	284 / 329 / 115	370 / 335 / 40	302 / 423 / 33	379 / 234 / 72	359 / 347 / 68	311 / 254 / 126	276 / 350 / 111	
3		349 / 375 / 38	282 / 465 / 30	374 / 326 / 71	308 / 415 / 58	276 / 356 / 111	221 / 438 / 89	328 / 388 / 35	266 / 482 / 29	359 / 345 / 68	292 / 433 / 55	264 / 375 / 107	213 / 463 / 86	318 / 411 / 34	256 / 506 / 28	349 / 367 / 66	282 / 457 / 53	252 / 392 / 102	201 / 478 / 81	
20		1	428 / 133 / 43	428 / 148 / 43	421 / 134 / 79	421 / 188 / 79	343 / 160 / 151	343 / 254 / 151	428 / 133 / 43	428 / 164 / 43	421 / 134 / 79	421 / 208 / 79	343 / 177 / 151	343 / 280 / 151	428 / 133 / 43	422 / 364 / 42	421 / 143 / 79	421 / 229 / 79	343 / 195 / 151	339 / 304 / 149
		2	428 / 273 / 43	392 / 388 / 39	421 / 181 / 79	421 / 286 / 79	343 / 203 / 151	334 / 311 / 147	428 / 301 / 43	373 / 407 / 37	421 / 201 / 79	421 / 316 / 79	343 / 225 / 151	321 / 329 / 141	428 / 330 / 43	355 / 423 / 35	421 / 221 / 79	421 / 347 / 79	343 / 247 / 151	312 / 350 / 137
		3	410 / 375 / 41	331 / 465 / 33	421 / 313 / 79	361 / 415 / 68	312 / 356 / 137	250 / 438 / 110	386 / 388 / 38	312 / 482 / 31	421 / 345 / 79	343 / 433 / 64	299 / 375 / 132	241 / 463 / 106	373 / 411 / 37	300 / 506 / 30	409 / 367 / 77	331 / 457 / 62	285 / 392 / 126	227 / 478 / 100
25		1	428 / 133 / 43	428 / 148 / 43	421 / 134 / 79	421 / 188 / 79	368 / 153 / 175	368 / 244 / 175	428 / 133 / 43	428 / 164 / 43	421 / 134 / 79	421 / 208 / 79	368 / 170 / 175	368 / 269 / 175	428 / 133 / 43	422 / 364 / 42	421 / 143 / 79	421 / 229 / 79	368 / 188 / 175	368 / 296 / 175
		2	428 / 273 / 43	392 / 388 / 39	421 / 181 / 79	421 / 286 / 79	368 / 195 / 175	368 / 307 / 175	428 / 301 / 43	373 / 407 / 37	421 / 201 / 79	421 / 316 / 79	368 / 216 / 175	358 / 329 / 170	428 / 330 / 43	355 / 423 / 35	421 / 221 / 79	421 / 347 / 79	368 / 238 / 175	348 / 350 / 165
		3	410 / 375 / 41	331 / 465 / 33	421 / 313 / 79	361 / 415 / 68	348 / 356 / 165	279 / 438 / 132	386 / 388 / 38	312 / 482 / 31	421 / 345 / 79	343 / 433 / 64	333 / 375 / 158	269 / 463 / 128	373 / 411 / 37	300 / 506 / 30	409 / 367 / 77	331 / 457 / 62	318 / 392 / 151	254 / 478 / 121
15	1	380 / 139 / 41	344 / 381 / 37	379 / 166 / 72	379 / 265 / 72	311 / 220 / 126	288 / 319 / 116	380 / 141 / 41	328 / 395 / 35	379 / 183 / 72	379 / 289 / 72	311 / 240 / 126	280 / 337 / 113							
	2	360 / 356 / 39	292 / 445 / 32	379 / 256 / 72	349 / 368 / 66	311 / 278 / 126	264 / 366 / 107	344 / 371 / 37	276 / 458 / 30	379 / 280 / 72	333 / 382 / 63	303 / 295 / 122	256 / 386 / 103							
	3	302 / 426 / 33	245 / 528 / 27	333 / 383 / 63	267 / 471 / 51	240 / 407 / 97	193 / 500 / 78	292 / 447 / 32	235 / 548 / 25	318 / 397 / 60	257 / 491 / 49	229 / 421 / 92	185 / 520 / 75							
	20	1	428 / 133 / 43	404 / 381 / 40	421 / 157 / 79	421 / 251 / 79	343 / 215 / 151	325 / 319 / 143	428 / 135 / 43	386 / 395 / 38	421 / 173 / 79	421 / 274 / 79	343 / 234 / 151	316 / 337 / 139						
		2	422 / 356 / 42	343 / 445 / 34	421 / 242 / 79	409 / 368 / 77	343 / 271 / 151	299 / 366 / 132	404 / 371 / 40	325 / 458 / 32	421 / 265 / 79	391 / 382 / 73	343 / 295 / 151	290 / 386 / 128						
		3	355 / 426 / 35	288 / 528 / 29	391 / 383 / 73	313 / 471 / 59	272 / 407 / 120	218 / 500 / 96	343 / 447 / 34	276 / 548 / 28	373 / 397 / 70	301 / 491 / 56	259 / 421 / 114	210 / 520 / 92						
	25	1	428 / 133 / 43	404 / 381 / 40	421 / 157 / 79	421 / 251 / 79	368 / 206 / 175	363 / 319 / 172	428 / 135 / 43	386 / 395 / 38	421 / 173 / 79	421 / 274 / 79	368 / 225 / 175	353 / 337 / 168						
		2	422 / 356 / 42	343 / 445 / 34	421 / 242 / 79	409 / 368 / 77	368 / 260 / 175	333 / 366 / 158	404 / 371 / 40	325 / 458 / 32	421 / 265 / 79	391 / 382 / 73	368 / 284 / 175	323 / 386 / 153						
		3	355 / 426 / 35	288 / 528 / 29	391 / 383 / 73	313 / 471 / 59	303 / 407 / 144	244 / 500 / 116	343 / 447 / 34	276 / 548 / 28	373 / 397 / 70	301 / 491 / 56	288 / 421 / 137	234 / 520 / 111						
15	1	380 / 155 / 41	313 / 408 / 34	379 / 199 / 72	379 / 315 / 72	311 / 262 / 126	272 / 356 / 110	380 / 141 / 41	328 / 395 / 35	379 / 183 / 72	379 / 289 / 72	311 / 240 / 126	280 / 337 / 113							
	2	334 / 390 / 36	266 / 477 / 29	379 / 304 / 72	318 / 395 / 60	295 / 312 / 119	244 / 399 / 99	344 / 371 / 37	276 / 458 / 30	379 / 280 / 72	333 / 382 / 63	303 / 295 / 122	256 / 386 / 103							
	3	276 / 458 / 30	224 / 567 / 24	308 / 417 / 58	246 / 510 / 47	221 / 440 / 89	177 / 538 / 72	292 / 447 / 32	235 / 548 / 25	318 / 397 / 60	257 / 491 / 49	229 / 421 / 92	185 / 520 / 75							
	20	1	428 / 148 / 43	367 / 408 / 37	421 / 189 / 79	421 / 298 / 79	343 / 255 / 151	307 / 356 / 135	428 / 135 / 43	386 / 395 / 38	421 / 173 / 79	421 / 274 / 79	343 / 234 / 151	316 / 337 / 139						
		2	392 / 390 / 39	312 / 477 / 31	421 / 288 / 79	373 / 395 / 70	334 / 312 / 147	276 / 399 / 122	404 / 371 / 40	325 / 458 / 32	421 / 265 / 79	391 / 382 / 73	343 / 295 / 151	290 / 386 / 128						
		3	325 / 458 / 32	263 / 567 / 26	361 / 417 / 68	289 / 510 / 54	250 / 440 / 110	201 / 538 / 89	343 / 447 / 34	276 / 548 / 28	373 / 397 / 70	301 / 491 / 56	259 / 421 / 114	210 / 520 / 92						
	25	1	428 / 148 / 43	367 / 408 / 37	421 / 189 / 79	421 / 298 / 79	368 / 245 / 175	343 / 356 / 163	428 / 135 / 43	386 / 395 / 38	421 / 173 / 79	421 / 274 / 79	368 / 225 / 175	353 / 337 / 168						
		2	392 / 390 / 39	312 / 477 / 31	421 / 288 / 79	373 / 395 / 70	368 / 308 / 175	308 / 399 / 146	404 / 371 / 40	325 / 458 / 32	421 / 265 / 79	391 / 382 / 73	368 / 284 / 175	323 / 386 / 153						
		3	325 / 458 / 32	263 / 567 / 26	361 / 417 / 68	289 / 510 / 54	279 / 440 / 132	224 / 538 / 106	343 / 447 / 34	276 / 548 / 28	373 / 397 / 70	301 / 491 / 56	288 / 421 / 137	234 / 520 / 111						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	370 / 337 / 40	302 / 426 / 33	379 / 217 / 72	369 / 332 / 70	307 / 280 / 124	264 / 373 / 107	349 / 370 / 38	282 / 459 / 30	379 / 253 / 72	349 / 364 / 66	291 / 309 / 118	244 / 400 / 99	328 / 399 / 35	261 / 486 / 28	379 / 293 / 72	328 / 393 / 62	280 / 341 / 113
2		318 / 401 / 34	256 / 494 / 28	374 / 325 / 71	308 / 414 / 58	288 / 329 / 116	236 / 417 / 96	297 / 434 / 32	240 / 536 / 26	354 / 357 / 67	287 / 447 / 54	272 / 361 / 110	217 / 441 / 88	276 / 463 / 30	224 / 572 / 24	333 / 386 / 63	267 / 475 / 51	252 / 384 / 102	207 / 478 / 83
3		266 / 476 / 29	219 / 597 / 24	292 / 428 / 55	236 / 527 / 45	213 / 457 / 86	174 / 567 / 70	250 / 517 / 27	203 / 638 / 22	272 / 460 / 52	221 / 569 / 42	197 / 489 / 80	162 / 609 / 65	235 / 554 / 25	188 / 673 / 20	257 / 496 / 49	205 / 604 / 39	185 / 525 / 75	151 / 644 / 61
1		428 / 162 / 43	355 / 426 / 35	421 / 205 / 79	421 / 322 / 79	343 / 276 / 151	299 / 373 / 132	410 / 370 / 41	331 / 459 / 33	421 / 240 / 79	409 / 364 / 77	330 / 309 / 145	276 / 400 / 122	386 / 399 / 38	306 / 486 / 31	421 / 277 / 79	385 / 393 / 72	316 / 341 / 139	261 / 429 / 114
2		373 / 401 / 37	300 / 494 / 30	421 / 312 / 79	361 / 414 / 68	325 / 329 / 143	267 / 417 / 118	349 / 434 / 35	282 / 536 / 28	415 / 357 / 78	337 / 447 / 63	307 / 361 / 135	245 / 441 / 108	325 / 463 / 32	263 / 572 / 26	391 / 386 / 73	313 / 475 / 59	285 / 384 / 126	234 / 478 / 102
3		312 / 476 / 31	257 / 597 / 26	343 / 428 / 64	277 / 527 / 52	241 / 457 / 106	196 / 567 / 87	294 / 517 / 29	239 / 638 / 24	319 / 460 / 60	259 / 569 / 49	223 / 489 / 98	183 / 609 / 81	276 / 554 / 28	221 / 673 / 22	301 / 496 / 56	241 / 604 / 45	210 / 525 / 92	171 / 644 / 75
1		428 / 162 / 43	355 / 426 / 35	421 / 205 / 79	421 / 322 / 79	368 / 266 / 175	333 / 373 / 158	410 / 370 / 41	331 / 459 / 33	421 / 240 / 79	409 / 364 / 77	368 / 309 / 175	308 / 400 / 146	386 / 399 / 38	306 / 486 / 31	421 / 277 / 79	385 / 393 / 72	353 / 341 / 168	291 / 429 / 137
2		373 / 401 / 37	300 / 494 / 30	421 / 312 / 79	361 / 414 / 68	363 / 329 / 172	298 / 417 / 142	349 / 434 / 35	282 / 536 / 28	415 / 357 / 78	337 / 447 / 63	343 / 361 / 163	274 / 441 / 130	325 / 463 / 32	263 / 572 / 26	391 / 386 / 73	313 / 475 / 59	318 / 384 / 151	261 / 478 / 123
3		312 / 476 / 31	257 / 597 / 26	343 / 428 / 64	277 / 527 / 52	269 / 457 / 128	219 / 567 / 104	294 / 517 / 29	239 / 638 / 24	319 / 460 / 60	259 / 569 / 49	249 / 489 / 118	204 / 609 / 97	276 / 554 / 28	221 / 673 / 22	301 / 496 / 56	241 / 604 / 45	234 / 525 / 111	191 / 644 / 90
20	1	308 / 425 / 33	245 / 519 / 27	374 / 330 / 71	303 / 413 / 57	264 / 367 / 107	228 / 453 / 86	287 / 448 / 31	235 / 559 / 25	359 / 358 / 68	287 / 442 / 54	248 / 389 / 100	227 / 482 / 81						
	2	261 / 495 / 28	209 / 603 / 23	308 / 406 / 58	251 / 508 / 48	236 / 409 / 96	206 / 510 / 78	245 / 525 / 27	198 / 644 / 22	292 / 435 / 55	236 / 537 / 45	225 / 438 / 91	205 / 539 / 73						
	3	219 / 586 / 24	177 / 719 / 19	241 / 529 / 46	195 / 650 / 37	174 / 557 / 70	152 / 691 / 58	209 / 628 / 23	167 / 760 / 18	226 / 558 / 43	185 / 692 / 35	166 / 598 / 67	152 / 733 / 54						
	1	361 / 425 / 36	288 / 519 / 29	421 / 316 / 79	355 / 413 / 67	299 / 367 / 132	255 / 453 / 106	337 / 448 / 34	276 / 559 / 28	421 / 358 / 79	337 / 442 / 63	281 / 389 / 124	254 / 482 / 100						
	2	306 / 495 / 31	245 / 603 / 25	361 / 406 / 68	295 / 508 / 55	267 / 409 / 118	232 / 510 / 96	288 / 525 / 29	233 / 644 / 23	343 / 435 / 64	277 / 537 / 52	254 / 438 / 112	229 / 539 / 90						
	3	257 / 586 / 26	208 / 719 / 21	283 / 529 / 53	229 / 650 / 43	196 / 557 / 87	170 / 691 / 71	245 / 628 / 25	196 / 760 / 20	265 / 558 / 50	217 / 692 / 41	187 / 598 / 83	169 / 733 / 67						
	1	361 / 425 / 36	288 / 519 / 29	421 / 316 / 79	355 / 413 / 67	333 / 367 / 158	283 / 453 / 128	337 / 448 / 34	276 / 559 / 28	421 / 358 / 79	337 / 442 / 63	313 / 389 / 149	280 / 482 / 121						
	2	306 / 495 / 31	245 / 603 / 25	361 / 406 / 68	295 / 508 / 55	298 / 409 / 142	257 / 510 / 116	288 / 525 / 29	233 / 644 / 23	343 / 435 / 64	277 / 537 / 52	284 / 438 / 135	253 / 539 / 109						
	3	257 / 586 / 26	208 / 719 / 21	283 / 529 / 53	229 / 650 / 43	219 / 557 / 104	189 / 691 / 85	245 / 628 / 25	196 / 760 / 20	265 / 558 / 50	217 / 692 / 41	209 / 598 / 99	187 / 733 / 81						
25	1	271 / 474 / 29	225 / 583 / 24	338 / 380 / 64	280 / 469 / 52	236 / 416 / 96	226 / 508 / 77	256 / 497 / 28	223 / 617 / 23	318 / 398 / 60	274 / 492 / 49	231 / 440 / 91	230 / 541 / 73						
	2	230 / 549 / 25	193 / 682 / 20	277 / 462 / 52	227 / 561 / 42	213 / 465 / 86	203 / 564 / 69	219 / 583 / 24	189 / 715 / 19	262 / 486 / 50	225 / 595 / 40	207 / 489 / 81	205 / 597 / 65						
	3	193 / 649 / 21	161 / 796 / 17	216 / 595 / 41	179 / 730 / 33	154 / 621 / 62	151 / 770 / 51	183 / 682 / 20	162 / 854 / 17	200 / 614 / 38	176 / 763 / 31	150 / 654 / 59	150 / 801 / 48						
	1	318 / 474 / 32	263 / 583 / 26	397 / 380 / 74	326 / 469 / 60	267 / 416 / 118	251 / 508 / 94	300 / 497 / 30	259 / 617 / 25	373 / 398 / 70	318 / 492 / 56	261 / 440 / 112	253 / 541 / 90						
	2	270 / 549 / 27	226 / 682 / 22	325 / 462 / 61	265 / 561 / 49	241 / 465 / 106	225 / 564 / 85	257 / 583 / 26	220 / 715 / 21	307 / 486 / 58	261 / 595 / 46	233 / 489 / 100	226 / 597 / 81						
	3	227 / 649 / 23	188 / 796 / 19	253 / 595 / 47	210 / 730 / 39	174 / 621 / 77	168 / 770 / 63	214 / 682 / 22	188 / 854 / 18	235 / 614 / 44	204 / 763 / 36	169 / 654 / 73	165 / 801 / 59						
	1	318 / 474 / 32	263 / 583 / 26	397 / 380 / 74	326 / 469 / 60	298 / 416 / 142	276 / 508 / 113	300 / 497 / 30	259 / 617 / 25	373 / 398 / 70	318 / 492 / 56	290 / 440 / 135	277 / 541 / 109						
	2	270 / 549 / 27	226 / 682 / 22	325 / 462 / 61	265 / 561 / 49	269 / 465 / 128	247 / 564 / 102	257 / 583 / 26	220 / 715 / 21	307 / 486 / 58	261 / 595 / 46	260 / 489 / 121	247 / 597 / 97						
	3	227 / 649 / 23	188 / 796 / 19	253 / 595 / 47	210 / 730 / 39	194 / 621 / 92	184 / 770 / 76	214 / 682 / 22	188 / 854 / 18	235 / 614 / 44	204 / 763 / 36	189 / 654 / 88	181 / 801 / 71						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	449 / 129 / 43	449 / 144 / 43	447 / 132 / 83	447 / 185 / 83	395 / 149 / 199	395 / 237 / 199	449 / 129 / 43	449 / 160 / 43	447 / 132 / 83	447 / 205 / 83	395 / 166 / 199	395 / 262 / 199	449 / 129 / 43	449 / 176 / 43	447 / 141 / 83	447 / 226 / 83	395 / 183 / 199	395 / 288 / 199
2		449 / 265 / 43	423 / 388 / 41	447 / 178 / 83	447 / 282 / 83	395 / 190 / 199	395 / 298 / 199	449 / 292 / 43	403 / 407 / 39	447 / 198 / 83	447 / 311 / 83	395 / 210 / 199	395 / 329 / 199	449 / 321 / 43	383 / 423 / 37	447 / 218 / 83	447 / 342 / 83	395 / 231 / 199	384 / 350 / 193	
3		443 / 375 / 43	357 / 465 / 34	447 / 308 / 83	389 / 415 / 73	384 / 356 / 193	308 / 438 / 155	416 / 388 / 40	337 / 482 / 33	447 / 340 / 83	370 / 433 / 69	368 / 375 / 185	297 / 463 / 149	403 / 411 / 39	324 / 506 / 31	441 / 367 / 82	357 / 457 / 67	351 / 392 / 177	280 / 478 / 141	
35		1	489 / 128 / 45	489 / 141 / 45	479 / 128 / 89	479 / 180 / 89	420 / 145 / 221	420 / 231 / 221	489 / 128 / 45	489 / 157 / 45	479 / 128 / 89	479 / 199 / 89	420 / 161 / 221	420 / 255 / 221	489 / 128 / 45	489 / 174 / 45	479 / 137 / 89	479 / 219 / 89	420 / 178 / 221	420 / 280 / 221
		2	489 / 261 / 45	467 / 388 / 43	479 / 173 / 89	479 / 274 / 89	420 / 185 / 221	420 / 290 / 221	489 / 288 / 45	445 / 407 / 41	479 / 192 / 89	479 / 302 / 89	420 / 204 / 221	420 / 319 / 221	489 / 316 / 45	423 / 423 / 39	479 / 212 / 89	479 / 332 / 89	420 / 225 / 221	420 / 350 / 221
		3	489 / 375 / 45	394 / 465 / 36	479 / 299 / 89	429 / 415 / 80	420 / 356 / 221	336 / 438 / 177	460 / 388 / 42	372 / 482 / 34	479 / 330 / 89	408 / 433 / 76	402 / 375 / 212	324 / 463 / 171	445 / 411 / 41	358 / 506 / 33	479 / 362 / 89	394 / 457 / 73	384 / 392 / 202	306 / 478 / 161
40		1	524 / 124 / 101	524 / 137 / 101	511 / 124 / 142	511 / 174 / 142	450 / 143 / 252	450 / 228 / 252	524 / 124 / 101	524 / 153 / 101	511 / 124 / 142	511 / 193 / 142	450 / 159 / 252	450 / 251 / 252	524 / 124 / 101	524 / 169 / 101	511 / 133 / 142	511 / 213 / 142	450 / 175 / 252	450 / 276 / 252
		2	524 / 253 / 101	516 / 388 / 99	511 / 168 / 142	511 / 266 / 142	450 / 182 / 252	450 / 286 / 252	524 / 280 / 101	492 / 407 / 94	511 / 186 / 142	511 / 293 / 142	450 / 201 / 252	450 / 315 / 252	524 / 307 / 101	468 / 423 / 90	511 / 205 / 142	511 / 322 / 142	450 / 222 / 252	450 / 345 / 252
		3	524 / 363 / 101	436 / 465 / 84	511 / 290 / 142	471 / 415 / 131	450 / 351 / 252	365 / 438 / 204	508 / 388 / 98	411 / 482 / 79	511 / 320 / 142	448 / 433 / 124	437 / 375 / 244	352 / 463 / 197	492 / 411 / 94	395 / 506 / 76	511 / 351 / 142	432 / 457 / 120	418 / 392 / 234	333 / 478 / 186
Wind Speed [mph]		110				115														
30	1	449 / 129 / 43	436 / 381 / 42	447 / 155 / 83	447 / 247 / 83	395 / 201 / 199	395 / 314 / 199	449 / 132 / 43	416 / 395 / 40	447 / 170 / 83	447 / 270 / 83	395 / 219 / 199	390 / 337 / 196							
	2	449 / 351 / 43	370 / 445 / 36	447 / 239 / 83	441 / 368 / 82	395 / 253 / 199	368 / 366 / 185	436 / 371 / 42	350 / 458 / 34	447 / 261 / 83	422 / 382 / 79	395 / 276 / 199	357 / 386 / 179							
	3	383 / 426 / 37	311 / 528 / 30	422 / 383 / 79	337 / 471 / 63	335 / 407 / 168	269 / 500 / 135	370 / 447 / 36	298 / 548 / 29	402 / 397 / 75	324 / 491 / 61	318 / 421 / 160	258 / 520 / 130							
	35	1	489 / 128 / 45	482 / 381 / 44	479 / 151 / 89	479 / 240 / 89	420 / 195 / 221	420 / 306 / 221	489 / 130 / 45	460 / 395 / 42	479 / 165 / 89	479 / 262 / 89	420 / 213 / 221	420 / 333 / 221						
		2	489 / 346 / 45	409 / 445 / 38	479 / 232 / 89	479 / 362 / 89	420 / 246 / 221	402 / 366 / 212	482 / 371 / 44	387 / 458 / 36	479 / 253 / 89	465 / 382 / 86	420 / 268 / 221	390 / 386 / 205						
		3	423 / 426 / 39	343 / 528 / 32	465 / 383 / 86	372 / 471 / 69	366 / 407 / 193	294 / 500 / 155	409 / 447 / 38	328 / 548 / 30	444 / 397 / 82	358 / 491 / 67	348 / 421 / 183	282 / 520 / 149						
	40	1	524 / 124 / 101	524 / 185 / 101	511 / 146 / 142	511 / 233 / 142	450 / 192 / 252	450 / 301 / 252	524 / 126 / 101	508 / 395 / 98	511 / 160 / 142	511 / 254 / 142	450 / 210 / 252	450 / 328 / 252						
		2	524 / 335 / 101	452 / 445 / 87	511 / 225 / 142	511 / 352 / 142	450 / 243 / 252	437 / 366 / 244	524 / 365 / 101	428 / 458 / 82	511 / 246 / 142	511 / 382 / 142	450 / 264 / 252	424 / 386 / 237						
		3	468 / 426 / 90	379 / 528 / 73	511 / 383 / 142	409 / 471 / 113	398 / 407 / 223	320 / 500 / 179	452 / 447 / 87	363 / 548 / 70	487 / 397 / 135	393 / 491 / 109	378 / 421 / 212	307 / 520 / 172						
Wind Speed [mph]		120				130														
30	1	449 / 144 / 43	397 / 408 / 38	447 / 186 / 83	447 / 293 / 83	395 / 238 / 199	379 / 356 / 190	449 / 132 / 43	416 / 395 / 40	447 / 170 / 83	447 / 270 / 83	395 / 219 / 199	390 / 337 / 196							
	2	423 / 390 / 41	337 / 477 / 33	447 / 284 / 83	402 / 395 / 75	395 / 300 / 199	340 / 399 / 171	436 / 371 / 42	350 / 458 / 34	447 / 261 / 83	422 / 382 / 79	395 / 276 / 199	357 / 386 / 179							
	3	350 / 458 / 34	284 / 567 / 28	389 / 417 / 73	311 / 510 / 58	308 / 440 / 155	247 / 538 / 124	370 / 447 / 36	298 / 548 / 29	402 / 397 / 75	324 / 491 / 61	318 / 421 / 160	258 / 520 / 130							
	35	1	489 / 142 / 45	438 / 408 / 40	479 / 180 / 89	479 / 285 / 89	420 / 232 / 221	414 / 356 / 218	489 / 130 / 45	460 / 395 / 42	479 / 165 / 89	479 / 262 / 89	420 / 213 / 221	420 / 333 / 221						
		2	467 / 390 / 43	372 / 477 / 34	479 / 275 / 89	444 / 395 / 82	420 / 291 / 221	372 / 399 / 196	482 / 371 / 44	387 / 458 / 36	479 / 253 / 89	465 / 382 / 86	420 / 268 / 221	390 / 386 / 205						
		3	387 / 458 / 36	314 / 567 / 29	429 / 417 / 80	344 / 510 / 64	336 / 440 / 177	270 / 538 / 142	409 / 447 / 38	328 / 548 / 30	444 / 397 / 82	358 / 491 / 67	348 / 421 / 183	282 / 520 / 149						
	40	1	524 / 138 / 101	484 / 408 / 93	511 / 175 / 142	511 / 276 / 142	450 / 229 / 252	450 / 356 / 252	524 / 126 / 101	508 / 395 / 98	511 / 160 / 142	511 / 254 / 142	450 / 210 / 252	450 / 328 / 252						
		2	516 / 390 / 99	411 / 477 / 79	511 / 267 / 142	487 / 395 / 135	450 / 287 / 252	404 / 399 / 226	524 / 365 / 101	428 / 458 / 82	511 / 246 / 142	511 / 382 / 142	450 / 264 / 252	424 / 386 / 237						
		3	428 / 458 / 82	347 / 567 / 67	471 / 417 / 131	377 / 510 / 105	365 / 440 / 204	294 / 538 / 164	452 / 447 / 87	363 / 548 / 70	487 / 397 / 135	393 / 491 / 109	378 / 421 / 212	307 / 520 / 172						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	449 / 157 / 43	383 / 426 / 37	447 / 202 / 83	447 / 318 / 83	395 / 258 / 199	368 / 373 / 185	443 / 370 / 43	357 / 459 / 34	447 / 236 / 83	441 / 364 / 82	395 / 301 / 199	340 / 400 / 171	416 / 399 / 40	331 / 486 / 32	447 / 273 / 83	415 / 393 / 77	390 / 341 / 196	321 / 429 / 160
2		403 / 401 / 39	324 / 494 / 31	447 / 307 / 83	389 / 414 / 73	395 / 324 / 199	329 / 417 / 166	377 / 434 / 36	304 / 536 / 29	447 / 357 / 83	363 / 447 / 68	379 / 361 / 190	302 / 441 / 152	350 / 463 / 34	284 / 572 / 28	422 / 386 / 79	337 / 475 / 63	351 / 384 / 177	288 / 478 / 144	
3		337 / 476 / 33	278 / 597 / 27	370 / 428 / 69	298 / 527 / 56	297 / 457 / 149	242 / 567 / 122	317 / 517 / 31	258 / 638 / 25	344 / 460 / 64	279 / 569 / 52	275 / 489 / 138	225 / 609 / 113	298 / 554 / 29	238 / 673 / 23	324 / 496 / 61	260 / 604 / 49	258 / 525 / 130	210 / 644 / 105	
35		1	489 / 155 / 45	423 / 426 / 39	479 / 196 / 89	479 / 309 / 89	420 / 251 / 221	402 / 373 / 212	489 / 182 / 45	394 / 459 / 36	479 / 229 / 89	479 / 358 / 89	420 / 292 / 221	372 / 400 / 196	460 / 399 / 42	365 / 486 / 34	479 / 265 / 89	458 / 393 / 85	420 / 336 / 221	351 / 429 / 183
		2	445 / 401 / 41	358 / 494 / 33	479 / 298 / 89	429 / 414 / 80	420 / 315 / 221	360 / 417 / 189	416 / 434 / 38	336 / 536 / 31	479 / 347 / 89	401 / 447 / 74	414 / 361 / 218	330 / 441 / 174	387 / 463 / 36	314 / 572 / 29	465 / 386 / 86	372 / 475 / 69	384 / 384 / 202	315 / 478 / 164
		3	372 / 476 / 34	307 / 597 / 28	408 / 428 / 76	329 / 527 / 61	324 / 457 / 171	264 / 567 / 139	350 / 517 / 32	285 / 638 / 26	379 / 460 / 70	308 / 569 / 57	300 / 489 / 158	246 / 609 / 130	328 / 554 / 30	263 / 673 / 24	358 / 496 / 67	286 / 604 / 53	282 / 525 / 149	230 / 644 / 120
40		1	524 / 150 / 101	468 / 426 / 90	511 / 190 / 142	511 / 299 / 142	450 / 248 / 252	437 / 373 / 244	524 / 177 / 101	436 / 459 / 84	511 / 223 / 142	511 / 348 / 142	450 / 288 / 252	404 / 400 / 226	508 / 399 / 98	403 / 486 / 77	511 / 257 / 142	503 / 393 / 139	450 / 331 / 252	381 / 429 / 212
		2	492 / 401 / 94	395 / 494 / 76	511 / 289 / 142	471 / 414 / 131	450 / 311 / 252	391 / 417 / 219	460 / 434 / 88	371 / 536 / 71	511 / 336 / 142	440 / 447 / 122	450 / 361 / 252	359 / 441 / 201	428 / 463 / 82	347 / 572 / 67	511 / 386 / 142	409 / 475 / 113	418 / 384 / 234	341 / 478 / 190
		3	411 / 476 / 79	339 / 597 / 65	448 / 428 / 124	361 / 527 / 100	352 / 457 / 197	287 / 567 / 161	387 / 517 / 74	315 / 638 / 61	416 / 460 / 115	338 / 569 / 94	326 / 489 / 183	268 / 609 / 150	363 / 554 / 70	291 / 673 / 56	393 / 496 / 109	314 / 604 / 87	307 / 525 / 172	250 / 644 / 139
30	1	390 / 425 / 38	311 / 519 / 30	447 / 312 / 83	383 / 413 / 71	368 / 367 / 185	311 / 453 / 149	364 / 448 / 35	298 / 559 / 29	447 / 353 / 83	363 / 442 / 68	346 / 389 / 174	306 / 482 / 141							
	2	331 / 495 / 32	265 / 603 / 26	389 / 406 / 73	318 / 508 / 59	329 / 409 / 166	282 / 510 / 135	311 / 525 / 30	251 / 644 / 24	370 / 435 / 69	298 / 537 / 56	313 / 438 / 157	276 / 539 / 127							
	3	278 / 586 / 27	225 / 719 / 22	305 / 529 / 57	247 / 650 / 46	242 / 557 / 122	208 / 691 / 100	265 / 628 / 26	212 / 760 / 21	286 / 558 / 53	234 / 692 / 44	231 / 598 / 116	204 / 733 / 94							
	35	1	431 / 425 / 40	343 / 519 / 32	479 / 303 / 89	422 / 413 / 78	402 / 367 / 212	339 / 453 / 171	401 / 448 / 37	328 / 559 / 30	479 / 343 / 89	401 / 442 / 74	378 / 389 / 199	333 / 482 / 161						
		2	365 / 495 / 34	292 / 603 / 27	429 / 406 / 80	351 / 508 / 65	360 / 409 / 189	308 / 510 / 155	343 / 525 / 32	277 / 644 / 26	408 / 435 / 76	329 / 537 / 61	342 / 438 / 180	300 / 539 / 145						
		3	307 / 586 / 28	248 / 719 / 23	336 / 529 / 63	272 / 650 / 51	264 / 557 / 139	226 / 691 / 114	292 / 628 / 27	234 / 760 / 22	315 / 558 / 59	258 / 692 / 48	252 / 598 / 133	222 / 733 / 108						
	40	1	476 / 425 / 91	379 / 519 / 73	511 / 294 / 142	463 / 413 / 129	437 / 367 / 244	367 / 453 / 197	444 / 448 / 85	363 / 559 / 70	511 / 333 / 142	440 / 442 / 122	411 / 389 / 230	359 / 482 / 186						
		2	403 / 495 / 77	323 / 603 / 62	471 / 406 / 131	385 / 508 / 107	391 / 409 / 219	333 / 510 / 179	379 / 525 / 73	307 / 644 / 59	448 / 435 / 124	361 / 537 / 100	372 / 438 / 208	324 / 539 / 168						
		3	339 / 586 / 65	274 / 719 / 53	369 / 529 / 102	299 / 650 / 83	287 / 557 / 161	245 / 691 / 132	323 / 628 / 62	258 / 760 / 50	346 / 558 / 96	283 / 692 / 79	274 / 598 / 153	240 / 733 / 124						
30	1	344 / 474 / 33	284 / 583 / 27	428 / 380 / 80	351 / 469 / 64	329 / 416 / 166	301 / 508 / 133	324 / 497 / 31	279 / 617 / 26	402 / 398 / 75	342 / 492 / 61	320 / 440 / 157	301 / 541 / 127							
	2	291 / 549 / 28	243 / 682 / 23	350 / 462 / 65	285 / 561 / 52	297 / 465 / 149	270 / 564 / 119	278 / 583 / 27	237 / 715 / 22	331 / 486 / 62	280 / 595 / 50	286 / 489 / 141	268 / 597 / 113							
	3	245 / 649 / 24	203 / 796 / 19	273 / 595 / 51	226 / 730 / 41	214 / 621 / 108	201 / 770 / 89	232 / 682 / 22	202 / 854 / 19	253 / 614 / 47	219 / 763 / 39	208 / 654 / 102	196 / 801 / 83							
	35	1	379 / 474 / 35	313 / 583 / 28	472 / 380 / 88	387 / 469 / 70	360 / 416 / 189	326 / 508 / 152	358 / 497 / 33	306 / 617 / 27	444 / 398 / 82	375 / 492 / 67	349 / 440 / 180	325 / 541 / 145						
		2	321 / 549 / 30	268 / 682 / 24	386 / 462 / 72	314 / 561 / 57	324 / 465 / 171	292 / 564 / 136	307 / 583 / 28	260 / 715 / 23	365 / 486 / 68	308 / 595 / 55	312 / 489 / 161	289 / 597 / 130						
		3	270 / 649 / 25	223 / 796 / 20	301 / 595 / 56	248 / 730 / 45	234 / 621 / 123	217 / 770 / 101	256 / 682 / 24	222 / 854 / 20	279 / 614 / 52	240 / 763 / 43	227 / 654 / 117	212 / 801 / 95						
	40	1	420 / 474 / 81	342 / 583 / 65	511 / 374 / 142	422 / 469 / 115	391 / 416 / 219	351 / 508 / 175	395 / 497 / 76	333 / 617 / 62	487 / 398 / 135	409 / 492 / 109	379 / 440 / 208	348 / 541 / 168						
		2	355 / 549 / 68	293 / 682 / 56	424 / 462 / 118	343 / 561 / 94	352 / 465 / 197	314 / 564 / 157	339 / 583 / 65	284 / 715 / 53	401 / 486 / 111	335 / 595 / 89	339 / 489 / 186	311 / 597 / 150						
		3	299 / 649 / 57	244 / 796 / 47	330 / 595 / 92	271 / 730 / 74	255 / 621 / 143	234 / 770 / 117	283 / 682 / 54	242 / 854 / 45	307 / 614 / 85	262 / 763 / 70	246 / 654 / 135	227 / 801 / 110						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof

0-30ft

70in x 41in

Exposure Category : B	Enclosed Mono Slope Roof																			
	95						100						105							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																	
45	1	566 / 120 / 105	566 / 133 / 105	560 / 122 / 153	560 / 172 / 153	472 / 139 / 269	472 / 221 / 269	566 / 120 / 105	566 / 148 / 105	560 / 122 / 153	560 / 190 / 153	472 / 154 / 269	472 / 244 / 269	566 / 120 / 105	566 / 163 / 105	560 / 131 / 153	560 / 209 / 153	472 / 170 / 269	472 / 268 / 269	
	2	566 / 246 / 105	566 / 382 / 105	560 / 166 / 153	560 / 262 / 153	472 / 177 / 269	472 / 278 / 269	566 / 271 / 105	548 / 407 / 102	560 / 184 / 153	560 / 289 / 153	472 / 196 / 269	472 / 306 / 269	566 / 297 / 105	521 / 423 / 97	560 / 202 / 153	560 / 317 / 153	472 / 215 / 269	472 / 335 / 269	
	3	566 / 352 / 105	485 / 465 / 90	560 / 286 / 153	525 / 415 / 143	472 / 341 / 269	394 / 438 / 225	566 / 388 / 105	458 / 482 / 85	560 / 315 / 153	499 / 433 / 136	472 / 375 / 269	380 / 463 / 217	548 / 411 / 102	440 / 506 / 82	560 / 346 / 153	481 / 457 / 131	451 / 392 / 257	359 / 478 / 205	
	50	1	614 / 118 / 112	614 / 131 / 112	597 / 118 / 161	597 / 166 / 161	499 / 137 / 290	499 / 218 / 290	614 / 118 / 112	614 / 146 / 112	597 / 118 / 161	597 / 184 / 161	499 / 152 / 290	499 / 240 / 290	614 / 118 / 112	614 / 161 / 112	597 / 126 / 161	597 / 203 / 161	499 / 168 / 290	499 / 264 / 290
		2	614 / 242 / 112	614 / 376 / 112	597 / 160 / 161	597 / 254 / 161	499 / 174 / 290	499 / 274 / 290	614 / 267 / 112	604 / 407 / 110	597 / 178 / 161	597 / 280 / 161	499 / 193 / 290	499 / 301 / 290	614 / 293 / 112	574 / 423 / 104	597 / 196 / 161	597 / 307 / 161	499 / 212 / 290	499 / 330 / 290
		3	614 / 347 / 112	535 / 465 / 97	597 / 277 / 161	578 / 415 / 156	499 / 336 / 290	423 / 438 / 246	614 / 381 / 112	505 / 482 / 92	597 / 305 / 161	549 / 433 / 148	499 / 369 / 290	408 / 463 / 237	604 / 411 / 110	485 / 506 / 88	597 / 335 / 161	530 / 457 / 143	484 / 392 / 281	386 / 478 / 224
	60	1	669 / 109 / 117	669 / 120 / 117	662 / 111 / 175	662 / 156 / 175	561 / 131 / 324	561 / 208 / 324	669 / 109 / 117	669 / 134 / 117	662 / 111 / 175	662 / 172 / 175	561 / 145 / 324	561 / 229 / 324	669 / 109 / 117	669 / 148 / 117	662 / 118 / 175	662 / 190 / 175	561 / 160 / 324	561 / 252 / 324
		2	669 / 222 / 117	669 / 346 / 117	662 / 150 / 175	662 / 237 / 175	561 / 166 / 324	561 / 261 / 324	669 / 245 / 117	669 / 380 / 117	662 / 166 / 175	662 / 262 / 175	561 / 184 / 324	561 / 288 / 324	669 / 269 / 117	669 / 416 / 117	662 / 183 / 175	662 / 287 / 175	561 / 202 / 324	561 / 315 / 324
		3	669 / 319 / 117	634 / 465 / 111	662 / 259 / 175	662 / 401 / 175	561 / 320 / 324	499 / 438 / 288	669 / 351 / 117	598 / 482 / 105	662 / 286 / 175	651 / 433 / 172	561 / 352 / 324	481 / 463 / 278	669 / 384 / 117	575 / 506 / 101	662 / 313 / 175	628 / 457 / 166	561 / 386 / 324	454 / 478 / 263
45	1	566 / 120 / 105	566 / 180 / 105	560 / 144 / 153	560 / 229 / 153	472 / 187 / 269	472 / 293 / 269	566 / 122 / 105	566 / 196 / 105	560 / 158 / 153	560 / 250 / 153	472 / 204 / 269	472 / 318 / 269							
	2	566 / 325 / 105	503 / 445 / 94	560 / 222 / 153	560 / 346 / 153	472 / 236 / 269	472 / 366 / 269	566 / 354 / 105	476 / 458 / 89	560 / 242 / 153	560 / 377 / 153	472 / 257 / 269	458 / 386 / 261							
	3	521 / 426 / 97	422 / 528 / 79	560 / 377 / 153	455 / 471 / 124	429 / 407 / 245	345 / 500 / 197	503 / 447 / 94	404 / 548 / 75	542 / 397 / 148	437 / 491 / 119	408 / 421 / 233	331 / 520 / 189							
	50	1	614 / 118 / 112	614 / 177 / 112	597 / 139 / 161	597 / 222 / 161	499 / 184 / 290	499 / 288 / 290	614 / 120 / 112	614 / 193 / 112	597 / 153 / 161	597 / 243 / 161	499 / 201 / 290	499 / 314 / 290						
		2	614 / 320 / 112	554 / 445 / 101	597 / 215 / 161	597 / 335 / 161	499 / 232 / 290	499 / 360 / 290	614 / 348 / 112	525 / 458 / 95	597 / 234 / 161	597 / 365 / 161	499 / 253 / 290	491 / 386 / 285						
		3	574 / 426 / 104	465 / 528 / 85	597 / 365 / 161	501 / 471 / 135	461 / 407 / 268	370 / 500 / 215	554 / 447 / 101	446 / 548 / 81	597 / 397 / 161	482 / 491 / 130	438 / 421 / 255	355 / 520 / 206						
	60	1	669 / 109 / 117	669 / 163 / 117	662 / 131 / 175	662 / 208 / 175	561 / 176 / 324	561 / 275 / 324	669 / 110 / 117	669 / 178 / 117	662 / 143 / 175	662 / 227 / 175	561 / 192 / 324	561 / 299 / 324						
		2	669 / 294 / 117	657 / 445 / 115	662 / 201 / 175	662 / 314 / 175	561 / 222 / 324	561 / 344 / 324	669 / 320 / 117	622 / 458 / 109	662 / 219 / 175	662 / 341 / 175	561 / 242 / 324	561 / 374 / 324						
		3	669 / 419 / 117	551 / 528 / 96	662 / 342 / 175	594 / 471 / 157	543 / 407 / 314	437 / 500 / 252	657 / 447 / 115	528 / 548 / 92	662 / 372 / 175	571 / 491 / 151	517 / 421 / 299	419 / 520 / 242						
45	1	566 / 134 / 105	539 / 408 / 100	560 / 172 / 153	560 / 272 / 153	472 / 222 / 269	472 / 345 / 269	566 / 122 / 105	566 / 196 / 105	560 / 158 / 153	560 / 250 / 153	472 / 204 / 269	472 / 318 / 269							
	2	566 / 384 / 105	458 / 477 / 85	560 / 263 / 153	542 / 395 / 148	472 / 279 / 269	437 / 399 / 249	566 / 354 / 105	476 / 458 / 89	560 / 242 / 153	560 / 377 / 153	472 / 257 / 269	458 / 386 / 261							
	3	476 / 458 / 89	386 / 567 / 72	525 / 417 / 143	420 / 510 / 115	394 / 440 / 225	317 / 538 / 181	503 / 447 / 94	404 / 548 / 75	542 / 397 / 148	437 / 491 / 119	408 / 421 / 233	331 / 520 / 189							
	50	1	614 / 132 / 112	594 / 408 / 108	597 / 167 / 161	597 / 264 / 161	499 / 219 / 290	499 / 340 / 290	614 / 120 / 112	614 / 193 / 112	597 / 153 / 161	597 / 243 / 161	499 / 201 / 290	499 / 314 / 290						
		2	614 / 378 / 112	505 / 477 / 92	597 / 255 / 161	597 / 395 / 161	499 / 275 / 290	469 / 399 / 272	614 / 348 / 112	525 / 458 / 95	597 / 234 / 161	597 / 365 / 161	499 / 253 / 290	491 / 386 / 285						
		3	525 / 458 / 95	426 / 567 / 77	578 / 417 / 156	463 / 510 / 125	423 / 440 / 246	340 / 538 / 198	554 / 447 / 101	446 / 548 / 81	597 / 397 / 161	482 / 491 / 130	438 / 421 / 255	355 / 520 / 206						
	60	1	669 / 121 / 117	669 / 194 / 117	662 / 156 / 175	662 / 247 / 175	561 / 209 / 324	561 / 325 / 324	669 / 110 / 117	669 / 178 / 117	662 / 143 / 175	662 / 227 / 175	561 / 192 / 324	561 / 299 / 324						
		2	669 / 347 / 117	598 / 477 / 105	662 / 238 / 175	662 / 370 / 175	561 / 262 / 324	552 / 399 / 319	669 / 320 / 117	622 / 458 / 109	662 / 219 / 175	662 / 341 / 175	561 / 242 / 324	561 / 374 / 324						
		3	622 / 458 / 109	505 / 567 / 88	662 / 403 / 175	548 / 510 / 145	499 / 440 / 288	401 / 538 / 232	657 / 447 / 115	528 / 548 / 92	662 / 372 / 175	571 / 491 / 151	517 / 421 / 299	419 / 520 / 242						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	45	1	566 / 146 / 105	521 / 426 / 97	560 / 187 / 153	560 / 295 / 153	472 / 241 / 269	472 / 373 / 269	566 / 171 / 105	485 / 459 / 90	560 / 219 / 153	560 / 342 / 153	472 / 280 / 269	437 / 400 / 249	566 / 199 / 105	449 / 486 / 84	560 / 253 / 153	560 / 393 / 153	472 / 322 / 269	411 / 429 / 233
2		548 / 401 / 102	440 / 494 / 82	560 / 285 / 153	525 / 414 / 143	472 / 302 / 269	422 / 417 / 241	512 / 434 / 95	413 / 536 / 77	560 / 331 / 153	490 / 447 / 134	472 / 350 / 269	387 / 441 / 221	476 / 463 / 89	386 / 572 / 72	560 / 381 / 153	455 / 475 / 124	451 / 384 / 257	368 / 478 / 209	
3		458 / 476 / 85	377 / 597 / 70	499 / 428 / 136	402 / 527 / 110	380 / 457 / 217	310 / 567 / 177	431 / 517 / 80	350 / 638 / 65	464 / 460 / 127	376 / 569 / 103	352 / 489 / 201	289 / 609 / 165	404 / 554 / 75	324 / 673 / 60	437 / 496 / 119	350 / 604 / 96	331 / 525 / 189	269 / 644 / 153	
50		1	614 / 143 / 112	574 / 426 / 104	597 / 182 / 161	597 / 286 / 161	499 / 237 / 290	499 / 368 / 290	614 / 169 / 112	535 / 459 / 97	597 / 212 / 161	597 / 332 / 161	499 / 276 / 290	469 / 400 / 272	614 / 196 / 112	495 / 486 / 90	597 / 245 / 161	597 / 381 / 161	499 / 317 / 290	441 / 429 / 255
		2	604 / 401 / 110	485 / 494 / 88	597 / 276 / 161	578 / 414 / 156	499 / 297 / 290	453 / 417 / 263	564 / 434 / 103	455 / 536 / 83	597 / 321 / 161	540 / 447 / 145	499 / 345 / 290	416 / 441 / 241	525 / 463 / 95	426 / 572 / 77	597 / 369 / 161	501 / 475 / 135	484 / 384 / 281	395 / 478 / 228
		3	505 / 476 / 92	416 / 597 / 76	549 / 428 / 148	443 / 527 / 120	408 / 457 / 237	333 / 567 / 193	475 / 517 / 86	386 / 638 / 70	511 / 460 / 138	415 / 569 / 112	378 / 489 / 219	310 / 609 / 180	446 / 554 / 81	357 / 673 / 65	482 / 496 / 130	386 / 604 / 104	355 / 525 / 206	289 / 644 / 167
60		1	669 / 132 / 117	669 / 210 / 117	662 / 170 / 175	662 / 267 / 175	561 / 226 / 324	561 / 351 / 324	669 / 155 / 117	634 / 459 / 111	662 / 199 / 175	662 / 310 / 175	561 / 263 / 324	552 / 400 / 319	669 / 180 / 117	587 / 486 / 103	662 / 229 / 175	662 / 356 / 175	561 / 303 / 324	517 / 429 / 299
		2	669 / 375 / 117	575 / 494 / 101	662 / 258 / 175	662 / 400 / 175	561 / 284 / 324	535 / 417 / 309	669 / 434 / 117	540 / 536 / 94	662 / 300 / 175	639 / 447 / 169	561 / 329 / 324	490 / 441 / 283	622 / 463 / 109	505 / 572 / 88	662 / 345 / 175	594 / 475 / 157	561 / 378 / 324	463 / 478 / 268
		3	598 / 476 / 105	493 / 597 / 86	651 / 428 / 172	525 / 527 / 139	481 / 457 / 278	392 / 567 / 227	563 / 517 / 98	458 / 638 / 80	605 / 460 / 160	491 / 569 / 130	446 / 489 / 257	365 / 609 / 211	528 / 554 / 92	423 / 673 / 74	571 / 496 / 151	457 / 604 / 121	419 / 525 / 242	339 / 644 / 196
Wind Speed [mph]		170						180												
45	1	530 / 425 / 99	422 / 519 / 79	560 / 289 / 153	516 / 413 / 141	472 / 367 / 269	395 / 453 / 217	494 / 448 / 92	404 / 559 / 75	560 / 328 / 153	490 / 442 / 134	444 / 389 / 253	386 / 482 / 205							
	2	449 / 495 / 84	359 / 603 / 67	525 / 406 / 143	429 / 508 / 117	422 / 409 / 241	358 / 510 / 197	422 / 525 / 79	342 / 644 / 64	499 / 435 / 136	402 / 537 / 110	401 / 438 / 229	348 / 539 / 185							
	3	377 / 586 / 70	306 / 719 / 57	411 / 529 / 112	333 / 650 / 91	310 / 557 / 177	263 / 691 / 145	359 / 628 / 67	288 / 760 / 54	385 / 558 / 105	315 / 692 / 86	296 / 598 / 169	257 / 733 / 137							
	50	1	584 / 425 / 106	465 / 519 / 85	597 / 280 / 161	569 / 413 / 153	499 / 361 / 290	423 / 453 / 237	544 / 448 / 99	446 / 559 / 81	597 / 317 / 161	540 / 442 / 145	476 / 389 / 276	412 / 482 / 224						
		2	495 / 495 / 90	396 / 603 / 72	578 / 406 / 156	472 / 508 / 127	453 / 409 / 263	384 / 510 / 215	465 / 525 / 85	376 / 644 / 69	549 / 435 / 148	443 / 537 / 120	431 / 438 / 250	372 / 539 / 202						
		3	416 / 586 / 76	337 / 719 / 61	453 / 529 / 122	366 / 650 / 99	333 / 557 / 193	282 / 691 / 158	396 / 628 / 72	317 / 760 / 58	424 / 558 / 114	347 / 692 / 94	318 / 598 / 184	275 / 733 / 149						
	60	1	669 / 206 / 117	551 / 519 / 96	662 / 262 / 175	662 / 406 / 175	561 / 345 / 324	481 / 453 / 278	645 / 448 / 113	528 / 559 / 92	662 / 297 / 175	639 / 442 / 169	561 / 389 / 324	465 / 482 / 263						
		2	587 / 495 / 103	469 / 603 / 82	662 / 393 / 175	560 / 508 / 148	535 / 409 / 309	437 / 510 / 252	551 / 525 / 96	446 / 644 / 78	651 / 435 / 172	525 / 537 / 139	508 / 438 / 293	419 / 539 / 237						
		3	493 / 586 / 86	399 / 719 / 70	537 / 529 / 142	434 / 650 / 115	392 / 557 / 227	321 / 691 / 185	469 / 628 / 82	376 / 760 / 66	503 / 558 / 133	411 / 692 / 109	374 / 598 / 216	310 / 733 / 175						
Wind Speed [mph]		190						200												
45	1	467 / 474 / 87	377 / 583 / 70	560 / 368 / 153	464 / 469 / 127	422 / 416 / 241	375 / 508 / 193	440 / 497 / 82	361 / 617 / 67	542 / 398 / 148	442 / 492 / 119	408 / 440 / 229	372 / 541 / 185							
	2	395 / 549 / 74	324 / 682 / 60	472 / 462 / 129	376 / 561 / 103	380 / 465 / 217	336 / 564 / 173	377 / 583 / 70	307 / 715 / 57	446 / 486 / 122	363 / 595 / 98	365 / 489 / 205	332 / 597 / 165							
	3	333 / 649 / 62	270 / 796 / 50	367 / 595 / 100	298 / 730 / 81	275 / 621 / 157	250 / 770 / 129	315 / 682 / 59	262 / 854 / 49	341 / 614 / 93	283 / 763 / 77	265 / 654 / 149	243 / 801 / 121							
	50	1	515 / 474 / 94	416 / 583 / 76	597 / 357 / 161	511 / 469 / 138	453 / 416 / 263	400 / 508 / 211	485 / 497 / 88	396 / 617 / 72	597 / 398 / 161	482 / 492 / 130	437 / 440 / 250	396 / 541 / 202						
		2	436 / 549 / 79	357 / 682 / 65	520 / 462 / 140	415 / 561 / 112	408 / 465 / 237	358 / 564 / 189	416 / 583 / 76	337 / 715 / 61	492 / 486 / 133	395 / 595 / 107	391 / 489 / 224	353 / 597 / 180						
		3	366 / 649 / 67	297 / 796 / 54	405 / 595 / 109	328 / 730 / 89	295 / 621 / 171	267 / 770 / 141	347 / 682 / 63	287 / 854 / 52	376 / 614 / 101	309 / 763 / 83	284 / 654 / 163	258 / 801 / 132						
	60	1	610 / 474 / 107	493 / 583 / 86	662 / 334 / 175	605 / 469 / 160	535 / 416 / 309	450 / 508 / 247	575 / 497 / 101	469 / 617 / 82	662 / 372 / 175	571 / 492 / 151	508 / 440 / 293	444 / 541 / 237						
		2	516 / 549 / 90	423 / 682 / 74	617 / 462 / 163	491 / 561 / 130	481 / 465 / 278	403 / 564 / 221	493 / 583 / 86	399 / 715 / 70	582 / 486 / 154	468 / 595 / 124	454 / 489 / 263	395 / 597 / 211						
		3	434 / 649 / 76	352 / 796 / 62	480 / 595 / 127	388 / 730 / 103	348 / 621 / 201	300 / 770 / 165	411 / 682 / 72	340 / 854 / 60	446 / 614 / 118	366 / 763 / 97	330 / 654 / 191	289 / 801 / 155						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	70	1	719 / 101 / 122	719 / 112 / 122	713 / 103 / 185	713 / 145 / 185	627 / 127 / 362	627 / 201 / 362	719 / 101 / 122	719 / 124 / 122	713 / 103 / 185	713 / 160 / 185	627 / 140 / 362	627 / 222 / 362	719 / 101 / 122	719 / 138 / 122	713 / 110 / 185	713 / 177 / 185	627 / 155 / 362	627 / 244 / 362
2		719 / 207 / 122	719 / 321 / 122	713 / 140 / 185	713 / 221 / 185	627 / 161 / 362	627 / 253 / 362	719 / 228 / 122	719 / 353 / 122	713 / 155 / 185	713 / 244 / 185	627 / 178 / 362	627 / 278 / 362	719 / 250 / 122	719 / 387 / 122	713 / 171 / 185	713 / 267 / 185	627 / 196 / 362	627 / 305 / 362	
3		719 / 296 / 122	719 / 456 / 122	713 / 241 / 185	713 / 373 / 185	627 / 310 / 362	576 / 438 / 333	719 / 326 / 122	692 / 482 / 117	713 / 266 / 185	713 / 410 / 185	627 / 341 / 362	556 / 463 / 321	719 / 357 / 122	665 / 506 / 113	713 / 292 / 185	713 / 449 / 185	627 / 373 / 362	525 / 478 / 303	
80		1	770 / 95 / 128	770 / 106 / 128	764 / 98 / 197	764 / 137 / 197	677 / 120 / 391	677 / 191 / 391	770 / 95 / 128	770 / 117 / 128	764 / 98 / 197	764 / 152 / 197	677 / 134 / 391	677 / 211 / 391	770 / 95 / 128	770 / 130 / 128	764 / 104 / 197	764 / 167 / 197	677 / 147 / 391	677 / 232 / 391
		2	770 / 195 / 128	770 / 303 / 128	764 / 132 / 197	764 / 209 / 197	677 / 153 / 391	677 / 240 / 391	770 / 215 / 128	770 / 333 / 128	764 / 146 / 197	764 / 230 / 197	677 / 169 / 391	677 / 265 / 391	770 / 236 / 128	770 / 365 / 128	764 / 161 / 197	764 / 253 / 197	677 / 186 / 391	677 / 290 / 391
		3	770 / 280 / 128	770 / 430 / 128	764 / 228 / 197	764 / 353 / 197	677 / 295 / 391	653 / 438 / 377	770 / 308 / 128	770 / 472 / 128	764 / 251 / 197	764 / 388 / 197	677 / 324 / 391	630 / 463 / 364	770 / 337 / 128	755 / 506 / 125	764 / 275 / 197	764 / 424 / 197	677 / 355 / 391	595 / 478 / 344
90		1	810 / 90 / 132	810 / 99 / 132	805 / 92 / 205	805 / 129 / 205	717 / 114 / 414	717 / 181 / 414	810 / 90 / 132	810 / 110 / 132	805 / 92 / 205	805 / 143 / 205	717 / 127 / 414	717 / 200 / 414	810 / 90 / 132	810 / 122 / 132	805 / 98 / 205	805 / 157 / 205	717 / 140 / 414	717 / 220 / 414
		2	810 / 183 / 132	810 / 285 / 132	805 / 124 / 205	805 / 197 / 205	717 / 145 / 414	717 / 228 / 414	810 / 202 / 132	810 / 313 / 132	805 / 138 / 205	805 / 217 / 205	717 / 161 / 414	717 / 251 / 414	810 / 222 / 132	810 / 343 / 132	805 / 152 / 205	805 / 238 / 205	717 / 177 / 414	717 / 275 / 414
		3	810 / 263 / 132	810 / 404 / 132	805 / 215 / 205	805 / 332 / 205	717 / 280 / 414	717 / 430 / 414	810 / 289 / 132	810 / 444 / 132	805 / 236 / 205	805 / 365 / 205	717 / 308 / 414	704 / 463 / 407	810 / 317 / 132	810 / 485 / 132	805 / 259 / 205	805 / 399 / 205	717 / 337 / 414	665 / 478 / 384
Wind Speed [mph]		110						115												
70	1	719 / 101 / 122	719 / 151 / 122	713 / 122 / 185	713 / 194 / 185	627 / 170 / 362	627 / 266 / 362	719 / 103 / 122	719 / 165 / 122	713 / 133 / 185	713 / 211 / 185	627 / 186 / 362	627 / 290 / 362							
	2	719 / 274 / 122	719 / 422 / 122	713 / 187 / 185	713 / 292 / 185	627 / 215 / 362	627 / 333 / 362	719 / 298 / 122	719 / 458 / 122	713 / 204 / 185	713 / 318 / 185	627 / 234 / 362	627 / 362 / 362							
	3	719 / 389 / 122	638 / 528 / 108	713 / 318 / 185	687 / 471 / 179	627 / 407 / 362	504 / 500 / 291	719 / 423 / 122	610 / 548 / 104	713 / 346 / 185	660 / 491 / 172	597 / 421 / 345	484 / 520 / 279							
	80	1	770 / 95 / 128	770 / 143 / 128	764 / 115 / 197	764 / 183 / 197	677 / 162 / 391	677 / 253 / 391	770 / 97 / 128	770 / 156 / 128	764 / 126 / 197	764 / 200 / 197	677 / 177 / 391	677 / 276 / 391						
		2	770 / 258 / 128	770 / 398 / 128	764 / 177 / 197	764 / 276 / 197	677 / 204 / 391	677 / 317 / 391	770 / 281 / 128	770 / 432 / 128	764 / 193 / 197	764 / 300 / 197	677 / 222 / 391	677 / 344 / 391						
		3	770 / 367 / 128	724 / 528 / 120	764 / 301 / 197	764 / 462 / 197	677 / 387 / 391	572 / 500 / 330	770 / 399 / 128	693 / 548 / 115	764 / 327 / 197	749 / 491 / 193	677 / 421 / 391	548 / 520 / 317						
	90	1	810 / 90 / 132	810 / 134 / 132	805 / 108 / 205	805 / 172 / 205	717 / 153 / 414	717 / 240 / 414	810 / 91 / 132	810 / 147 / 132	805 / 119 / 205	805 / 188 / 205	717 / 168 / 414	717 / 261 / 414						
		2	810 / 243 / 132	810 / 374 / 132	805 / 166 / 205	805 / 260 / 205	717 / 193 / 414	717 / 300 / 414	810 / 264 / 132	810 / 406 / 132	805 / 182 / 205	805 / 283 / 205	717 / 211 / 414	717 / 327 / 414						
		3	810 / 345 / 132	810 / 528 / 132	805 / 283 / 205	805 / 435 / 205	717 / 367 / 414	639 / 500 / 369	810 / 375 / 132	775 / 548 / 126	805 / 308 / 205	805 / 472 / 205	717 / 399 / 414	613 / 520 / 354						
Wind Speed [mph]		120						130												
70	1	719 / 113 / 122	719 / 180 / 122	713 / 146 / 185	713 / 230 / 185	627 / 202 / 362	627 / 314 / 362	719 / 103 / 122	719 / 165 / 122	713 / 133 / 185	713 / 211 / 185	627 / 186 / 362	627 / 290 / 362							
	2	719 / 323 / 122	692 / 477 / 117	713 / 222 / 185	713 / 345 / 185	627 / 254 / 362	627 / 392 / 362	719 / 298 / 122	719 / 458 / 122	713 / 204 / 185	713 / 318 / 185	627 / 234 / 362	627 / 362 / 362							
	3	719 / 458 / 122	583 / 567 / 99	713 / 375 / 185	634 / 510 / 165	576 / 440 / 333	463 / 538 / 268	719 / 423 / 122	610 / 548 / 104	713 / 346 / 185	660 / 491 / 172	597 / 421 / 345	484 / 520 / 279							
	80	1	770 / 106 / 128	770 / 170 / 128	764 / 138 / 197	764 / 217 / 197	677 / 192 / 391	677 / 299 / 391	770 / 97 / 128	770 / 156 / 128	764 / 126 / 197	764 / 200 / 197	677 / 177 / 391	677 / 276 / 391						
		2	770 / 305 / 128	770 / 467 / 128	764 / 210 / 197	764 / 325 / 197	677 / 242 / 391	677 / 373 / 391	770 / 281 / 128	770 / 432 / 128	764 / 193 / 197	764 / 300 / 197	677 / 222 / 391	677 / 344 / 391						
		3	770 / 432 / 128	662 / 567 / 110	764 / 354 / 197	719 / 510 / 185	653 / 440 / 377	525 / 538 / 303	770 / 399 / 128	693 / 548 / 115	764 / 327 / 197	749 / 491 / 193	677 / 421 / 391	548 / 520 / 317						
	90	1	810 / 100 / 132	810 / 160 / 132	805 / 129 / 205	805 / 204 / 205	717 / 182 / 414	717 / 284 / 414	810 / 91 / 132	810 / 147 / 132	805 / 119 / 205	805 / 188 / 205	717 / 168 / 414	717 / 261 / 414						
		2	810 / 286 / 132	810 / 439 / 132	805 / 197 / 205	805 / 306 / 205	717 / 229 / 414	717 / 354 / 414	810 / 264 / 132	810 / 406 / 132	805 / 182 / 205	805 / 283 / 205	717 / 211 / 414	717 / 327 / 414						
		3	810 / 406 / 132	741 / 567 / 121	805 / 333 / 205	805 / 510 / 205	717 / 432 / 414	587 / 538 / 339	810 / 375 / 132	775 / 548 / 126	805 / 308 / 205	805 / 472 / 205	717 / 399 / 414	613 / 520 / 354						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	70	1	719 / 123 / 122	719 / 195 / 122	713 / 158 / 185	713 / 249 / 185	627 / 219 / 362	627 / 340 / 362	719 / 144 / 122	719 / 228 / 122	713 / 185 / 185	713 / 289 / 185	627 / 255 / 362	627 / 394 / 362	719 / 167 / 122	678 / 486 / 115	713 / 214 / 185	713 / 332 / 185	627 / 293 / 362	597 / 429 / 345															
2		719 / 349 / 122	665 / 494 / 113	713 / 241 / 185	713 / 372 / 185	627 / 275 / 362	617 / 417 / 357	719 / 404 / 122	624 / 536 / 106	713 / 280 / 185	713 / 431 / 185	627 / 319 / 362	566 / 441 / 327	719 / 463 / 122	583 / 572 / 99	713 / 321 / 185	687 / 475 / 179	627 / 366 / 362	535 / 478 / 309																
3		692 / 476 / 117	570 / 597 / 97	713 / 405 / 185	607 / 527 / 158	556 / 457 / 321	453 / 567 / 262	651 / 517 / 111	529 / 638 / 90	700 / 460 / 182	568 / 569 / 148	514 / 489 / 297	422 / 609 / 244	610 / 554 / 104	488 / 673 / 83	660 / 496 / 172	528 / 604 / 138	484 / 525 / 279	391 / 644 / 226																
80		1	770 / 116 / 128	770 / 184 / 128	764 / 150 / 197	764 / 235 / 197	677 / 208 / 391	677 / 323 / 391	770 / 136 / 128	770 / 215 / 128	764 / 175 / 197	764 / 273 / 197	677 / 242 / 391	677 / 374 / 391	770 / 158 / 128	770 / 247 / 128	764 / 202 / 197	764 / 313 / 197	677 / 279 / 391	677 / 429 / 391															
		2	770 / 329 / 128	755 / 494 / 125	764 / 227 / 197	764 / 352 / 197	677 / 261 / 391	677 / 403 / 391	770 / 381 / 128	708 / 536 / 117	764 / 264 / 197	764 / 407 / 197	677 / 303 / 391	642 / 441 / 371	770 / 436 / 128	662 / 572 / 110	764 / 303 / 197	764 / 466 / 197	677 / 348 / 391	607 / 478 / 350															
		3	770 / 466 / 128	647 / 597 / 107	764 / 383 / 197	689 / 527 / 177	630 / 457 / 364	513 / 567 / 297	739 / 517 / 123	601 / 638 / 100	764 / 442 / 197	644 / 569 / 166	583 / 489 / 337	478 / 609 / 276	693 / 554 / 115	554 / 673 / 92	749 / 496 / 193	599 / 604 / 154	548 / 525 / 317	443 / 644 / 256															
90		1	810 / 109 / 132	810 / 173 / 132	805 / 141 / 205	805 / 221 / 205	717 / 198 / 414	717 / 307 / 414	810 / 128 / 132	810 / 202 / 132	805 / 165 / 205	805 / 257 / 205	717 / 230 / 414	717 / 355 / 414	810 / 148 / 132	810 / 233 / 132	805 / 190 / 205	805 / 295 / 205	717 / 264 / 414	717 / 407 / 414															
		2	810 / 309 / 132	810 / 474 / 132	805 / 214 / 205	805 / 331 / 205	717 / 248 / 414	717 / 382 / 414	810 / 358 / 132	793 / 536 / 129	805 / 249 / 205	805 / 383 / 205	717 / 288 / 414	717 / 441 / 414	810 / 410 / 132	741 / 572 / 121	805 / 286 / 205	805 / 438 / 205	717 / 330 / 414	678 / 478 / 392															
		3	810 / 438 / 132	724 / 597 / 118	805 / 360 / 205	771 / 527 / 197	704 / 457 / 407	574 / 567 / 332	810 / 506 / 132	672 / 638 / 109	805 / 416 / 205	721 / 569 / 184	652 / 489 / 377	535 / 609 / 309	775 / 554 / 126	620 / 673 / 101	805 / 477 / 205	671 / 604 / 171	613 / 525 / 354	496 / 644 / 286															
Wind Speed [mph]		170						180																											
70	1	719 / 192 / 122	638 / 519 / 108	713 / 244 / 185	713 / 378 / 185	627 / 334 / 362	556 / 453 / 321	719 / 218 / 122	610 / 559 / 104	713 / 276 / 185	713 / 426 / 185	627 / 377 / 362	525 / 482 / 303	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	678 / 495 / 115	543 / 603 / 92	713 / 365 / 185	647 / 508 / 168	617 / 409 / 357	504 / 510 / 291	638 / 525 / 108	516 / 644 / 88	713 / 413 / 185	607 / 537 / 158	586 / 438 / 339	473 / 539 / 273																							
3	570 / 586 / 97	461 / 719 / 78	621 / 529 / 162	502 / 650 / 131	453 / 557 / 262	371 / 691 / 214	543 / 628 / 92	434 / 760 / 74	581 / 558 / 151	475 / 692 / 124	432 / 598 / 250	350 / 733 / 202																							
80	1	770 / 181 / 128	724 / 519 / 120	764 / 231 / 197	764 / 357 / 197	677 / 317 / 391	630 / 453 / 364	770 / 205 / 128	693 / 559 / 115	764 / 261 / 197	764 / 402 / 197	677 / 358 / 391	595 / 482 / 344																						
	2	770 / 495 / 128	616 / 603 / 102	764 / 345 / 197	734 / 508 / 189	677 / 396 / 391	572 / 510 / 330	724 / 525 / 120	585 / 644 / 97	764 / 390 / 197	689 / 537 / 177	665 / 438 / 384	537 / 539 / 310																						
	3	647 / 586 / 107	524 / 719 / 87	704 / 529 / 181	570 / 650 / 147	513 / 557 / 297	420 / 691 / 243	616 / 628 / 102	493 / 760 / 82	659 / 558 / 170	540 / 692 / 139	490 / 598 / 283	397 / 733 / 229																						
90	1	810 / 170 / 132	810 / 265 / 132	805 / 217 / 205	805 / 336 / 205	717 / 301 / 414	704 / 453 / 407	810 / 193 / 132	775 / 559 / 126	805 / 246 / 205	805 / 379 / 205	717 / 340 / 414	665 / 482 / 384																						
	2	810 / 466 / 132	689 / 603 / 112	805 / 325 / 205	805 / 497 / 205	717 / 375 / 414	639 / 510 / 369	810 / 525 / 132	655 / 644 / 107	805 / 367 / 205	771 / 537 / 197	717 / 423 / 414	600 / 539 / 347																						
	3	724 / 586 / 118	586 / 719 / 95	788 / 529 / 201	637 / 650 / 162	574 / 557 / 332	470 / 691 / 271	689 / 628 / 112	552 / 760 / 90	738 / 558 / 188	604 / 692 / 154	548 / 598 / 317	444 / 733 / 256																						
Wind Speed [mph]		190						200																											
70	1	705 / 474 / 120	570 / 583 / 97	713 / 311 / 185	700 / 469 / 182	617 / 416 / 357	499 / 508 / 285	665 / 497 / 113	543 / 617 / 92	713 / 347 / 185	660 / 492 / 172	586 / 440 / 339	491 / 541 / 273																						
	2	597 / 549 / 101	488 / 682 / 83	713 / 462 / 185	568 / 561 / 148	556 / 465 / 321	447 / 564 / 256	570 / 583 / 97	461 / 715 / 78	673 / 486 / 175	541 / 595 / 141	525 / 489 / 303	438 / 597 / 244																						
	3	502 / 649 / 85	407 / 796 / 69	555 / 595 / 144	449 / 730 / 117	401 / 621 / 232	333 / 770 / 190	475 / 682 / 81	394 / 854 / 67	515 / 614 / 134	423 / 763 / 110	381 / 654 / 220	320 / 801 / 179																						
	80	1	770 / 231 / 128	647 / 583 / 107	764 / 293 / 197	764 / 451 / 197	677 / 402 / 391	560 / 508 / 324	755 / 497 / 125	616 / 617 / 102	764 / 327 / 197	749 / 492 / 193	665 / 440 / 384	539 / 541 / 310																					
		2	678 / 549 / 112	554 / 682 / 92	764 / 437 / 197	644 / 561 / 166	630 / 465 / 364	502 / 564 / 290	647 / 583 / 107	524 / 715 / 87	764 / 486 / 197	614 / 595 / 158	595 / 489 / 344	480 / 597 / 276																					
		3	570 / 649 / 95	462 / 796 / 77	629 / 595 / 162	510 / 730 / 131	455 / 621 / 263	374 / 770 / 216	539 / 682 / 90	447 / 854 / 74	585 / 614 / 150	480 / 763 / 124	432 / 654 / 250	351 / 801 / 202																					
	90	1	810 / 217 / 132	724 / 583 / 118	805 / 276 / 205	805 / 424 / 205	717 / 381 / 414	626 / 508 / 362	810 / 243 / 132	689 / 617 / 112	805 / 308 / 205	805 / 472 / 205	717 / 424 / 414	600 / 541 / 347																					
		2	758 / 549 / 123	620 / 682 / 101	805 / 411 / 205	721 / 561 / 184	704 / 465 / 407	561 / 564 / 324	724 / 583 / 118	586 / 715 / 95	805 / 457 / 205	688 / 595 / 175	665 / 489 / 384	535 / 597 / 309																					
		3	638 / 649 / 104	517 / 796 / 84	704 / 595 / 180	570 / 730 / 145	509 / 621 / 294	418 / 770 / 241	603 / 682 / 98	500 / 854 / 82	654 / 614 / 167	537 / 763 / 137	483 / 654 / 279	392 / 801 / 226																					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	1	858 / 86 / 138	858 / 95 / 138	853 / 88 / 216	853 / 123 / 216	750 / 108 / 433	750 / 172 / 433	858 / 86 / 138	858 / 106 / 138	853 / 88 / 216	853 / 137 / 216	750 / 120 / 433	750 / 189 / 433	858 / 86 / 138	858 / 117 / 138	853 / 94 / 216	853 / 151 / 216	750 / 132 / 433	750 / 208 / 433	
	100	2	858 / 176 / 138	858 / 273 / 138	853 / 119 / 216	853 / 188 / 216	750 / 137 / 433	750 / 216 / 433	858 / 194 / 138	858 / 300 / 138	853 / 132 / 216	853 / 208 / 216	750 / 152 / 433	750 / 237 / 433	858 / 213 / 138	858 / 328 / 138	853 / 145 / 216	853 / 228 / 216	750 / 167 / 433	750 / 260 / 433
	3	858 / 252 / 138	858 / 387 / 138	853 / 206 / 216	853 / 318 / 216	750 / 265 / 433	750 / 406 / 433	858 / 277 / 138	858 / 425 / 138	853 / 227 / 216	853 / 350 / 216	750 / 291 / 433	750 / 446 / 433	858 / 303 / 138	858 / 464 / 138	853 / 248 / 216	853 / 382 / 216	750 / 318 / 433	736 / 478 / 425	
Wind Speed [mph]		110				115														
Exposure Category : B	1	858 / 86 / 138	858 / 128 / 138	853 / 104 / 216	853 / 165 / 216	750 / 145 / 433	750 / 227 / 433	858 / 87 / 138	858 / 140 / 138	853 / 114 / 216	853 / 180 / 216	750 / 158 / 433	750 / 247 / 433							
	100	2	858 / 232 / 138	858 / 358 / 138	853 / 159 / 216	853 / 249 / 216	750 / 183 / 433	750 / 284 / 433	858 / 253 / 138	858 / 389 / 138	853 / 174 / 216	853 / 271 / 216	750 / 199 / 433	750 / 309 / 433						
	3	858 / 331 / 138	858 / 506 / 138	853 / 271 / 216	853 / 417 / 216	750 / 347 / 433	707 / 500 / 408	858 / 359 / 138	858 / 548 / 138	853 / 295 / 216	853 / 452 / 216	750 / 377 / 433	678 / 520 / 392							
	Wind Speed [mph]		120				130													
Exposure Category : B	1	858 / 96 / 138	858 / 153 / 138	853 / 124 / 216	853 / 196 / 216	750 / 172 / 433	750 / 268 / 433	858 / 87 / 138	858 / 140 / 138	853 / 114 / 216	853 / 180 / 216	750 / 158 / 433	750 / 247 / 433							
	100	2	858 / 274 / 138	858 / 421 / 138	853 / 189 / 216	853 / 294 / 216	750 / 217 / 433	750 / 334 / 433	858 / 253 / 138	858 / 389 / 138	853 / 174 / 216	853 / 271 / 216	750 / 199 / 433	750 / 309 / 433						
	3	858 / 389 / 138	820 / 567 / 131	853 / 320 / 216	853 / 489 / 216	750 / 408 / 433	649 / 538 / 375	858 / 359 / 138	858 / 548 / 138	853 / 295 / 216	853 / 452 / 216	750 / 377 / 433	678 / 520 / 392							

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		140				150				160										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	100	1	858 / 104 / 138	858 / 166 / 138	853 / 135 / 216	853 / 212 / 216	750 / 187 / 433	750 / 290 / 433	858 / 123 / 138	858 / 193 / 138	853 / 158 / 216	853 / 246 / 216	750 / 217 / 433	750 / 336 / 433	858 / 142 / 138	858 / 223 / 138	853 / 182 / 216	853 / 283 / 216	750 / 250 / 433	750 / 384 / 433
		2	858 / 296 / 138	858 / 454 / 138	853 / 205 / 216	853 / 317 / 216	750 / 234 / 433	750 / 361 / 433	858 / 343 / 138	858 / 524 / 138	853 / 238 / 216	853 / 367 / 216	750 / 272 / 433	750 / 417 / 433	858 / 393 / 138	820 / 572 / 131	853 / 274 / 216	853 / 420 / 216	750 / 312 / 433	750 / 478 / 433
		3	858 / 420 / 138	801 / 597 / 128	853 / 345 / 216	853 / 527 / 216	750 / 440 / 433	635 / 567 / 367	858 / 485 / 138	744 / 638 / 119	853 / 399 / 216	798 / 569 / 202	721 / 489 / 417	591 / 609 / 342	858 / 554 / 138	686 / 673 / 110	853 / 457 / 216	742 / 604 / 188	678 / 525 / 392	548 / 644 / 317
Wind Speed [mph]		170				180														
	100	1	858 / 163 / 138	858 / 254 / 138	853 / 208 / 216	853 / 322 / 216	750 / 285 / 433	750 / 436 / 433	858 / 185 / 138	858 / 287 / 138	853 / 236 / 216	853 / 363 / 216	750 / 321 / 433	736 / 482 / 425						
		2	858 / 446 / 138	763 / 603 / 122	853 / 311 / 216	853 / 477 / 216	750 / 355 / 433	707 / 510 / 408	858 / 502 / 138	725 / 644 / 116	853 / 351 / 216	853 / 537 / 216	750 / 400 / 433	663 / 539 / 383						
		3	801 / 586 / 128	648 / 719 / 104	853 / 518 / 216	705 / 650 / 178	635 / 557 / 367	519 / 691 / 300	763 / 628 / 122	610 / 760 / 98	816 / 558 / 206	668 / 692 / 169	606 / 598 / 350	491 / 733 / 283						
Wind Speed [mph]		190				200														
	100	1	858 / 208 / 138	801 / 583 / 128	853 / 265 / 216	853 / 407 / 216	750 / 360 / 433	692 / 508 / 400	858 / 233 / 138	763 / 617 / 122	853 / 295 / 216	853 / 453 / 216	750 / 401 / 433	663 / 541 / 383						
		2	839 / 549 / 134	686 / 682 / 110	853 / 394 / 216	798 / 561 / 202	750 / 448 / 433	620 / 564 / 358	801 / 583 / 128	648 / 715 / 104	853 / 438 / 216	761 / 595 / 192	736 / 489 / 425	591 / 597 / 342						
		3	705 / 649 / 113	572 / 796 / 92	779 / 595 / 197	631 / 730 / 160	563 / 621 / 325	462 / 770 / 267	667 / 682 / 107	553 / 854 / 89	724 / 614 / 183	594 / 763 / 150	534 / 654 / 308	433 / 801 / 250						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the e dges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	0	1	230 / 304 / 41	193 / 396 / 34	254 / 205 / 52	232 / 298 / 47	247 / 253 / 67	211 / 338 / 57	224 / 326 / 40	184 / 415 / 33	254 / 228 / 52	226 / 320 / 46	238 / 270 / 64	205 / 362 / 55	218 / 348 / 39	175 / 431 / 31	254 / 251 / 52	217 / 337 / 44	232 / 289 / 63	196 / 379 / 53
2		203 / 372 / 36	163 / 459 / 29	235 / 292 / 48	199 / 383 / 41	229 / 296 / 62	193 / 387 / 52	193 / 390 / 34	157 / 485 / 28	226 / 309 / 46	190 / 402 / 39	220 / 313 / 59	184 / 405 / 50	184 / 407 / 33	151 / 509 / 27	220 / 331 / 45	181 / 419 / 37	214 / 334 / 58	175 / 422 / 48	
3		172 / 448 / 31	138 / 550 / 25	190 / 398 / 39	153 / 493 / 31	172 / 422 / 47	140 / 521 / 38	163 / 466 / 29	132 / 576 / 24	181 / 417 / 37	147 / 519 / 30	167 / 447 / 45	134 / 547 / 36	157 / 490 / 28	126 / 600 / 22	174 / 441 / 36	141 / 543 / 29	158 / 462 / 43	128 / 571 / 35	
5		1	255 / 304 / 41	214 / 396 / 34	275 / 203 / 54	255 / 298 / 50	247 / 253 / 82	211 / 338 / 71	248 / 326 / 40	204 / 415 / 33	275 / 225 / 54	249 / 320 / 49	238 / 270 / 79	205 / 362 / 69	241 / 348 / 39	194 / 431 / 31	275 / 248 / 54	238 / 337 / 47	232 / 289 / 77	196 / 379 / 66
		2	224 / 372 / 36	180 / 459 / 29	259 / 292 / 51	218 / 383 / 43	229 / 296 / 77	193 / 387 / 65	214 / 390 / 34	173 / 485 / 28	249 / 309 / 49	208 / 402 / 41	220 / 313 / 74	184 / 405 / 62	204 / 407 / 33	166 / 509 / 27	242 / 331 / 47	198 / 419 / 39	214 / 334 / 72	175 / 422 / 59
		3	190 / 448 / 31	153 / 550 / 25	208 / 398 / 41	168 / 493 / 33	172 / 422 / 58	140 / 521 / 47	180 / 466 / 29	146 / 576 / 24	198 / 417 / 39	161 / 519 / 32	167 / 447 / 56	134 / 547 / 45	173 / 490 / 28	139 / 600 / 22	192 / 441 / 38	155 / 543 / 30	158 / 462 / 53	128 / 571 / 43
10		1	323 / 304 / 41	271 / 396 / 34	327 / 190 / 63	322 / 298 / 62	281 / 250 / 106	243 / 338 / 92	314 / 326 / 40	258 / 415 / 33	327 / 211 / 63	314 / 320 / 60	274 / 270 / 103	236 / 362 / 89	306 / 348 / 39	245 / 431 / 31	327 / 233 / 63	301 / 337 / 58	267 / 289 / 101	226 / 379 / 85
		2	284 / 372 / 36	228 / 459 / 29	327 / 292 / 63	276 / 383 / 53	263 / 296 / 99	222 / 387 / 84	271 / 390 / 34	220 / 485 / 28	314 / 309 / 60	263 / 402 / 51	253 / 313 / 96	212 / 405 / 80	258 / 407 / 33	211 / 509 / 27	305 / 331 / 59	250 / 419 / 48	246 / 334 / 93	202 / 422 / 76
		3	241 / 448 / 31	194 / 550 / 25	263 / 398 / 51	212 / 493 / 41	199 / 422 / 75	161 / 521 / 61	228 / 466 / 29	185 / 576 / 24	250 / 417 / 48	204 / 519 / 39	192 / 447 / 72	154 / 547 / 58	220 / 490 / 28	177 / 600 / 22	242 / 441 / 46	195 / 543 / 38	181 / 462 / 69	147 / 571 / 56
Wind Speed [mph]		110						115												
0	1	209 / 364 / 37	169 / 454 / 30	245 / 265 / 50	211 / 358 / 43	223 / 304 / 60	187 / 394 / 51	199 / 379 / 35	163 / 475 / 29	239 / 283 / 49	202 / 373 / 41	217 / 322 / 59	178 / 408 / 48							
	2	178 / 429 / 32	144 / 532 / 26	214 / 351 / 44	174 / 441 / 36	208 / 355 / 56	167 / 436 / 45	169 / 442 / 30	138 / 552 / 25	205 / 366 / 42	165 / 454 / 34	199 / 370 / 54	161 / 457 / 44							
	3	151 / 512 / 27	120 / 620 / 21	165 / 455 / 34	135 / 565 / 28	152 / 484 / 41	122 / 592 / 33	144 / 533 / 26	117 / 655 / 21	159 / 475 / 33	129 / 585 / 26	146 / 505 / 40	119 / 625 / 32							
	5	1	231 / 364 / 37	187 / 454 / 30	269 / 265 / 53	232 / 358 / 45	223 / 304 / 75	187 / 394 / 63	221 / 379 / 35	180 / 475 / 29	262 / 283 / 51	222 / 373 / 43	217 / 322 / 73	178 / 408 / 60						
		2	197 / 429 / 32	160 / 532 / 26	235 / 351 / 46	192 / 441 / 38	208 / 355 / 70	167 / 436 / 56	187 / 442 / 30	153 / 552 / 25	225 / 366 / 44	182 / 454 / 36	199 / 370 / 67	161 / 457 / 54						
		3	166 / 512 / 27	133 / 620 / 21	182 / 455 / 36	148 / 565 / 29	152 / 484 / 51	122 / 592 / 41	160 / 533 / 26	129 / 655 / 21	175 / 475 / 34	141 / 585 / 28	146 / 505 / 49	119 / 625 / 40						
	10	1	293 / 364 / 37	237 / 454 / 30	327 / 255 / 63	293 / 358 / 56	257 / 304 / 97	216 / 394 / 81	280 / 379 / 35	228 / 475 / 29	327 / 279 / 63	280 / 373 / 54	250 / 322 / 94	205 / 408 / 78						
		2	250 / 429 / 32	202 / 532 / 26	297 / 351 / 57	242 / 441 / 46	240 / 355 / 90	192 / 436 / 72	237 / 442 / 30	194 / 552 / 25	284 / 366 / 55	229 / 454 / 44	229 / 370 / 87	185 / 457 / 70						
		3	211 / 512 / 27	168 / 620 / 21	229 / 455 / 44	187 / 565 / 36	175 / 484 / 66	141 / 592 / 53	202 / 533 / 26	164 / 655 / 21	221 / 475 / 42	178 / 585 / 34	168 / 505 / 63	137 / 625 / 52						
Wind Speed [mph]		120						130												
0	1	193 / 398 / 34	154 / 485 / 27	232 / 299 / 47	196 / 392 / 40	211 / 340 / 57	175 / 427 / 47	199 / 379 / 35	163 / 475 / 29	239 / 283 / 49	202 / 373 / 41	217 / 322 / 59	178 / 408 / 48							
	2	163 / 461 / 29	132 / 570 / 24	199 / 385 / 41	159 / 473 / 33	190 / 383 / 51	157 / 476 / 42	169 / 442 / 30	138 / 552 / 25	205 / 366 / 42	165 / 454 / 34	199 / 370 / 54	161 / 457 / 44							
	3	138 / 552 / 25	111 / 670 / 20	153 / 495 / 31	123 / 602 / 25	140 / 523 / 38	115 / 642 / 31	144 / 533 / 26	117 / 655 / 21	159 / 475 / 33	129 / 585 / 26	146 / 505 / 40	119 / 625 / 32							
	5	1	214 / 398 / 34	170 / 485 / 27	255 / 299 / 50	215 / 392 / 42	211 / 340 / 71	175 / 427 / 58	221 / 379 / 35	180 / 475 / 29	262 / 283 / 51	222 / 373 / 43	217 / 322 / 73	178 / 408 / 60						
		2	180 / 461 / 29	146 / 570 / 24	218 / 385 / 43	175 / 473 / 34	190 / 383 / 64	157 / 476 / 52	187 / 442 / 30	153 / 552 / 25	225 / 366 / 44	182 / 454 / 36	199 / 370 / 67	161 / 457 / 54						
		3	153 / 552 / 25	122 / 670 / 20	168 / 495 / 33	135 / 602 / 27	140 / 523 / 47	115 / 642 / 38	160 / 533 / 26	129 / 655 / 21	175 / 475 / 34	141 / 585 / 28	146 / 505 / 49	119 / 625 / 40						
	10	1	271 / 398 / 34	215 / 485 / 27	322 / 299 / 62	272 / 392 / 52	243 / 340 / 92	201 / 427 / 75	280 / 379 / 35	228 / 475 / 29	327 / 279 / 63	280 / 373 / 54	250 / 322 / 94	205 / 408 / 78						
		2	228 / 461 / 29	185 / 570 / 24	276 / 385 / 53	221 / 473 / 42	219 / 383 / 83	180 / 476 / 67	237 / 442 / 30	194 / 552 / 25	284 / 366 / 55	229 / 454 / 44	229 / 370 / 87	185 / 457 / 70						
		3	194 / 552 / 25	155 / 670 / 20	212 / 495 / 41	170 / 602 / 33	161 / 523 / 61	132 / 642 / 49	202 / 533 / 26	164 / 655 / 21	221 / 475 / 42	178 / 585 / 34	168 / 505 / 63	137 / 625 / 52						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	0	1	184 / 409 / 33	151 / 512 / 27	226 / 316 / 46	187 / 404 / 38	205 / 357 / 55	179 / 445 / 45	172 / 442 / 31	138 / 543 / 25	214 / 347 / 44	174 / 437 / 36	190 / 384 / 51	186 / 477 / 42	160 / 470 / 28	136 / 579 / 23	202 / 377 / 41	171 / 465 / 33	178 / 412 / 48	191 / 504 / 39
2		157 / 479 / 28	126 / 586 / 22	190 / 397 / 39	153 / 491 / 31	184 / 400 / 50	160 / 494 / 40	147 / 520 / 26	120 / 642 / 21	177 / 430 / 36	144 / 533 / 30	172 / 433 / 47	168 / 535 / 38	138 / 558 / 25	117 / 677 / 20	165 / 459 / 34	142 / 570 / 28	161 / 462 / 44	171 / 559 / 35	
3		132 / 569 / 24	108 / 702 / 19	147 / 512 / 30	120 / 633 / 25	134 / 540 / 36	119 / 673 / 30	123 / 610 / 22	102 / 762 / 18	138 / 554 / 28	110 / 673 / 23	125 / 581 / 34	122 / 712 / 28	117 / 662 / 21	98 / 790 / 17	129 / 591 / 26	110 / 725 / 22	116 / 616 / 32	128 / 764 / 26	
5		1	204 / 409 / 33	166 / 512 / 27	249 / 316 / 49	205 / 404 / 40	205 / 357 / 69	179 / 445 / 56	190 / 442 / 31	153 / 543 / 25	235 / 347 / 46	192 / 437 / 38	190 / 384 / 64	186 / 477 / 52	177 / 470 / 28	148 / 579 / 23	222 / 377 / 43	185 / 465 / 35	178 / 412 / 60	191 / 504 / 48
		2	173 / 479 / 28	139 / 586 / 22	208 / 397 / 41	168 / 491 / 33	184 / 400 / 62	160 / 494 / 50	163 / 520 / 26	133 / 642 / 21	195 / 430 / 38	158 / 533 / 31	172 / 433 / 58	168 / 535 / 47	153 / 558 / 25	127 / 677 / 20	182 / 459 / 36	154 / 570 / 29	161 / 462 / 54	171 / 559 / 43
		3	146 / 569 / 24	119 / 702 / 19	161 / 512 / 32	131 / 633 / 26	134 / 540 / 45	119 / 673 / 37	136 / 610 / 22	112 / 762 / 18	151 / 554 / 30	121 / 673 / 24	125 / 581 / 42	122 / 712 / 34	129 / 662 / 21	106 / 790 / 17	141 / 591 / 28	119 / 725 / 23	116 / 616 / 39	128 / 764 / 32
10		1	258 / 409 / 33	211 / 512 / 27	314 / 316 / 60	259 / 404 / 50	236 / 357 / 89	201 / 445 / 72	241 / 442 / 31	194 / 543 / 25	297 / 347 / 57	242 / 437 / 46	219 / 384 / 83	202 / 477 / 67	224 / 470 / 28	186 / 579 / 23	280 / 377 / 54	232 / 465 / 43	205 / 412 / 78	201 / 504 / 62
		2	220 / 479 / 28	177 / 586 / 22	263 / 397 / 51	212 / 491 / 41	212 / 400 / 80	180 / 494 / 65	207 / 520 / 26	168 / 642 / 21	246 / 430 / 47	200 / 533 / 38	199 / 433 / 75	182 / 535 / 61	194 / 558 / 25	160 / 677 / 20	229 / 459 / 44	193 / 570 / 36	185 / 462 / 70	180 / 559 / 56
		3	185 / 569 / 24	151 / 702 / 19	204 / 512 / 39	166 / 633 / 32	154 / 540 / 58	133 / 673 / 48	172 / 610 / 22	142 / 762 / 18	191 / 554 / 37	153 / 673 / 30	144 / 581 / 54	132 / 712 / 44	164 / 662 / 21	133 / 790 / 17	178 / 591 / 34	149 / 725 / 28	134 / 616 / 51	134 / 764 / 42
Wind Speed [mph]		170						180												
0	1	151 / 503 / 27	143 / 625 / 22	190 / 403 / 39	178 / 498 / 31	177 / 437 / 45	199 / 536 / 36	141 / 532 / 25	145 / 650 / 20	177 / 426 / 36	183 / 527 / 30	183 / 466 / 43	210 / 576 / 35							
	2	129 / 590 / 23	122 / 724 / 19	156 / 492 / 32	146 / 602 / 26	158 / 485 / 40	181 / 604 / 33	120 / 616 / 21	125 / 765 / 18	147 / 522 / 30	152 / 644 / 25	166 / 524 / 39	185 / 629 / 31							
	3	108 / 690 / 19	104 / 864 / 16	120 / 622 / 25	114 / 772 / 20	117 / 662 / 30	133 / 810 / 24	102 / 731 / 18	106 / 903 / 15	113 / 663 / 23	117 / 813 / 19	121 / 703 / 28	137 / 849 / 23							
	5	1	166 / 503 / 27	151 / 625 / 22	208 / 403 / 41	187 / 498 / 33	177 / 437 / 56	199 / 536 / 45	156 / 532 / 25	149 / 650 / 20	195 / 426 / 38	188 / 527 / 31	183 / 466 / 53	210 / 576 / 43						
		2	143 / 590 / 23	128 / 724 / 19	171 / 492 / 34	153 / 602 / 27	158 / 485 / 50	181 / 604 / 41	133 / 616 / 21	129 / 765 / 18	161 / 522 / 32	156 / 644 / 26	166 / 524 / 48	185 / 629 / 38						
		3	119 / 690 / 19	110 / 864 / 16	131 / 622 / 26	120 / 772 / 21	117 / 662 / 37	133 / 810 / 30	112 / 731 / 18	109 / 903 / 15	125 / 663 / 25	120 / 813 / 20	121 / 703 / 35	137 / 849 / 28						
	10	1	211 / 503 / 27	187 / 625 / 22	263 / 403 / 51	231 / 498 / 41	199 / 437 / 72	203 / 536 / 58	198 / 532 / 25	183 / 650 / 20	246 / 426 / 47	229 / 527 / 38	201 / 466 / 69	210 / 576 / 56						
		2	181 / 590 / 23	159 / 724 / 19	217 / 492 / 42	189 / 602 / 34	178 / 485 / 65	185 / 604 / 53	168 / 616 / 21	158 / 765 / 18	204 / 522 / 39	190 / 644 / 32	182 / 524 / 62	185 / 629 / 49						
		3	151 / 690 / 19	136 / 864 / 16	166 / 622 / 32	148 / 772 / 26	132 / 662 / 48	135 / 810 / 39	142 / 731 / 18	134 / 903 / 15	157 / 663 / 30	146 / 813 / 25	133 / 703 / 45	137 / 849 / 36						
Wind Speed [mph]		190						200												
0	1	136 / 569 / 24	150 / 687 / 19	170 / 452 / 34	188 / 552 / 28	189 / 492 / 40	220 / 613 / 33	137 / 590 / 22	154 / 719 / 18	174 / 476 / 33	195 / 586 / 26	194 / 515 / 38	223 / 631 / 31							
	2	115 / 653 / 20	128 / 801 / 17	139 / 547 / 28	154 / 664 / 23	170 / 549 / 36	193 / 666 / 29	117 / 686 / 19	135 / 859 / 16	144 / 581 / 27	163 / 717 / 22	177 / 583 / 35	205 / 719 / 28							
	3	96 / 767 / 17	107 / 933 / 14	108 / 701 / 22	120 / 847 / 18	125 / 740 / 27	145 / 913 / 22	101 / 823 / 17	112 / 993 / 13	110 / 733 / 21	126 / 906 / 17	128 / 772 / 25	147 / 938 / 20							
	5	1	150 / 569 / 24	151 / 687 / 19	186 / 452 / 36	188 / 552 / 29	189 / 492 / 50	220 / 613 / 41	148 / 590 / 22	154 / 719 / 18	186 / 476 / 34	195 / 586 / 28	194 / 515 / 47	223 / 631 / 38						
		2	126 / 653 / 20	129 / 801 / 17	152 / 547 / 30	154 / 664 / 24	170 / 549 / 45	193 / 666 / 36	126 / 686 / 19	135 / 859 / 16	154 / 581 / 28	163 / 717 / 23	177 / 583 / 43	205 / 719 / 35						
		3	106 / 767 / 17	108 / 933 / 14	118 / 701 / 23	120 / 847 / 19	125 / 740 / 33	145 / 913 / 27	108 / 823 / 17	112 / 993 / 13	118 / 733 / 22	126 / 906 / 18	128 / 772 / 31	147 / 938 / 25						
	10	1	190 / 569 / 24	182 / 687 / 19	234 / 452 / 45	227 / 552 / 36	202 / 492 / 65	220 / 613 / 53	185 / 590 / 22	182 / 719 / 18	232 / 476 / 42	228 / 586 / 34	202 / 515 / 61	223 / 631 / 49						
		2	160 / 653 / 20	156 / 801 / 17	192 / 547 / 37	185 / 664 / 30	182 / 549 / 58	193 / 666 / 47	158 / 686 / 19	160 / 859 / 16	192 / 581 / 35	190 / 717 / 29	184 / 583 / 56	205 / 719 / 45						
		3	134 / 767 / 17	130 / 933 / 14	149 / 701 / 29	144 / 847 / 23	133 / 740 / 43	145 / 913 / 35	136 / 823 / 17	132 / 993 / 13	147 / 733 / 27	147 / 906 / 22	133 / 772 / 40	147 / 938 / 33						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	380 / 142 / 41	328 / 396 / 35	379 / 183 / 72	379 / 290 / 72	311 / 241 / 126	280 / 338 / 113	380 / 158 / 41	313 / 415 / 34	379 / 203 / 72	379 / 320 / 72	311 / 266 / 126	272 / 362 / 110	370 / 348 / 40	297 / 431 / 32	379 / 224 / 72	364 / 337 / 69	307 / 289 / 124	260 / 379 / 105
2		344 / 372 / 37	276 / 459 / 30	379 / 280 / 72	333 / 383 / 63	303 / 296 / 122	256 / 387 / 103	328 / 390 / 35	266 / 485 / 29	379 / 309 / 72	318 / 402 / 60	291 / 313 / 118	244 / 405 / 99	313 / 407 / 34	256 / 509 / 28	369 / 331 / 70	303 / 419 / 57	284 / 334 / 115	232 / 422 / 94	
3		292 / 448 / 32	235 / 550 / 25	318 / 398 / 60	257 / 493 / 49	229 / 422 / 92	185 / 521 / 75	276 / 466 / 30	224 / 576 / 24	303 / 417 / 57	246 / 519 / 47	221 / 447 / 89	177 / 547 / 72	266 / 490 / 29	214 / 600 / 23	292 / 441 / 55	236 / 543 / 45	209 / 462 / 84	170 / 571 / 69	
20		1	428 / 136 / 43	386 / 396 / 38	421 / 173 / 79	421 / 275 / 79	343 / 235 / 151	316 / 338 / 139	428 / 151 / 43	367 / 415 / 37	421 / 192 / 79	421 / 303 / 79	343 / 260 / 151	307 / 362 / 135	428 / 167 / 43	349 / 431 / 35	421 / 212 / 79	421 / 332 / 79	343 / 285 / 151	294 / 379 / 130
		2	404 / 372 / 40	325 / 459 / 32	421 / 265 / 79	391 / 383 / 73	343 / 296 / 151	290 / 387 / 128	386 / 390 / 38	312 / 485 / 31	421 / 293 / 79	373 / 402 / 70	330 / 313 / 145	276 / 405 / 122	367 / 407 / 37	300 / 509 / 30	421 / 321 / 79	355 / 419 / 67	321 / 334 / 141	263 / 422 / 116
		3	343 / 448 / 34	276 / 550 / 28	373 / 398 / 70	301 / 493 / 56	259 / 422 / 114	210 / 521 / 92	325 / 466 / 32	263 / 576 / 26	355 / 417 / 67	289 / 519 / 54	250 / 447 / 110	201 / 547 / 89	312 / 490 / 31	251 / 600 / 25	343 / 441 / 64	277 / 543 / 52	236 / 462 / 104	192 / 571 / 85
25		1	428 / 136 / 43	386 / 396 / 38	421 / 173 / 79	421 / 275 / 79	368 / 226 / 175	353 / 338 / 168	428 / 151 / 43	367 / 415 / 37	421 / 192 / 79	421 / 303 / 79	368 / 249 / 175	343 / 362 / 163	428 / 167 / 43	349 / 431 / 35	421 / 212 / 79	421 / 332 / 79	368 / 274 / 175	328 / 379 / 156
		2	404 / 372 / 40	325 / 459 / 32	421 / 265 / 79	391 / 383 / 73	368 / 284 / 175	323 / 387 / 153	386 / 390 / 38	312 / 485 / 31	421 / 293 / 79	373 / 402 / 70	368 / 313 / 175	308 / 405 / 146	367 / 407 / 37	300 / 509 / 30	421 / 321 / 79	355 / 419 / 67	358 / 334 / 170	293 / 422 / 139
		3	343 / 448 / 34	276 / 550 / 28	373 / 398 / 70	301 / 493 / 56	288 / 422 / 137	234 / 521 / 111	325 / 466 / 32	263 / 576 / 26	355 / 417 / 67	289 / 519 / 54	279 / 447 / 132	224 / 547 / 106	312 / 490 / 31	251 / 600 / 25	343 / 441 / 64	277 / 543 / 52	264 / 462 / 125	214 / 571 / 102
Wind Speed [mph]		110						115												
15	1	354 / 364 / 38	287 / 454 / 31	379 / 245 / 72	354 / 358 / 67	295 / 304 / 119	248 / 394 / 100	339 / 379 / 37	276 / 475 / 30	379 / 268 / 72	338 / 373 / 64	288 / 322 / 116	236 / 408 / 96							
	2	302 / 429 / 33	245 / 532 / 27	359 / 351 / 68	292 / 441 / 55	276 / 355 / 111	221 / 436 / 89	287 / 442 / 31	235 / 552 / 25	344 / 366 / 65	277 / 454 / 52	264 / 370 / 107	213 / 457 / 86							
	3	256 / 512 / 28	203 / 620 / 22	277 / 455 / 52	226 / 565 / 43	201 / 484 / 81	162 / 592 / 65	245 / 533 / 27	198 / 655 / 22	267 / 475 / 51	216 / 585 / 41	193 / 505 / 78	158 / 625 / 64							
	20	1	416 / 364 / 41	337 / 454 / 34	421 / 232 / 79	415 / 358 / 78	334 / 304 / 147	281 / 394 / 124	398 / 379 / 40	325 / 475 / 32	421 / 254 / 79	397 / 373 / 74	325 / 322 / 143	267 / 408 / 118						
		2	355 / 429 / 35	288 / 532 / 29	421 / 351 / 79	343 / 441 / 64	312 / 355 / 137	250 / 436 / 110	337 / 442 / 34	276 / 552 / 28	403 / 366 / 75	325 / 454 / 61	299 / 370 / 132	241 / 457 / 106						
		3	300 / 512 / 30	239 / 620 / 24	325 / 455 / 61	265 / 565 / 50	227 / 484 / 100	183 / 592 / 81	288 / 533 / 29	233 / 655 / 23	313 / 475 / 59	253 / 585 / 47	218 / 505 / 96	178 / 625 / 79						
	25	1	416 / 364 / 41	337 / 454 / 34	421 / 232 / 79	415 / 358 / 78	368 / 300 / 175	313 / 394 / 149	398 / 379 / 40	325 / 475 / 32	421 / 254 / 79	397 / 373 / 74	363 / 322 / 172	298 / 408 / 142						
		2	355 / 429 / 35	288 / 532 / 29	421 / 351 / 79	343 / 441 / 64	348 / 355 / 165	279 / 436 / 132	337 / 442 / 34	276 / 552 / 28	403 / 366 / 75	325 / 454 / 61	333 / 370 / 158	269 / 457 / 128						
		3	300 / 512 / 30	239 / 620 / 24	325 / 455 / 61	265 / 565 / 50	254 / 484 / 121	204 / 592 / 97	288 / 533 / 29	233 / 655 / 23	313 / 475 / 59	253 / 585 / 47	244 / 505 / 116	199 / 625 / 95						
Wind Speed [mph]		120						130												
15	1	328 / 398 / 35	261 / 485 / 28	379 / 292 / 72	328 / 392 / 62	280 / 340 / 113	231 / 427 / 92	339 / 379 / 37	276 / 475 / 30	379 / 268 / 72	338 / 373 / 64	288 / 322 / 116	236 / 408 / 96							
	2	276 / 461 / 30	224 / 570 / 24	333 / 385 / 63	267 / 473 / 51	252 / 383 / 102	207 / 476 / 83	287 / 442 / 31	235 / 552 / 25	344 / 366 / 65	277 / 454 / 52	264 / 370 / 107	213 / 457 / 86							
	3	235 / 552 / 25	188 / 670 / 20	257 / 495 / 49	205 / 602 / 39	185 / 523 / 75	151 / 642 / 61	245 / 533 / 27	198 / 655 / 22	267 / 475 / 51	216 / 585 / 41	193 / 505 / 78	158 / 625 / 64							
	20	1	386 / 398 / 38	306 / 485 / 31	421 / 276 / 79	385 / 392 / 72	316 / 340 / 139	261 / 427 / 114	398 / 379 / 40	325 / 475 / 32	421 / 254 / 79	397 / 373 / 74	325 / 322 / 143	267 / 408 / 118						
		2	325 / 461 / 32	263 / 570 / 26	391 / 385 / 73	313 / 473 / 59	285 / 383 / 126	234 / 476 / 102	337 / 442 / 34	276 / 552 / 28	403 / 366 / 75	325 / 454 / 61	299 / 370 / 132	241 / 457 / 106						
		3	276 / 552 / 28	221 / 670 / 22	301 / 495 / 56	241 / 602 / 45	210 / 523 / 92	171 / 642 / 75	288 / 533 / 29	233 / 655 / 23	313 / 475 / 59	253 / 585 / 47	218 / 505 / 96	178 / 625 / 79						
	25	1	386 / 398 / 38	306 / 485 / 31	421 / 276 / 79	385 / 392 / 72	353 / 340 / 168	291 / 427 / 137	398 / 379 / 40	325 / 475 / 32	421 / 254 / 79	397 / 373 / 74	363 / 322 / 172	298 / 408 / 142						
		2	325 / 461 / 32	263 / 570 / 26	391 / 385 / 73	313 / 473 / 59	318 / 383 / 151	261 / 476 / 123	337 / 442 / 34	276 / 552 / 28	403 / 366 / 75	325 / 454 / 61	333 / 370 / 158	269 / 457 / 128						
		3	276 / 552 / 28	221 / 670 / 22	301 / 495 / 56	241 / 602 / 45	234 / 523 / 111	191 / 642 / 90	288 / 533 / 29	233 / 655 / 23	313 / 475 / 59	253 / 585 / 47	244 / 505 / 116	199 / 625 / 95						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	313 / 409 / 34	256 / 512 / 28	379 / 316 / 72	313 / 404 / 59	272 / 357 / 110	230 / 445 / 89	292 / 442 / 32	235 / 543 / 25	359 / 347 / 68	292 / 437 / 55	252 / 384 / 102	229 / 477 / 83	271 / 470 / 29	225 / 579 / 24	338 / 377 / 64	279 / 465 / 52	236 / 412 / 96	226 / 504 / 77
2		266 / 479 / 29	214 / 586 / 23	318 / 397 / 60	257 / 491 / 49	244 / 400 / 99	206 / 494 / 80	250 / 520 / 27	203 / 642 / 22	297 / 430 / 56	241 / 533 / 46	229 / 433 / 92	207 / 535 / 75	235 / 558 / 25	193 / 677 / 20	277 / 459 / 52	232 / 570 / 43	213 / 462 / 86	202 / 559 / 69	
3		224 / 569 / 24	183 / 702 / 20	246 / 512 / 47	200 / 633 / 38	177 / 540 / 72	152 / 673 / 59	209 / 610 / 23	172 / 762 / 19	231 / 554 / 44	185 / 673 / 35	166 / 581 / 67	150 / 712 / 54	198 / 662 / 22	161 / 790 / 17	216 / 591 / 41	179 / 725 / 33	154 / 616 / 62	151 / 764 / 51	
20		1	367 / 409 / 37	300 / 512 / 30	421 / 299 / 79	367 / 404 / 69	307 / 357 / 135	259 / 445 / 110	343 / 442 / 34	276 / 543 / 28	421 / 347 / 79	343 / 437 / 64	285 / 384 / 126	255 / 477 / 102	318 / 470 / 32	263 / 579 / 26	397 / 377 / 74	326 / 465 / 60	267 / 412 / 118	250 / 504 / 94
		2	312 / 479 / 31	251 / 586 / 25	373 / 397 / 70	301 / 491 / 56	276 / 400 / 122	231 / 494 / 98	294 / 520 / 29	239 / 642 / 24	349 / 430 / 65	283 / 533 / 53	259 / 433 / 114	231 / 535 / 92	276 / 558 / 28	225 / 677 / 22	325 / 459 / 61	270 / 570 / 50	241 / 462 / 106	224 / 559 / 85
		3	263 / 569 / 26	214 / 702 / 22	289 / 512 / 54	235 / 633 / 44	201 / 540 / 89	171 / 673 / 73	245 / 610 / 25	202 / 762 / 20	271 / 554 / 51	217 / 673 / 41	187 / 581 / 83	167 / 712 / 67	233 / 662 / 23	188 / 790 / 19	253 / 591 / 47	209 / 725 / 39	174 / 616 / 77	167 / 764 / 63
25		1	367 / 409 / 37	300 / 512 / 30	421 / 299 / 79	367 / 404 / 69	343 / 357 / 163	288 / 445 / 132	343 / 442 / 34	276 / 543 / 28	421 / 347 / 79	343 / 437 / 64	318 / 384 / 151	282 / 477 / 123	318 / 470 / 32	263 / 579 / 26	397 / 377 / 74	326 / 465 / 60	298 / 412 / 142	275 / 504 / 113
		2	312 / 479 / 31	251 / 586 / 25	373 / 397 / 70	301 / 491 / 56	308 / 400 / 146	257 / 494 / 118	294 / 520 / 29	239 / 642 / 24	349 / 430 / 65	283 / 533 / 53	288 / 433 / 137	255 / 535 / 111	276 / 558 / 28	225 / 677 / 22	325 / 459 / 61	270 / 570 / 50	269 / 462 / 128	247 / 559 / 102
		3	263 / 569 / 26	214 / 702 / 22	289 / 512 / 54	235 / 633 / 44	224 / 540 / 106	191 / 673 / 88	245 / 610 / 25	202 / 762 / 20	271 / 554 / 51	217 / 673 / 41	209 / 581 / 99	185 / 712 / 81	233 / 662 / 23	188 / 790 / 19	253 / 591 / 47	209 / 725 / 39	194 / 616 / 92	184 / 764 / 76
Wind Speed [mph]		170						180												
15	1	256 / 503 / 28	224 / 625 / 23	318 / 403 / 60	275 / 498 / 49	228 / 437 / 89	226 / 536 / 72	240 / 532 / 26	216 / 650 / 21	297 / 426 / 56	271 / 527 / 46	228 / 466 / 84	231 / 576 / 69							
	2	219 / 590 / 24	190 / 724 / 19	262 / 492 / 50	226 / 602 / 40	204 / 485 / 80	206 / 604 / 65	203 / 616 / 22	187 / 765 / 18	246 / 522 / 47	225 / 644 / 38	207 / 524 / 77	204 / 629 / 61							
	3	183 / 690 / 20	162 / 864 / 17	200 / 622 / 38	176 / 772 / 31	151 / 662 / 59	151 / 810 / 48	172 / 731 / 19	158 / 903 / 15	190 / 663 / 36	173 / 813 / 29	151 / 703 / 56	150 / 849 / 45							
	20	1	300 / 503 / 30	260 / 625 / 25	373 / 403 / 70	319 / 498 / 56	257 / 437 / 110	249 / 536 / 89	282 / 532 / 28	250 / 650 / 23	349 / 426 / 65	312 / 527 / 53	256 / 466 / 104	253 / 576 / 85						
		2	257 / 590 / 26	221 / 724 / 21	307 / 492 / 58	262 / 602 / 46	230 / 485 / 98	227 / 604 / 81	239 / 616 / 24	216 / 765 / 20	289 / 522 / 54	259 / 644 / 44	232 / 524 / 94	224 / 629 / 75						
		3	214 / 690 / 22	189 / 864 / 18	235 / 622 / 44	205 / 772 / 36	170 / 662 / 73	166 / 810 / 59	202 / 731 / 20	183 / 903 / 17	223 / 663 / 42	200 / 813 / 34	169 / 703 / 69	165 / 849 / 55						
	25	1	300 / 503 / 30	260 / 625 / 25	373 / 403 / 70	319 / 498 / 56	286 / 437 / 132	273 / 536 / 106	282 / 532 / 28	250 / 650 / 23	349 / 426 / 65	312 / 527 / 53	283 / 466 / 125	275 / 576 / 102						
		2	257 / 590 / 26	221 / 724 / 21	307 / 492 / 58	262 / 602 / 46	256 / 485 / 118	248 / 604 / 97	239 / 616 / 24	216 / 765 / 20	289 / 522 / 54	259 / 644 / 44	256 / 524 / 113	243 / 629 / 90						
		3	214 / 690 / 22	189 / 864 / 18	235 / 622 / 44	205 / 772 / 36	189 / 662 / 88	182 / 810 / 71	202 / 731 / 20	183 / 903 / 17	223 / 663 / 42	200 / 813 / 34	187 / 703 / 83	179 / 849 / 66						
Wind Speed [mph]		190						200												
15	1	230 / 569 / 25	214 / 687 / 20	283 / 452 / 53	265 / 552 / 43	227 / 492 / 80	235 / 613 / 65	222 / 590 / 23	211 / 719 / 19	278 / 476 / 51	265 / 586 / 41	226 / 515 / 75	232 / 631 / 61							
	2	194 / 653 / 21	184 / 801 / 17	232 / 547 / 44	217 / 664 / 35	205 / 549 / 72	206 / 666 / 58	190 / 686 / 20	186 / 859 / 17	230 / 581 / 42	221 / 717 / 34	207 / 583 / 69	214 / 719 / 56							
	3	162 / 767 / 18	153 / 933 / 14	180 / 701 / 34	169 / 847 / 27	150 / 740 / 53	155 / 913 / 43	163 / 823 / 17	154 / 993 / 14	176 / 733 / 32	171 / 906 / 26	149 / 772 / 50	153 / 938 / 40							
	20	1	270 / 569 / 27	246 / 687 / 22	332 / 452 / 62	304 / 552 / 50	253 / 492 / 98	256 / 613 / 81	260 / 590 / 25	241 / 719 / 20	324 / 476 / 59	303 / 586 / 47	250 / 515 / 92	252 / 631 / 75						
		2	227 / 653 / 23	211 / 801 / 19	271 / 547 / 51	249 / 664 / 41	228 / 549 / 89	225 / 666 / 71	222 / 686 / 22	212 / 859 / 18	268 / 581 / 49	252 / 717 / 40	229 / 583 / 85	232 / 719 / 69						
		3	191 / 767 / 19	176 / 933 / 16	211 / 701 / 40	194 / 847 / 32	167 / 740 / 65	169 / 913 / 53	190 / 823 / 19	176 / 993 / 15	206 / 733 / 37	195 / 906 / 31	165 / 772 / 61	166 / 938 / 49						
	25	1	270 / 569 / 27	246 / 687 / 22	332 / 452 / 62	304 / 552 / 50	279 / 492 / 118	277 / 613 / 97	260 / 590 / 25	241 / 719 / 20	324 / 476 / 59	303 / 586 / 47	274 / 515 / 111	272 / 631 / 90						
		2	227 / 653 / 23	211 / 801 / 19	271 / 547 / 51	249 / 664 / 41	251 / 549 / 106	244 / 666 / 85	222 / 686 / 22	212 / 859 / 18	268 / 581 / 49	252 / 717 / 40	251 / 583 / 102	250 / 719 / 83						
		3	191 / 767 / 19	176 / 933 / 16	211 / 701 / 40	194 / 847 / 32	184 / 740 / 78	183 / 913 / 64	190 / 823 / 19	176 / 993 / 15	206 / 733 / 37	195 / 906 / 31	181 / 772 / 73	179 / 938 / 59						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	449 / 132 / 43	416 / 396 / 40	447 / 171 / 83	447 / 271 / 83	395 / 220 / 199	390 / 338 / 196	449 / 147 / 43	397 / 415 / 38	447 / 189 / 83	447 / 299 / 83	395 / 243 / 199	379 / 362 / 190	449 / 163 / 43	377 / 431 / 36	447 / 209 / 83	447 / 328 / 83	395 / 267 / 199	362 / 379 / 182
2		436 / 372 / 42	350 / 459 / 34	447 / 262 / 83	422 / 383 / 79	395 / 277 / 199	357 / 387 / 179	416 / 390 / 40	337 / 485 / 33	447 / 289 / 83	402 / 402 / 75	395 / 305 / 199	340 / 405 / 171	397 / 407 / 38	324 / 509 / 31	447 / 317 / 83	383 / 419 / 71	395 / 334 / 199	324 / 422 / 163	
3		370 / 448 / 36	298 / 550 / 29	402 / 398 / 75	324 / 493 / 61	318 / 422 / 160	258 / 521 / 130	350 / 466 / 34	284 / 576 / 28	383 / 417 / 71	311 / 519 / 58	308 / 447 / 155	247 / 547 / 124	337 / 490 / 33	271 / 600 / 26	370 / 441 / 69	298 / 543 / 56	291 / 462 / 146	236 / 571 / 119	
35		1	489 / 130 / 45	460 / 396 / 42	479 / 166 / 89	479 / 263 / 89	420 / 214 / 221	420 / 334 / 221	489 / 145 / 45	438 / 415 / 40	479 / 184 / 89	479 / 290 / 89	420 / 236 / 221	414 / 362 / 218	489 / 160 / 45	416 / 431 / 38	479 / 203 / 89	479 / 318 / 89	420 / 259 / 221	396 / 379 / 208
		2	482 / 372 / 44	387 / 459 / 36	479 / 254 / 89	465 / 383 / 86	420 / 269 / 221	390 / 387 / 205	460 / 390 / 42	372 / 485 / 34	479 / 280 / 89	444 / 402 / 82	420 / 296 / 221	372 / 405 / 196	438 / 407 / 40	358 / 509 / 33	479 / 308 / 89	422 / 419 / 78	420 / 325 / 221	354 / 422 / 186
		3	409 / 448 / 38	328 / 550 / 30	444 / 398 / 82	358 / 493 / 67	348 / 422 / 183	282 / 521 / 149	387 / 466 / 36	314 / 576 / 29	422 / 417 / 78	344 / 519 / 64	336 / 447 / 177	270 / 547 / 142	372 / 490 / 34	299 / 600 / 28	408 / 441 / 76	329 / 543 / 61	318 / 462 / 167	258 / 571 / 136
40		1	524 / 126 / 101	508 / 396 / 98	511 / 161 / 142	511 / 255 / 142	450 / 211 / 252	450 / 329 / 252	524 / 141 / 101	484 / 415 / 93	511 / 178 / 142	511 / 281 / 142	450 / 233 / 252	450 / 362 / 252	524 / 155 / 101	460 / 431 / 88	511 / 197 / 142	511 / 309 / 142	450 / 256 / 252	431 / 379 / 241
		2	524 / 366 / 101	428 / 459 / 82	511 / 246 / 142	511 / 383 / 142	450 / 265 / 252	424 / 387 / 237	508 / 390 / 98	411 / 485 / 79	511 / 272 / 142	487 / 402 / 135	450 / 292 / 252	404 / 405 / 226	484 / 407 / 93	395 / 509 / 76	511 / 299 / 142	463 / 419 / 129	450 / 320 / 252	385 / 422 / 215
		3	452 / 448 / 87	363 / 550 / 70	487 / 398 / 135	393 / 493 / 109	378 / 422 / 212	307 / 521 / 172	428 / 466 / 82	347 / 576 / 67	463 / 417 / 129	377 / 519 / 105	365 / 447 / 204	294 / 547 / 164	411 / 490 / 79	331 / 600 / 64	448 / 441 / 124	361 / 543 / 100	346 / 462 / 194	281 / 571 / 157
Wind Speed [mph]		110						115												
30	1	449 / 179 / 43	364 / 454 / 35	447 / 229 / 83	447 / 358 / 83	395 / 292 / 199	346 / 394 / 174	430 / 379 / 41	350 / 475 / 34	447 / 250 / 83	428 / 373 / 80	395 / 318 / 199	329 / 408 / 166							
	2	383 / 429 / 37	311 / 532 / 30	447 / 346 / 83	370 / 441 / 69	384 / 355 / 193	308 / 436 / 155	364 / 442 / 35	298 / 552 / 29	435 / 366 / 81	350 / 454 / 65	368 / 370 / 185	297 / 457 / 149							
	3	324 / 512 / 31	258 / 620 / 25	350 / 455 / 65	286 / 565 / 53	280 / 484 / 141	225 / 592 / 113	311 / 533 / 30	251 / 655 / 24	337 / 475 / 63	273 / 585 / 51	269 / 505 / 135	220 / 625 / 111							
	35	1	489 / 176 / 45	401 / 454 / 37	479 / 222 / 89	479 / 348 / 89	420 / 284 / 221	378 / 394 / 199	474 / 379 / 44	387 / 475 / 36	479 / 243 / 89	472 / 373 / 88	420 / 309 / 221	360 / 408 / 189						
		2	423 / 429 / 39	343 / 532 / 32	479 / 336 / 89	408 / 441 / 76	420 / 355 / 221	336 / 436 / 177	401 / 442 / 37	328 / 552 / 30	479 / 366 / 89	386 / 454 / 72	402 / 370 / 212	324 / 457 / 171						
		3	358 / 512 / 33	285 / 620 / 26	386 / 455 / 72	315 / 565 / 59	306 / 484 / 161	246 / 592 / 130	343 / 533 / 32	277 / 655 / 26	372 / 475 / 69	301 / 585 / 56	294 / 505 / 155	240 / 625 / 126						
	40	1	524 / 171 / 101	444 / 454 / 85	511 / 216 / 142	511 / 337 / 142	450 / 279 / 252	411 / 394 / 230	524 / 187 / 101	428 / 475 / 82	511 / 236 / 142	511 / 367 / 142	450 / 304 / 252	391 / 408 / 219						
		2	468 / 429 / 90	379 / 532 / 73	511 / 326 / 142	448 / 441 / 124	450 / 350 / 252	365 / 436 / 204	444 / 442 / 85	363 / 552 / 70	511 / 355 / 142	424 / 454 / 118	437 / 370 / 244	352 / 457 / 197						
		3	395 / 512 / 76	315 / 620 / 61	424 / 455 / 118	346 / 565 / 96	333 / 484 / 186	268 / 592 / 150	379 / 533 / 73	307 / 655 / 59	409 / 475 / 113	330 / 585 / 92	320 / 505 / 179	261 / 625 / 146						
Wind Speed [mph]		120						130												
30	1	416 / 398 / 40	331 / 485 / 32	447 / 272 / 83	415 / 392 / 77	390 / 340 / 196	321 / 427 / 160	430 / 379 / 41	350 / 475 / 34	447 / 250 / 83	428 / 373 / 80	395 / 318 / 199	329 / 408 / 166							
	2	350 / 461 / 34	284 / 570 / 28	422 / 385 / 79	337 / 473 / 63	351 / 383 / 177	287 / 476 / 144	364 / 442 / 35	298 / 552 / 29	435 / 366 / 81	350 / 454 / 65	368 / 370 / 185	297 / 457 / 149							
	3	298 / 552 / 29	238 / 670 / 23	324 / 495 / 61	260 / 602 / 49	258 / 523 / 130	210 / 642 / 105	311 / 533 / 30	251 / 655 / 24	337 / 475 / 63	273 / 585 / 51	269 / 505 / 135	220 / 625 / 111							
	35	1	460 / 398 / 42	365 / 485 / 34	479 / 264 / 89	458 / 392 / 85	420 / 335 / 221	350 / 427 / 183	474 / 379 / 44	387 / 475 / 36	479 / 243 / 89	472 / 373 / 88	420 / 309 / 221	360 / 408 / 189						
		2	387 / 461 / 36	314 / 570 / 29	465 / 385 / 86	372 / 473 / 69	384 / 383 / 202	314 / 476 / 164	401 / 442 / 37	328 / 552 / 30	479 / 366 / 89	386 / 454 / 72	402 / 370 / 212	324 / 457 / 171						
		3	328 / 552 / 30	263 / 670 / 24	358 / 495 / 67	286 / 602 / 53	282 / 523 / 149	230 / 642 / 120	343 / 533 / 32	277 / 655 / 26	372 / 475 / 69	301 / 585 / 56	294 / 505 / 155	240 / 625 / 126						
	40	1	508 / 398 / 98	403 / 485 / 77	511 / 256 / 142	503 / 392 / 139	450 / 330 / 252	380 / 427 / 212	524 / 187 / 101	428 / 475 / 82	511 / 236 / 142	511 / 367 / 142	450 / 304 / 252	391 / 408 / 219						
		2	428 / 461 / 82	347 / 570 / 67	511 / 385 / 142	409 / 473 / 113	418 / 383 / 234	341 / 476 / 190	444 / 442 / 85	363 / 552 / 70	511 / 355 / 142	424 / 454 / 118	437 / 370 / 244	352 / 457 / 197						
		3	363 / 552 / 70	291 / 670 / 56	393 / 495 / 109	314 / 602 / 87	307 / 523 / 172	249 / 642 / 139	379 / 533 / 73	307 / 655 / 59	409 / 475 / 113	330 / 585 / 92	320 / 505 / 179	261 / 625 / 146						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	397 / 409 / 38	324 / 512 / 31	447 / 295 / 83	396 / 404 / 74	379 / 357 / 190	317 / 445 / 155	370 / 442 / 36	298 / 543 / 29	447 / 343 / 83	370 / 437 / 69	351 / 384 / 177	309 / 477 / 144	344 / 470 / 33	283 / 579 / 27	428 / 377 / 80	351 / 465 / 64	329 / 412 / 166	300 / 504 / 133
2		337 / 479 / 33	271 / 586 / 26	402 / 397 / 75	324 / 491 / 61	340 / 400 / 171	283 / 494 / 138	317 / 520 / 31	258 / 642 / 25	376 / 430 / 70	305 / 533 / 57	318 / 433 / 160	280 / 535 / 130	298 / 558 / 29	243 / 677 / 23	350 / 459 / 65	291 / 570 / 53	297 / 462 / 149	269 / 559 / 119	
3		284 / 569 / 28	232 / 702 / 22	311 / 512 / 58	253 / 633 / 47	247 / 540 / 124	210 / 673 / 102	265 / 610 / 26	218 / 762 / 21	292 / 554 / 55	234 / 673 / 44	231 / 581 / 116	202 / 712 / 94	251 / 662 / 24	202 / 790 / 19	273 / 591 / 51	225 / 725 / 41	214 / 616 / 108	200 / 764 / 89	
35		1	438 / 409 / 40	358 / 512 / 33	479 / 286 / 89	436 / 404 / 81	414 / 357 / 218	346 / 445 / 177	409 / 442 / 38	328 / 543 / 30	479 / 333 / 89	408 / 437 / 76	384 / 384 / 202	336 / 477 / 164	379 / 470 / 35	312 / 579 / 28	472 / 377 / 88	386 / 465 / 70	360 / 412 / 189	325 / 504 / 152
		2	372 / 479 / 34	299 / 586 / 28	444 / 397 / 82	358 / 491 / 67	372 / 400 / 196	309 / 494 / 158	350 / 520 / 32	285 / 642 / 26	415 / 430 / 77	336 / 533 / 63	348 / 433 / 183	304 / 535 / 149	328 / 558 / 30	268 / 677 / 24	386 / 459 / 72	321 / 570 / 59	324 / 462 / 171	291 / 559 / 136
		3	314 / 569 / 29	256 / 702 / 24	344 / 512 / 64	279 / 633 / 52	270 / 540 / 142	229 / 673 / 117	292 / 610 / 27	241 / 762 / 22	322 / 554 / 60	258 / 673 / 48	252 / 581 / 133	220 / 712 / 108	277 / 662 / 26	223 / 790 / 20	301 / 591 / 56	248 / 725 / 45	234 / 616 / 123	217 / 764 / 101
40		1	484 / 409 / 93	395 / 512 / 76	511 / 278 / 142	479 / 404 / 133	450 / 357 / 252	375 / 445 / 204	452 / 442 / 87	363 / 543 / 70	511 / 323 / 142	448 / 437 / 124	418 / 384 / 234	363 / 477 / 190	420 / 470 / 81	341 / 579 / 65	511 / 371 / 142	422 / 465 / 115	391 / 412 / 219	350 / 504 / 175
		2	411 / 479 / 79	331 / 586 / 64	487 / 397 / 135	393 / 491 / 109	404 / 400 / 226	335 / 494 / 183	387 / 520 / 74	315 / 642 / 61	456 / 430 / 126	369 / 533 / 102	378 / 433 / 212	328 / 535 / 172	363 / 558 / 70	292 / 677 / 56	424 / 459 / 118	350 / 570 / 96	352 / 462 / 197	313 / 559 / 157
		3	347 / 569 / 67	283 / 702 / 54	377 / 512 / 105	307 / 633 / 85	294 / 540 / 164	248 / 673 / 135	323 / 610 / 62	266 / 762 / 51	354 / 554 / 98	283 / 673 / 79	274 / 581 / 153	237 / 712 / 124	307 / 662 / 59	244 / 790 / 47	330 / 591 / 92	271 / 725 / 74	255 / 616 / 143	233 / 764 / 117
30	Wind Speed [mph]		170						180											
	1	324 / 503 / 31	279 / 625 / 26	402 / 403 / 75	343 / 498 / 61	315 / 437 / 155	296 / 536 / 124	304 / 532 / 29	268 / 650 / 24	376 / 426 / 70	335 / 527 / 57	310 / 466 / 146	297 / 576 / 119							
	2	278 / 590 / 27	238 / 724 / 22	331 / 492 / 62	281 / 602 / 50	281 / 485 / 138	270 / 604 / 113	258 / 616 / 25	232 / 765 / 21	311 / 522 / 58	278 / 644 / 47	281 / 524 / 133	263 / 629 / 105							
	3	232 / 690 / 22	203 / 864 / 19	253 / 622 / 47	220 / 772 / 39	208 / 662 / 102	197 / 810 / 83	218 / 731 / 21	196 / 903 / 17	240 / 663 / 45	214 / 813 / 37	205 / 703 / 97	194 / 849 / 78							
	35	1	358 / 503 / 33	307 / 625 / 27	444 / 403 / 82	376 / 498 / 67	344 / 437 / 177	319 / 536 / 142	336 / 532 / 31	293 / 650 / 25	415 / 426 / 77	366 / 527 / 63	338 / 466 / 167	320 / 576 / 136						
		2	307 / 590 / 28	261 / 724 / 23	365 / 492 / 68	309 / 602 / 55	307 / 485 / 158	291 / 604 / 130	285 / 616 / 26	254 / 765 / 22	344 / 522 / 64	304 / 644 / 52	306 / 524 / 152	283 / 629 / 120						
		3	256 / 690 / 24	223 / 864 / 20	279 / 622 / 52	241 / 772 / 43	228 / 662 / 117	213 / 810 / 95	241 / 731 / 22	214 / 903 / 18	265 / 663 / 49	234 / 813 / 40	223 / 703 / 111	208 / 849 / 89						
	40	1	395 / 503 / 76	334 / 625 / 62	487 / 403 / 135	410 / 498 / 109	373 / 437 / 204	342 / 536 / 164	371 / 532 / 71	319 / 650 / 57	456 / 426 / 126	397 / 527 / 102	365 / 466 / 194	342 / 576 / 157						
		2	339 / 590 / 65	284 / 724 / 53	401 / 492 / 111	336 / 602 / 89	333 / 485 / 183	312 / 604 / 150	315 / 616 / 61	276 / 765 / 50	377 / 522 / 105	330 / 644 / 85	331 / 524 / 175	302 / 629 / 139						
3		283 / 690 / 54	243 / 864 / 45	307 / 622 / 85	263 / 772 / 70	247 / 662 / 135	228 / 810 / 110	266 / 731 / 51	233 / 903 / 42	291 / 663 / 81	254 / 813 / 66	241 / 703 / 128	223 / 849 / 102							
30	Wind Speed [mph]		190						200											
	1	292 / 569 / 28	263 / 687 / 22	358 / 452 / 67	325 / 552 / 53	305 / 492 / 138	299 / 613 / 113	280 / 590 / 26	258 / 719 / 21	348 / 476 / 63	322 / 586 / 51	299 / 515 / 130	291 / 631 / 105							
	2	245 / 653 / 24	226 / 801 / 19	293 / 547 / 55	266 / 664 / 44	275 / 549 / 124	262 / 666 / 100	239 / 686 / 22	226 / 859 / 19	288 / 581 / 52	269 / 717 / 43	273 / 583 / 119	268 / 719 / 97							
	3	206 / 767 / 20	188 / 933 / 16	228 / 701 / 43	207 / 847 / 34	201 / 740 / 91	197 / 913 / 75	205 / 823 / 19	187 / 993 / 16	221 / 733 / 40	207 / 906 / 33	197 / 772 / 86	192 / 938 / 69							
	35	1	322 / 569 / 30	287 / 687 / 24	395 / 452 / 73	355 / 552 / 59	331 / 492 / 158	320 / 613 / 130	308 / 590 / 28	280 / 719 / 22	383 / 476 / 69	351 / 586 / 56	323 / 515 / 149	311 / 631 / 120						
		2	271 / 653 / 25	246 / 801 / 20	323 / 547 / 60	290 / 664 / 48	298 / 549 / 142	281 / 666 / 114	263 / 686 / 24	246 / 859 / 20	317 / 581 / 57	292 / 717 / 47	296 / 583 / 136	286 / 719 / 111						
		3	227 / 767 / 21	205 / 933 / 17	251 / 701 / 47	226 / 847 / 37	219 / 740 / 104	211 / 913 / 86	225 / 823 / 20	204 / 993 / 16	243 / 733 / 44	226 / 906 / 36	213 / 772 / 98	205 / 938 / 79						
	40	1	355 / 569 / 68	311 / 687 / 54	432 / 452 / 120	384 / 552 / 96	357 / 492 / 183	341 / 613 / 150	336 / 590 / 64	303 / 719 / 51	418 / 476 / 113	379 / 586 / 92	347 / 515 / 172	331 / 631 / 139						
		2	299 / 653 / 57	267 / 801 / 47	354 / 547 / 98	314 / 664 / 79	321 / 549 / 164	299 / 666 / 132	287 / 686 / 54	266 / 859 / 45	346 / 581 / 94	316 / 717 / 76	318 / 583 / 157	304 / 719 / 128						
3		250 / 767 / 48	222 / 933 / 39	275 / 701 / 76	245 / 847 / 61	236 / 740 / 121	225 / 913 / 99	246 / 823 / 47	220 / 993 / 37	265 / 733 / 72	244 / 906 / 59	229 / 772 / 113	218 / 938 / 92							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		95						100						105																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	45	1	566 / 122 / 105	566 / 197 / 105	560 / 158 / 153	560 / 251 / 153	472 / 205 / 269	472 / 319 / 269	566 / 136 / 105	539 / 415 / 100	560 / 176 / 153	560 / 277 / 153	472 / 226 / 269	472 / 351 / 269	566 / 151 / 105	512 / 431 / 95	560 / 194 / 153	560 / 304 / 153	472 / 248 / 269	465 / 379 / 265															
2		566 / 355 / 105	476 / 459 / 89	560 / 243 / 153	560 / 378 / 153	472 / 257 / 269	458 / 387 / 261	566 / 390 / 105	458 / 485 / 85	560 / 268 / 153	542 / 402 / 148	472 / 284 / 269	437 / 405 / 249	539 / 407 / 100	440 / 509 / 82	560 / 294 / 153	516 / 419 / 141	472 / 311 / 269	415 / 422 / 237																
3		503 / 448 / 94	404 / 550 / 75	542 / 398 / 148	437 / 493 / 119	408 / 422 / 233	331 / 521 / 189	476 / 466 / 89	386 / 576 / 72	516 / 417 / 141	420 / 519 / 115	394 / 447 / 225	317 / 547 / 181	458 / 490 / 85	368 / 600 / 69	499 / 441 / 136	402 / 543 / 110	373 / 462 / 213	303 / 571 / 173																
1		614 / 120 / 112	614 / 194 / 112	597 / 153 / 161	597 / 243 / 161	499 / 201 / 290	499 / 314 / 290	614 / 134 / 112	594 / 415 / 108	597 / 170 / 161	597 / 268 / 161	499 / 223 / 290	499 / 346 / 290	614 / 148 / 112	564 / 431 / 103	597 / 188 / 161	597 / 294 / 161	499 / 244 / 290	499 / 379 / 290																
2		614 / 349 / 112	525 / 459 / 95	597 / 235 / 161	597 / 366 / 161	499 / 254 / 290	491 / 387 / 285	614 / 384 / 112	505 / 485 / 92	597 / 259 / 161	597 / 402 / 161	499 / 280 / 290	469 / 405 / 272	594 / 407 / 108	485 / 509 / 88	597 / 285 / 161	569 / 419 / 153	499 / 307 / 290	446 / 422 / 259																
3		554 / 448 / 101	446 / 550 / 81	597 / 398 / 161	482 / 493 / 130	438 / 422 / 255	355 / 521 / 206	525 / 466 / 95	426 / 576 / 77	569 / 417 / 153	463 / 519 / 125	423 / 447 / 246	340 / 547 / 198	505 / 490 / 92	406 / 600 / 74	549 / 441 / 148	443 / 543 / 120	401 / 462 / 233	325 / 571 / 189																
60	1	669 / 111 / 117	669 / 178 / 117	662 / 144 / 175	662 / 228 / 175	561 / 192 / 324	561 / 300 / 324	669 / 123 / 117	669 / 197 / 117	662 / 159 / 175	662 / 251 / 175	561 / 212 / 324	561 / 330 / 324	669 / 136 / 117	669 / 217 / 117	662 / 176 / 175	662 / 276 / 175	561 / 233 / 324	561 / 362 / 324																
	2	669 / 321 / 117	622 / 459 / 109	662 / 220 / 175	662 / 342 / 175	561 / 242 / 324	561 / 375 / 324	669 / 353 / 117	598 / 485 / 105	662 / 243 / 175	662 / 376 / 175	561 / 267 / 324	552 / 405 / 319	669 / 387 / 117	575 / 509 / 101	662 / 266 / 175	662 / 412 / 175	561 / 293 / 324	526 / 422 / 304																
	3	657 / 448 / 115	528 / 550 / 92	662 / 373 / 175	571 / 493 / 151	517 / 422 / 299	419 / 521 / 242	622 / 466 / 109	505 / 576 / 88	662 / 410 / 175	548 / 519 / 145	499 / 447 / 288	401 / 547 / 232	598 / 490 / 105	481 / 600 / 84	651 / 441 / 172	525 / 543 / 139	472 / 462 / 273	383 / 571 / 221																
45	1	566 / 166 / 105	494 / 454 / 92	560 / 212 / 153	560 / 332 / 153	472 / 271 / 269	444 / 394 / 253	566 / 182 / 105	476 / 475 / 89	560 / 232 / 153	560 / 361 / 153	472 / 296 / 269	422 / 408 / 241	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
0 - 3	1 = 1' / 1																																		
	2 = 2																																		
	3 = 3																																		
3 - 10	1 = 1																																		
	2 = 2' / 2																																		
	3 = 3' / 3																																		
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	521 / 429 / 97	422 / 532 / 79	560 / 321 / 153	499 / 441 / 136	472 / 340 / 269	394 / 436 / 225	494 / 442 / 92	404 / 552 / 75	560 / 350 / 153	472 / 454 / 129	472 / 370 / 269	380 / 457 / 217																							
3	440 / 512 / 82	350 / 620 / 65	472 / 455 / 129	385 / 565 / 105	359 / 484 / 205	289 / 592 / 165	422 / 533 / 79	342 / 655 / 64	455 / 475 / 124	367 / 585 / 100	345 / 505 / 197	282 / 625 / 161																							
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	2	574 / 429 / 104	465 / 532 / 85	597 / 311 / 161	549 / 441 / 148	499 / 335 / 290	423 / 436 / 246	544 / 442 / 99	446 / 552 / 81	597 / 339 / 161	520 / 454 / 140	499 / 364 / 290	408 / 457 / 237																						
	3	485 / 512 / 88	386 / 620 / 70	520 / 455 / 140	424 / 565 / 114	386 / 484 / 224	310 / 592 / 180	465 / 533 / 85	376 / 655 / 69	501 / 475 / 135	405 / 585 / 109	370 / 505 / 215	302 / 625 / 176																						
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	2	669 / 422 / 117	551 / 532 / 96	662 / 291 / 175	651 / 441 / 172	561 / 319 / 324	499 / 436 / 288	645 / 442 / 113	528 / 552 / 92	662 / 317 / 175	617 / 454 / 163	561 / 347 / 324	481 / 457 / 278																						
	3	575 / 512 / 101	458 / 620 / 80	617 / 455 / 163	503 / 565 / 133	454 / 484 / 263	365 / 592 / 211	551 / 533 / 96	446 / 655 / 78	594 / 475 / 157	480 / 585 / 127	437 / 505 / 252	357 / 625 / 206																						
45	1	566 / 198 / 105	449 / 485 / 84	560 / 252 / 153	560 / 392 / 153	472 / 321 / 269	410 / 427 / 233	566 / 182 / 105	476 / 475 / 89	560 / 232 / 153	560 / 361 / 153	472 / 296 / 269	422 / 408 / 241																						
	2	476 / 461 / 89	386 / 570 / 72	560 / 379 / 153	455 / 473 / 124	451 / 383 / 257	368 / 476 / 209	494 / 442 / 92	404 / 552 / 75	560 / 350 / 153	472 / 454 / 129	472 / 370 / 269	380 / 457 / 217																						
	3	404 / 552 / 75	324 / 670 / 60	437 / 495 / 119	350 / 602 / 96	331 / 523 / 189	269 / 642 / 153	422 / 533 / 79	342 / 655 / 64	455 / 475 / 124	367 / 585 / 100	345 / 505 / 197	282 / 625 / 161																						
50	1	614 / 195 / 112	495 / 485 / 90	597 / 244 / 161	597 / 380 / 161	499 / 316 / 290	440 / 427 / 255	614 / 179 / 112	525 / 475 / 95	597 / 225 / 161	597 / 350 / 161	499 / 291 / 290	453 / 408 / 263																						
	2	525 / 461 / 95	426 / 570 / 77	597 / 367 / 161	501 / 473 / 135	484 / 383 / 281	395 / 476 / 228	544 / 442 / 99	446 / 552 / 81	597 / 339 / 161	520 / 454 / 140	499 / 364 / 290	408 / 457 / 237																						
	3	446 / 552 / 81	357 / 670 / 65	482 / 495 / 130	386 / 602 / 104	355 / 523 / 206	289 / 642 / 167	465 / 533 / 85	376 / 655 / 69	501 / 475 / 135	405 / 585 / 109	370 / 505 / 215	302 / 625 / 176																						
60	1	669 / 179 / 117	587 / 485 / 103	662 / 229 / 175	662 / 355 / 175	561 / 302 / 324	517 / 427 / 299	669 / 164 / 117	622 / 475 / 109	662 / 210 / 175	662 / 328 / 175	561 / 278 / 324	535 / 408 / 309																						
	2	622 / 461 / 109	505 / 570 / 88	662 / 344 / 175	594 / 473 / 157	561 / 377 / 324	463 / 476 / 268	645 / 442 / 113	528 / 552 / 92	662 / 317 / 175	617 / 454 / 163	561 / 347 / 324	481 / 457 / 278																						
	3	528 / 552 / 92	423 / 670 / 74	571 / 495 / 151	457 / 602 / 121	419 / 523 / 242	339 / 642 / 196	551 / 533 / 96	446 / 655 / 78	594 / 475 / 157	480 / 585 / 127	437 / 505 / 252	357 / 625 / 206																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs																						
Wind Speed [mph]		140						150						160																						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																											
	Exposure Category : C	45	1	539 / 409 / 100	440 / 512 / 82	560 / 273 / 153	533 / 404 / 146	472 / 347 / 269	404 / 445 / 225	503 / 442 / 94	404 / 543 / 75	560 / 318 / 153	499 / 437 / 136	451 / 384 / 257	390 / 477 / 209	467 / 470 / 87	377 / 579 / 70	560 / 365 / 153	464 / 465 / 127	422 / 412 / 241	374 / 504 / 193															
2			458 / 479 / 85	368 / 586 / 69	542 / 397 / 148	437 / 491 / 119	437 / 400 / 249	361 / 494 / 201	431 / 520 / 80	350 / 642 / 65	507 / 430 / 138	411 / 533 / 112	408 / 433 / 233	352 / 535 / 189	404 / 558 / 75	324 / 677 / 60	472 / 459 / 129	385 / 570 / 105	380 / 462 / 217	335 / 559 / 173																
3			386 / 569 / 72	315 / 702 / 59	420 / 512 / 115	341 / 633 / 93	317 / 540 / 181	267 / 673 / 149	359 / 610 / 67	297 / 762 / 55	394 / 554 / 108	315 / 673 / 86	296 / 581 / 169	255 / 712 / 137	342 / 662 / 64	270 / 790 / 50	367 / 591 / 100	298 / 725 / 81	275 / 616 / 157	250 / 764 / 129																
50		1	594 / 409 / 108	485 / 512 / 88	597 / 265 / 161	588 / 404 / 158	499 / 342 / 290	433 / 445 / 246	554 / 442 / 101	446 / 543 / 81	597 / 308 / 161	549 / 437 / 148	484 / 384 / 281	417 / 477 / 228	515 / 470 / 94	416 / 579 / 76	597 / 354 / 161	511 / 465 / 138	453 / 412 / 263	399 / 504 / 211																
		2	505 / 479 / 92	406 / 586 / 74	597 / 397 / 161	482 / 491 / 130	469 / 400 / 272	386 / 494 / 219	475 / 520 / 86	386 / 642 / 70	559 / 430 / 151	453 / 533 / 122	438 / 433 / 255	377 / 535 / 206	446 / 558 / 81	357 / 677 / 65	520 / 459 / 140	424 / 570 / 114	408 / 462 / 237	358 / 559 / 189																
		3	426 / 569 / 77	347 / 702 / 63	463 / 512 / 125	376 / 633 / 101	340 / 540 / 198	286 / 673 / 163	396 / 610 / 72	327 / 762 / 60	434 / 554 / 117	347 / 673 / 94	318 / 581 / 184	273 / 712 / 149	376 / 662 / 69	297 / 790 / 54	405 / 591 / 109	328 / 725 / 89	295 / 616 / 171	266 / 764 / 141																
60		1	669 / 194 / 117	575 / 512 / 101	662 / 248 / 175	662 / 384 / 175	561 / 326 / 324	499 / 445 / 288	657 / 442 / 115	528 / 543 / 92	662 / 288 / 175	651 / 437 / 172	561 / 378 / 324	470 / 477 / 268	610 / 470 / 107	493 / 579 / 86	662 / 331 / 175	605 / 465 / 160	535 / 412 / 309	449 / 504 / 247																
		2	598 / 479 / 105	481 / 586 / 84	662 / 371 / 175	571 / 491 / 151	552 / 400 / 319	446 / 494 / 257	563 / 520 / 98	458 / 642 / 80	662 / 430 / 175	537 / 533 / 142	517 / 433 / 299	425 / 535 / 242	528 / 558 / 92	423 / 677 / 74	617 / 459 / 163	503 / 570 / 133	481 / 462 / 278	402 / 559 / 221																
		3	505 / 569 / 88	411 / 702 / 72	548 / 512 / 145	446 / 633 / 118	401 / 540 / 232	330 / 673 / 191	469 / 610 / 82	387 / 762 / 68	514 / 554 / 136	411 / 673 / 109	374 / 581 / 216	308 / 712 / 175	446 / 662 / 78	352 / 790 / 62	480 / 591 / 127	388 / 725 / 103	348 / 616 / 201	299 / 764 / 165																
Exposure Category : C	45	1	440 / 503 / 82	362 / 625 / 67	542 / 403 / 148	443 / 498 / 119	402 / 437 / 225	366 / 536 / 181	413 / 532 / 77	344 / 650 / 62	507 / 426 / 138	429 / 527 / 112	393 / 466 / 213	364 / 576 / 173	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	377 / 590 / 70	308 / 724 / 57	446 / 492 / 122	364 / 602 / 98	359 / 485 / 201	333 / 604 / 165	350 / 616 / 65	298 / 765 / 54	420 / 522 / 115	356 / 644 / 93	356 / 524 / 193	322 / 629 / 153																								
3	315 / 690 / 59	263 / 864 / 49	341 / 622 / 93	284 / 772 / 77	266 / 662 / 149	244 / 810 / 121	297 / 731 / 55	251 / 903 / 45	324 / 663 / 89	274 / 813 / 72	259 / 703 / 141	237 / 849 / 113																								
50	1	485 / 503 / 88	396 / 625 / 72	597 / 403 / 161	482 / 498 / 130	431 / 437 / 246	389 / 536 / 198	455 / 532 / 83	370 / 650 / 67	559 / 426 / 151	460 / 527 / 122	420 / 466 / 233	386 / 576 / 189																							
	2	416 / 590 / 76	337 / 724 / 61	492 / 492 / 133	395 / 602 / 107	385 / 485 / 219	354 / 604 / 180	386 / 616 / 70	320 / 765 / 58	463 / 522 / 125	382 / 644 / 101	380 / 524 / 211	341 / 629 / 167																							
	3	347 / 690 / 63	287 / 864 / 52	376 / 622 / 101	309 / 772 / 83	285 / 662 / 163	259 / 810 / 132	327 / 731 / 60	270 / 903 / 49	357 / 663 / 96	294 / 813 / 78	278 / 703 / 154	252 / 849 / 123																							
60	1	575 / 503 / 101	469 / 625 / 82	662 / 377 / 175	571 / 498 / 151	499 / 437 / 288	435 / 536 / 232	540 / 532 / 94	434 / 650 / 76	662 / 426 / 175	537 / 527 / 142	475 / 466 / 273	431 / 576 / 221																							
	2	493 / 590 / 86	399 / 724 / 70	582 / 492 / 154	468 / 602 / 124	446 / 485 / 257	397 / 604 / 211	458 / 616 / 80	376 / 765 / 66	548 / 522 / 145	446 / 644 / 118	430 / 524 / 247	381 / 629 / 196																							
	3	411 / 690 / 72	340 / 864 / 60	446 / 622 / 118	366 / 772 / 97	330 / 662 / 191	290 / 810 / 155	387 / 731 / 68	317 / 903 / 56	423 / 663 / 112	343 / 813 / 91	314 / 703 / 180	281 / 849 / 144																							
Exposure Category : C	45	1	395 / 569 / 74	335 / 687 / 59	481 / 452 / 131	413 / 552 / 105	383 / 492 / 201	362 / 613 / 165	368 / 590 / 69	326 / 719 / 55	455 / 476 / 124	407 / 586 / 100	372 / 515 / 189	350 / 631 / 153																						
		2	333 / 653 / 62	287 / 801 / 50	394 / 547 / 108	338 / 664 / 86	344 / 549 / 181	318 / 666 / 145	315 / 686 / 59	286 / 859 / 49	376 / 581 / 103	339 / 717 / 84	340 / 583 / 173	323 / 719 / 141																						
		3	279 / 767 / 52	240 / 933 / 42	306 / 701 / 84	263 / 847 / 67	253 / 740 / 133	239 / 913 / 109	270 / 823 / 50	237 / 993 / 40	289 / 733 / 79	262 / 906 / 65	245 / 772 / 125	231 / 938 / 101																						
	50	1	436 / 569 / 79	359 / 687 / 63	530 / 452 / 143	443 / 552 / 114	408 / 492 / 219	383 / 613 / 180	406 / 590 / 74	348 / 719 / 60	501 / 476 / 135	435 / 586 / 109	396 / 515 / 206	370 / 631 / 167																						
		2	366 / 653 / 67	308 / 801 / 54	434 / 547 / 117	362 / 664 / 94	368 / 549 / 198	337 / 666 / 158	347 / 686 / 63	306 / 859 / 52	415 / 581 / 112	362 / 717 / 91	362 / 583 / 189	341 / 719 / 154																						
		3	307 / 767 / 56	257 / 933 / 45	337 / 701 / 91	282 / 847 / 73	270 / 740 / 145	253 / 913 / 119	297 / 823 / 54	253 / 993 / 43	318 / 733 / 86	280 / 906 / 70	261 / 772 / 136	243 / 938 / 110																						
	60	1	516 / 569 / 90	411 / 687 / 72	628 / 452 / 166	503 / 552 / 133	460 / 492 / 257	426 / 613 / 211	481 / 590 / 84	394 / 719 / 68	594 / 476 / 157	491 / 586 / 127	444 / 515 / 242	409 / 631 / 196																						
		2	434 / 653 / 76	352 / 801 / 62	514 / 547 / 136	411 / 664 / 109	414 / 549 / 232	374 / 666 / 185	411 / 686 / 72	346 / 859 / 60	491 / 581 / 130	409 / 717 / 106	407 / 583 / 221	377 / 719 / 180																						
		3	364 / 767 / 64	294 / 933 / 52	400 / 701 / 106	320 / 847 / 85	304 / 740 / 170	280 / 913 / 139	352 / 823 / 62	286 / 993 / 49	377 / 733 / 100	316 / 906 / 82	293 / 772 / 160	269 / 938 / 129																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	70	1	719 / 103 / 122	719 / 166 / 122	713 / 134 / 185	713 / 212 / 185	627 / 186 / 362	627 / 291 / 362	719 / 115 / 122	719 / 183 / 122	713 / 148 / 185	713 / 234 / 185	627 / 206 / 362	627 / 320 / 362	719 / 127 / 122	719 / 202 / 122	713 / 163 / 185	713 / 257 / 185	627 / 226 / 362	627 / 350 / 362
2		719 / 298 / 122	719 / 459 / 122	713 / 205 / 185	713 / 319 / 185	627 / 234 / 362	627 / 363 / 362	719 / 328 / 122	692 / 485 / 117	713 / 226 / 185	713 / 350 / 185	627 / 258 / 362	627 / 399 / 362	719 / 359 / 122	665 / 509 / 113	713 / 248 / 185	713 / 383 / 185	627 / 283 / 362	607 / 422 / 351	
3		719 / 424 / 122	610 / 550 / 104	713 / 347 / 185	660 / 493 / 172	597 / 422 / 345	484 / 521 / 279	719 / 466 / 122	583 / 576 / 99	713 / 381 / 185	634 / 519 / 165	576 / 447 / 333	463 / 547 / 268	692 / 490 / 117	556 / 600 / 94	713 / 417 / 185	607 / 543 / 158	545 / 462 / 315	442 / 571 / 256	
80		1	770 / 97 / 128	770 / 156 / 128	764 / 126 / 197	764 / 200 / 197	677 / 177 / 391	677 / 276 / 391	770 / 108 / 128	770 / 173 / 128	764 / 140 / 197	764 / 221 / 197	677 / 196 / 391	677 / 304 / 391	770 / 120 / 128	770 / 190 / 128	764 / 154 / 197	764 / 242 / 197	677 / 215 / 391	677 / 333 / 391
		2	770 / 282 / 128	770 / 433 / 128	764 / 193 / 197	764 / 301 / 197	677 / 223 / 391	677 / 345 / 391	770 / 310 / 128	770 / 475 / 128	764 / 213 / 197	764 / 331 / 197	677 / 246 / 391	677 / 379 / 391	770 / 339 / 128	755 / 509 / 125	764 / 234 / 197	764 / 362 / 197	677 / 269 / 391	677 / 415 / 391
		3	770 / 400 / 128	693 / 550 / 115	764 / 328 / 197	749 / 493 / 193	677 / 422 / 391	548 / 521 / 317	770 / 439 / 128	662 / 576 / 110	764 / 360 / 197	719 / 519 / 185	653 / 447 / 377	525 / 547 / 303	770 / 480 / 128	631 / 600 / 105	764 / 394 / 197	689 / 543 / 177	618 / 462 / 357	502 / 571 / 290
90		1	810 / 91 / 132	810 / 147 / 132	805 / 119 / 205	805 / 188 / 205	717 / 168 / 414	717 / 262 / 414	810 / 102 / 132	810 / 163 / 132	805 / 132 / 205	805 / 208 / 205	717 / 186 / 414	717 / 288 / 414	810 / 113 / 132	810 / 179 / 132	805 / 145 / 205	805 / 228 / 205	717 / 204 / 414	717 / 316 / 414
		2	810 / 265 / 132	810 / 407 / 132	805 / 182 / 205	805 / 283 / 205	717 / 211 / 414	717 / 327 / 414	810 / 291 / 132	810 / 447 / 132	805 / 201 / 205	805 / 311 / 205	717 / 233 / 414	717 / 360 / 414	810 / 319 / 132	810 / 488 / 132	805 / 221 / 205	805 / 341 / 205	717 / 256 / 414	717 / 393 / 414
		3	810 / 376 / 132	775 / 550 / 126	805 / 309 / 205	805 / 473 / 205	717 / 400 / 414	613 / 521 / 354	810 / 413 / 132	741 / 576 / 121	805 / 339 / 205	805 / 519 / 205	717 / 439 / 414	587 / 547 / 339	810 / 451 / 132	707 / 600 / 115	805 / 371 / 205	771 / 543 / 197	691 / 462 / 399	561 / 571 / 324
Wind Speed [mph]		110						115												
70	1	719 / 140 / 122	719 / 221 / 122	713 / 179 / 185	713 / 280 / 185	627 / 247 / 362	627 / 382 / 362	719 / 153 / 122	719 / 241 / 122	713 / 196 / 185	713 / 305 / 185	627 / 269 / 362	617 / 408 / 357							
	2	719 / 392 / 122	638 / 532 / 108	713 / 271 / 185	713 / 418 / 185	627 / 309 / 362	576 / 436 / 333	719 / 426 / 122	610 / 552 / 104	713 / 295 / 185	713 / 454 / 185	627 / 336 / 362	556 / 457 / 321							
	3	665 / 512 / 113	529 / 620 / 90	713 / 455 / 185	581 / 565 / 151	525 / 484 / 303	422 / 592 / 244	638 / 533 / 108	516 / 655 / 88	687 / 475 / 179	555 / 585 / 144	504 / 505 / 291	412 / 625 / 238							
	80	1	770 / 132 / 128	770 / 208 / 128	764 / 169 / 197	764 / 265 / 197	677 / 235 / 391	677 / 363 / 391	770 / 144 / 128	770 / 227 / 128	764 / 185 / 197	764 / 288 / 197	677 / 256 / 391	677 / 395 / 391						
		2	770 / 370 / 128	724 / 532 / 120	764 / 256 / 197	764 / 395 / 197	677 / 294 / 391	653 / 436 / 377	770 / 402 / 128	693 / 552 / 115	764 / 279 / 197	764 / 429 / 197	677 / 320 / 391	630 / 457 / 364						
		3	755 / 512 / 125	601 / 620 / 100	764 / 430 / 197	659 / 565 / 170	595 / 484 / 344	478 / 592 / 276	724 / 533 / 120	585 / 655 / 97	764 / 466 / 197	629 / 585 / 162	572 / 505 / 330	467 / 625 / 270						
	90	1	810 / 124 / 132	810 / 196 / 132	805 / 159 / 205	805 / 249 / 205	717 / 223 / 414	717 / 344 / 414	810 / 136 / 132	810 / 213 / 132	805 / 174 / 205	805 / 271 / 205	717 / 243 / 414	717 / 374 / 414						
		2	810 / 348 / 132	810 / 532 / 132	805 / 241 / 205	805 / 372 / 205	717 / 279 / 414	717 / 429 / 414	810 / 378 / 132	775 / 552 / 126	805 / 262 / 205	805 / 404 / 205	717 / 303 / 414	704 / 457 / 407						
		3	810 / 492 / 132	672 / 620 / 109	805 / 404 / 205	738 / 565 / 188	665 / 484 / 384	535 / 592 / 309	810 / 533 / 132	655 / 655 / 107	805 / 439 / 205	704 / 585 / 180	639 / 505 / 369	522 / 625 / 302						
Wind Speed [mph]		120						130												
70	1	719 / 167 / 122	678 / 485 / 115	713 / 213 / 185	713 / 331 / 185	627 / 292 / 362	597 / 427 / 345	719 / 153 / 122	719 / 241 / 122	713 / 196 / 185	713 / 305 / 185	627 / 269 / 362	617 / 408 / 357							
	2	719 / 461 / 122	583 / 570 / 99	713 / 320 / 185	687 / 473 / 179	627 / 365 / 362	535 / 476 / 309	719 / 426 / 122	610 / 552 / 104	713 / 295 / 185	713 / 454 / 185	627 / 336 / 362	556 / 457 / 321							
	3	610 / 552 / 104	488 / 670 / 83	660 / 495 / 172	528 / 602 / 138	484 / 523 / 279	391 / 642 / 226	638 / 533 / 108	516 / 655 / 88	687 / 475 / 179	555 / 585 / 144	504 / 505 / 291	412 / 625 / 238							
	80	1	770 / 157 / 128	770 / 246 / 128	764 / 201 / 197	764 / 312 / 197	677 / 278 / 391	677 / 427 / 391	770 / 144 / 128	770 / 227 / 128	764 / 185 / 197	764 / 288 / 197	677 / 256 / 391	677 / 395 / 391						
		2	770 / 435 / 128	662 / 570 / 110	764 / 302 / 197	764 / 464 / 197	677 / 347 / 391	607 / 476 / 350	770 / 402 / 128	693 / 552 / 115	764 / 279 / 197	764 / 429 / 197	677 / 320 / 391	630 / 457 / 364						
		3	693 / 552 / 115	554 / 670 / 92	749 / 495 / 193	599 / 602 / 154	548 / 523 / 317	443 / 642 / 256	724 / 533 / 120	585 / 655 / 97	764 / 466 / 197	629 / 585 / 162	572 / 505 / 330	467 / 625 / 270						
	90	1	810 / 148 / 132	810 / 232 / 132	805 / 189 / 205	805 / 294 / 205	717 / 263 / 414	717 / 405 / 414	810 / 136 / 132	810 / 213 / 132	805 / 174 / 205	805 / 271 / 205	717 / 243 / 414	717 / 374 / 414						
		2	810 / 409 / 132	741 / 570 / 121	805 / 285 / 205	805 / 437 / 205	717 / 329 / 414	678 / 476 / 392	810 / 378 / 132	775 / 552 / 126	805 / 262 / 205	805 / 404 / 205	717 / 303 / 414	704 / 457 / 407						
		3	775 / 552 / 126	620 / 670 / 101	805 / 475 / 205	671 / 602 / 171	613 / 523 / 354	496 / 642 / 286	810 / 533 / 132	655 / 655 / 107	805 / 439 / 205	704 / 585 / 180	639 / 505 / 369	522 / 625 / 302						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	70	1	719 / 181 / 122	665 / 512 / 113	713 / 231 / 185	713 / 357 / 185	627 / 316 / 362	576 / 445 / 333	719 / 211 / 122	610 / 543 / 104	713 / 268 / 185	713 / 414 / 185	627 / 366 / 362	535 / 477 / 309	705 / 470 / 120	570 / 579 / 97	713 / 308 / 185	700 / 465 / 182	617 / 412 / 357	498 / 504 / 285															
2		692 / 479 / 117	556 / 586 / 94	713 / 346 / 185	660 / 491 / 172	627 / 394 / 362	514 / 494 / 297	651 / 520 / 111	529 / 642 / 90	713 / 400 / 185	621 / 533 / 162	597 / 433 / 345	484 / 535 / 279	610 / 558 / 104	488 / 677 / 83	713 / 459 / 185	581 / 570 / 151	556 / 462 / 321	447 / 559 / 256																
3		583 / 569 / 99	475 / 702 / 81	634 / 512 / 165	515 / 633 / 134	463 / 540 / 268	381 / 673 / 220	543 / 610 / 92	448 / 762 / 76	594 / 554 / 155	475 / 673 / 124	432 / 581 / 250	350 / 712 / 202	516 / 662 / 88	407 / 790 / 69	555 / 591 / 144	449 / 725 / 117	401 / 616 / 232	332 / 764 / 190																
1		770 / 171 / 128	755 / 512 / 125	764 / 218 / 197	764 / 338 / 197	677 / 300 / 391	653 / 445 / 377	770 / 199 / 128	693 / 543 / 115	764 / 253 / 197	764 / 391 / 197	677 / 348 / 391	607 / 477 / 350	770 / 229 / 128	647 / 579 / 107	764 / 291 / 197	764 / 447 / 197	677 / 399 / 391	560 / 504 / 324																
2		770 / 469 / 128	631 / 586 / 105	764 / 327 / 197	749 / 491 / 193	677 / 374 / 391	583 / 494 / 337	739 / 520 / 123	601 / 642 / 100	764 / 378 / 197	704 / 533 / 181	677 / 433 / 391	548 / 535 / 317	693 / 558 / 115	554 / 677 / 92	764 / 433 / 197	659 / 570 / 170	630 / 462 / 364	502 / 559 / 290																
3		662 / 569 / 110	539 / 702 / 90	719 / 512 / 185	585 / 633 / 150	525 / 540 / 303	432 / 673 / 250	616 / 610 / 102	508 / 762 / 84	674 / 554 / 173	540 / 673 / 139	490 / 581 / 283	397 / 712 / 229	585 / 662 / 97	462 / 790 / 77	629 / 591 / 162	510 / 725 / 131	455 / 616 / 263	374 / 764 / 216																
1		810 / 160 / 132	810 / 251 / 132	805 / 205 / 205	805 / 318 / 205	717 / 285 / 414	717 / 437 / 414	810 / 187 / 132	775 / 543 / 126	805 / 238 / 205	805 / 368 / 205	717 / 330 / 414	678 / 477 / 392	810 / 216 / 132	724 / 579 / 118	805 / 274 / 205	805 / 421 / 205	717 / 378 / 414	626 / 504 / 362																
2		810 / 441 / 132	707 / 586 / 115	805 / 308 / 205	805 / 471 / 205	717 / 355 / 414	652 / 494 / 377	810 / 509 / 132	672 / 642 / 109	805 / 356 / 205	788 / 533 / 201	717 / 411 / 414	613 / 535 / 354	775 / 558 / 126	620 / 677 / 101	805 / 408 / 205	738 / 570 / 188	704 / 462 / 407	561 / 559 / 324																
3		741 / 569 / 121	603 / 702 / 98	805 / 512 / 205	654 / 633 / 167	587 / 540 / 339	483 / 673 / 279	689 / 610 / 112	569 / 762 / 93	755 / 554 / 192	604 / 673 / 154	548 / 581 / 317	444 / 712 / 256	655 / 662 / 107	517 / 790 / 84	704 / 591 / 180	570 / 725 / 145	509 / 616 / 294	418 / 764 / 241																
Wind Speed [mph]		170						180																											
70	1	665 / 503 / 113	543 / 625 / 92	713 / 351 / 185	660 / 498 / 172	576 / 437 / 333	482 / 536 / 268	624 / 532 / 106	502 / 650 / 85	713 / 396 / 185	621 / 527 / 162	545 / 466 / 315	475 / 576 / 256	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
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	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	570 / 590 / 97	461 / 724 / 78	673 / 492 / 175	541 / 602 / 141	514 / 485 / 297	439 / 604 / 244	529 / 616 / 90	434 / 765 / 74	634 / 522 / 165	515 / 644 / 134	494 / 524 / 285	420 / 629 / 226																							
3	475 / 690 / 81	394 / 864 / 67	515 / 622 / 134	423 / 772 / 110	381 / 662 / 220	321 / 810 / 179	448 / 731 / 76	366 / 903 / 62	489 / 663 / 127	396 / 813 / 103	360 / 703 / 208	310 / 849 / 167																							
1	755 / 503 / 125	616 / 625 / 102	764 / 331 / 197	749 / 498 / 193	653 / 437 / 377	528 / 536 / 303	708 / 532 / 117	570 / 650 / 95	764 / 374 / 197	704 / 527 / 181	618 / 466 / 357	520 / 576 / 290																							
2	647 / 590 / 107	524 / 724 / 87	764 / 492 / 197	614 / 602 / 158	583 / 485 / 337	481 / 604 / 276	601 / 616 / 100	493 / 765 / 82	719 / 522 / 185	585 / 644 / 150	560 / 524 / 324	459 / 629 / 256																							
3	539 / 690 / 90	447 / 864 / 74	585 / 622 / 150	480 / 772 / 124	432 / 662 / 250	352 / 810 / 202	508 / 731 / 84	416 / 903 / 69	555 / 663 / 143	450 / 813 / 116	408 / 703 / 236	339 / 849 / 189																							
1	810 / 246 / 132	689 / 625 / 112	805 / 312 / 205	805 / 478 / 205	717 / 429 / 414	587 / 536 / 339	793 / 532 / 129	638 / 650 / 104	805 / 352 / 205	788 / 527 / 201	691 / 466 / 399	564 / 576 / 324																							
2	724 / 590 / 118	586 / 724 / 95	805 / 463 / 205	688 / 602 / 175	652 / 485 / 377	535 / 604 / 309	672 / 616 / 109	552 / 765 / 90	805 / 522 / 205	654 / 644 / 167	626 / 524 / 362	499 / 629 / 286																							
3	603 / 690 / 98	500 / 864 / 82	654 / 622 / 167	537 / 772 / 137	483 / 662 / 279	392 / 810 / 226	569 / 731 / 93	465 / 903 / 76	621 / 663 / 158	503 / 813 / 128	457 / 703 / 264	368 / 849 / 211																							
Wind Speed [mph]		190						200																											
70	1	597 / 569 / 101	475 / 687 / 81	713 / 444 / 185	581 / 552 / 151	514 / 492 / 297	468 / 613 / 244	556 / 590 / 94	448 / 719 / 76	687 / 476 / 179	555 / 586 / 144	493 / 515 / 279							448 / 631 / 226																
	2	502 / 653 / 85	407 / 801 / 69	594 / 547 / 155	475 / 664 / 124	463 / 549 / 268	411 / 666 / 214	475 / 686 / 81	394 / 859 / 67	568 / 581 / 148	462 / 717 / 120	451 / 583 / 256							413 / 719 / 208																
	3	421 / 767 / 72	339 / 933 / 58	462 / 701 / 120	370 / 847 / 96	340 / 740 / 196	308 / 913 / 161	407 / 823 / 69	326 / 993 / 56	436 / 733 / 114	357 / 906 / 93	325 / 772 / 184	295 / 938 / 149																						
	1	678 / 569 / 112	539 / 687 / 90	764 / 419 / 197	659 / 552 / 170	583 / 492 / 337	510 / 613 / 276	631 / 590 / 105	508 / 719 / 84	764 / 467 / 197	629 / 586 / 162	548 / 515 / 317	488 / 631 / 256																						
	2	570 / 653 / 95	462 / 801 / 77	674 / 547 / 173	540 / 664 / 139	525 / 549 / 303	448 / 666 / 243	539 / 686 / 90	447 / 859 / 74	644 / 581 / 166	525 / 717 / 135	502 / 583 / 290	449 / 719 / 236																						
	3	478 / 767 / 79	385 / 933 / 64	525 / 701 / 135	420 / 847 / 108	385 / 740 / 223	336 / 913 / 182	462 / 823 / 77	370 / 993 / 62	495 / 733 / 127	405 / 906 / 104	362 / 772 / 209	321 / 938 / 169																						
	1	758 / 569 / 123	603 / 687 / 98	805 / 395 / 205	738 / 552 / 188	652 / 492 / 377	553 / 613 / 309	707 / 590 / 115	569 / 719 / 93	805 / 440 / 205	704 / 586 / 180	613 / 515 / 354	527 / 631 / 286																						
	2	638 / 653 / 104	517 / 801 / 84	755 / 547 / 192	604 / 664 / 154	587 / 549 / 339	485 / 666 / 271	603 / 686 / 98	500 / 859 / 82	721 / 581 / 184	587 / 717 / 150	561 / 583 / 324	485 / 719 / 264																						
	3	534 / 767 / 87	431 / 933 / 70	587 / 701 / 150	470 / 847 / 120	431 / 740 / 249	364 / 913 / 204	517 / 823 / 84	414 / 993 / 68	553 / 733 / 141	453 / 906 / 116	405 / 772 / 234	347 / 938 / 189																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	1	218 / 346 / 39	175 / 429 / 31	254 / 249 / 52	217 / 335 / 44	232 / 287 / 63	196 / 377 / 53	209 / 365 / 37	169 / 454 / 30	245 / 266 / 50	211 / 359 / 43	223 / 304 / 60	187 / 395 / 51	199 / 382 / 35	160 / 470 / 28	239 / 285 / 49	202 / 376 / 41	217 / 325 / 59	178 / 412 / 48	
0	2	187 / 411 / 33	151 / 506 / 27	220 / 329 / 45	181 / 417 / 37	214 / 332 / 58	175 / 420 / 48	178 / 430 / 32	144 / 533 / 26	214 / 352 / 44	171 / 434 / 35	208 / 356 / 56	167 / 437 / 45	169 / 446 / 30	138 / 557 / 25	205 / 369 / 42	165 / 458 / 34	199 / 373 / 54	161 / 461 / 44	
	3	157 / 487 / 28	126 / 596 / 22	174 / 438 / 36	141 / 540 / 29	158 / 460 / 43	128 / 567 / 35	151 / 513 / 27	120 / 621 / 21	165 / 456 / 34	135 / 566 / 28	152 / 485 / 41	122 / 593 / 33	141 / 527 / 25	117 / 661 / 21	159 / 480 / 33	129 / 590 / 26	146 / 509 / 40	116 / 615 / 32	
	1	241 / 346 / 39	194 / 429 / 31	275 / 246 / 54	238 / 335 / 47	232 / 287 / 75	196 / 377 / 63	231 / 365 / 37	187 / 454 / 30	269 / 266 / 53	232 / 359 / 45	223 / 304 / 72	187 / 395 / 61	221 / 382 / 35	177 / 470 / 28	262 / 285 / 51	222 / 376 / 43	217 / 325 / 70	178 / 412 / 58	
5	2	207 / 411 / 33	166 / 506 / 27	242 / 329 / 47	198 / 417 / 39	214 / 332 / 69	175 / 420 / 57	197 / 430 / 32	160 / 533 / 26	235 / 352 / 46	188 / 434 / 37	208 / 356 / 67	167 / 437 / 54	187 / 446 / 30	153 / 557 / 25	225 / 369 / 44	182 / 458 / 36	199 / 373 / 64	161 / 461 / 52	
	3	173 / 487 / 28	139 / 596 / 22	192 / 438 / 38	155 / 540 / 30	158 / 460 / 51	128 / 567 / 42	166 / 513 / 27	133 / 621 / 21	182 / 456 / 36	148 / 566 / 29	152 / 485 / 49	122 / 593 / 40	156 / 527 / 25	129 / 661 / 21	175 / 480 / 34	141 / 590 / 28	146 / 509 / 47	116 / 615 / 38	
	1	306 / 346 / 39	245 / 429 / 31	327 / 231 / 63	301 / 335 / 58	258 / 287 / 96	218 / 377 / 81	293 / 365 / 37	237 / 454 / 30	327 / 256 / 63	293 / 359 / 56	248 / 304 / 92	208 / 395 / 77	280 / 382 / 35	224 / 470 / 28	327 / 282 / 63	280 / 376 / 54	241 / 325 / 89	199 / 412 / 74	
10	2	263 / 411 / 33	211 / 506 / 27	305 / 329 / 59	250 / 417 / 48	238 / 332 / 88	195 / 420 / 72	250 / 430 / 32	202 / 533 / 26	297 / 352 / 57	238 / 434 / 46	232 / 356 / 86	185 / 437 / 69	237 / 446 / 30	194 / 557 / 25	284 / 369 / 55	229 / 458 / 44	222 / 373 / 82	179 / 461 / 66	
	3	220 / 487 / 28	177 / 596 / 22	242 / 438 / 46	195 / 540 / 38	175 / 460 / 65	142 / 567 / 53	211 / 513 / 27	168 / 621 / 21	229 / 456 / 44	187 / 566 / 36	169 / 485 / 63	136 / 593 / 50	198 / 527 / 25	164 / 661 / 21	221 / 480 / 42	178 / 590 / 34	162 / 509 / 60	129 / 615 / 48	
	1	190 / 398 / 34	154 / 492 / 27	232 / 304 / 47	193 / 392 / 39	211 / 345 / 57	177 / 434 / 47	184 / 418 / 33	147 / 513 / 26	223 / 319 / 46	187 / 413 / 38	202 / 360 / 55	179 / 447 / 44							
0	2	163 / 468 / 29	132 / 579 / 24	196 / 385 / 40	159 / 481 / 33	190 / 389 / 51	159 / 483 / 42	157 / 489 / 28	126 / 599 / 22	190 / 406 / 39	153 / 502 / 31	181 / 402 / 49	159 / 494 / 40							
	3	135 / 548 / 24	111 / 680 / 20	153 / 502 / 31	123 / 611 / 25	140 / 531 / 38	116 / 652 / 31	132 / 581 / 24	108 / 717 / 19	147 / 523 / 30	116 / 629 / 24	134 / 552 / 36	117 / 669 / 29							
	1	211 / 398 / 34	170 / 492 / 27	255 / 304 / 50	212 / 392 / 42	211 / 345 / 68	177 / 434 / 56	204 / 418 / 33	163 / 513 / 26	245 / 319 / 48	205 / 413 / 40	202 / 360 / 65	179 / 447 / 53							
5	2	180 / 468 / 29	146 / 579 / 24	215 / 385 / 42	175 / 481 / 34	190 / 389 / 62	159 / 483 / 50	173 / 489 / 28	139 / 599 / 22	208 / 406 / 41	168 / 502 / 33	181 / 402 / 59	159 / 494 / 47							
	3	150 / 548 / 24	122 / 680 / 20	168 / 502 / 33	135 / 611 / 27	140 / 531 / 45	116 / 652 / 37	146 / 581 / 24	119 / 717 / 19	161 / 523 / 32	128 / 629 / 25	134 / 552 / 43	117 / 669 / 35							
	1	267 / 398 / 34	215 / 492 / 27	322 / 304 / 62	267 / 392 / 51	235 / 345 / 87	195 / 434 / 71	258 / 418 / 33	207 / 513 / 26	310 / 319 / 59	259 / 413 / 50	225 / 360 / 83	194 / 447 / 68							
10	2	228 / 468 / 29	185 / 579 / 24	272 / 385 / 52	221 / 481 / 42	212 / 389 / 79	175 / 483 / 64	220 / 489 / 28	177 / 599 / 22	263 / 406 / 51	212 / 502 / 41	202 / 402 / 75	172 / 494 / 60							
	3	190 / 548 / 24	155 / 680 / 20	212 / 502 / 41	170 / 611 / 33	156 / 531 / 58	128 / 652 / 47	185 / 581 / 24	151 / 717 / 19	204 / 523 / 39	161 / 629 / 31	149 / 552 / 55	127 / 669 / 44							
	1	175 / 431 / 31	141 / 531 / 25	217 / 337 / 44	177 / 425 / 36	196 / 378 / 53	183 / 466 / 43	184 / 418 / 33	147 / 513 / 26	223 / 319 / 46	187 / 413 / 38	202 / 360 / 55	179 / 447 / 44							
0	2	151 / 508 / 27	120 / 615 / 21	181 / 418 / 37	147 / 521 / 30	175 / 421 / 48	166 / 523 / 39	157 / 489 / 28	126 / 599 / 22	190 / 406 / 39	153 / 502 / 31	181 / 402 / 49	159 / 494 / 40							
	3	126 / 599 / 22	102 / 730 / 18	141 / 542 / 29	113 / 662 / 23	128 / 570 / 35	121 / 702 / 28	132 / 581 / 24	108 / 717 / 19	147 / 523 / 30	116 / 629 / 24	134 / 552 / 36	117 / 669 / 29							
	1	194 / 431 / 31	156 / 531 / 25	238 / 337 / 47	195 / 425 / 38	196 / 378 / 63	183 / 466 / 51	204 / 418 / 33	163 / 513 / 26	245 / 319 / 48	205 / 413 / 40	202 / 360 / 65	179 / 447 / 53							
5	2	166 / 508 / 27	133 / 615 / 21	198 / 418 / 39	161 / 521 / 32	175 / 421 / 57	166 / 523 / 46	173 / 489 / 28	139 / 599 / 22	208 / 406 / 41	168 / 502 / 33	181 / 402 / 59	159 / 494 / 47							
	3	139 / 599 / 22	112 / 730 / 18	155 / 542 / 30	125 / 662 / 25	128 / 570 / 42	121 / 702 / 34	146 / 581 / 24	119 / 717 / 19	161 / 523 / 32	128 / 629 / 25	134 / 552 / 43	117 / 669 / 35							
	1	245 / 431 / 31	198 / 531 / 25	301 / 337 / 58	246 / 425 / 47	218 / 378 / 81	195 / 466 / 65	258 / 418 / 33	207 / 513 / 26	310 / 319 / 59	259 / 413 / 50	225 / 360 / 83	194 / 447 / 68							
10	2	211 / 508 / 27	168 / 615 / 21	250 / 418 / 48	204 / 521 / 39	195 / 421 / 72	176 / 523 / 59	220 / 489 / 28	177 / 599 / 22	263 / 406 / 51	212 / 502 / 41	202 / 402 / 75	172 / 494 / 60							
	3	177 / 599 / 22	142 / 730 / 18	195 / 542 / 38	157 / 662 / 30	142 / 570 / 53	129 / 702 / 43	185 / 581 / 24	151 / 717 / 19	204 / 523 / 39	161 / 629 / 31	149 / 552 / 55	127 / 669 / 44							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs							
Wind Speed [mph]		140						150						160							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	169 / 449 / 30	135 / 548 / 24	214 / 359 / 44	171 / 443 / 35	187 / 390 / 51	187 / 483 / 41	157 / 481 / 28	137 / 589 / 22	199 / 387 / 41	174 / 476 / 33	175 / 423 / 48	194 / 514 / 38	147 / 518 / 26	145 / 639 / 21	184 / 410 / 38	181 / 513 / 31	180 / 451 / 44	202 / 550 / 36
0	2	144 / 526 / 26	117 / 646 / 21	174 / 437 / 36	141 / 538 / 29	169 / 440 / 46	169 / 541 / 37	135 / 568 / 24	117 / 685 / 19	162 / 469 / 33	144 / 580 / 27	158 / 472 / 43	177 / 583 / 35	126 / 605 / 22	122 / 737 / 18	150 / 497 / 31	148 / 617 / 25	161 / 499 / 40	184 / 619 / 32		
0	3	120 / 614 / 21	98 / 762 / 18	135 / 559 / 28	110 / 694 / 23	122 / 585 / 33	125 / 735 / 28	114 / 671 / 20	101 / 822 / 17	126 / 601 / 26	110 / 732 / 21	116 / 641 / 32	128 / 771 / 25	105 / 703 / 19	104 / 875 / 16	116 / 636 / 24	115 / 785 / 20	118 / 676 / 29	134 / 822 / 24		
5	1	187 / 449 / 30	150 / 548 / 24	235 / 359 / 46	188 / 443 / 37	187 / 390 / 61	187 / 483 / 49	173 / 481 / 28	148 / 589 / 22	218 / 387 / 43	186 / 476 / 34	175 / 423 / 57	194 / 514 / 45	163 / 518 / 26	151 / 639 / 21	202 / 410 / 40	188 / 513 / 32	180 / 451 / 53	202 / 550 / 42		
5	2	160 / 526 / 26	129 / 646 / 21	192 / 437 / 38	155 / 538 / 30	169 / 440 / 55	169 / 541 / 44	150 / 568 / 24	126 / 685 / 19	178 / 469 / 35	154 / 580 / 28	158 / 472 / 51	177 / 583 / 42	139 / 605 / 22	128 / 737 / 18	165 / 497 / 32	154 / 617 / 27	161 / 499 / 47	184 / 619 / 39		
5	3	133 / 614 / 21	109 / 762 / 18	148 / 559 / 29	121 / 694 / 24	122 / 585 / 40	125 / 735 / 33	126 / 671 / 20	108 / 822 / 17	138 / 601 / 27	118 / 732 / 22	116 / 641 / 38	128 / 771 / 30	116 / 703 / 19	109 / 875 / 16	128 / 636 / 25	119 / 785 / 21	118 / 676 / 35	134 / 822 / 28		
10	1	237 / 449 / 30	190 / 548 / 24	297 / 359 / 57	238 / 443 / 46	208 / 390 / 77	195 / 483 / 63	220 / 481 / 28	185 / 589 / 22	276 / 387 / 53	232 / 476 / 42	195 / 423 / 72	196 / 514 / 58	207 / 518 / 26	187 / 639 / 21	255 / 410 / 49	231 / 513 / 40	195 / 451 / 68	202 / 550 / 54		
10	2	202 / 526 / 26	164 / 646 / 21	242 / 437 / 46	195 / 538 / 38	189 / 440 / 70	176 / 541 / 57	190 / 568 / 24	158 / 685 / 19	225 / 469 / 43	192 / 580 / 35	175 / 472 / 65	179 / 583 / 53	177 / 605 / 22	158 / 737 / 18	208 / 497 / 40	189 / 617 / 33	173 / 499 / 60	184 / 619 / 49		
10	3	168 / 614 / 21	138 / 762 / 18	187 / 559 / 36	153 / 694 / 30	136 / 585 / 50	130 / 735 / 42	159 / 671 / 20	136 / 822 / 17	174 / 601 / 34	147 / 732 / 27	129 / 641 / 48	129 / 771 / 38	147 / 703 / 19	134 / 875 / 16	161 / 636 / 31	147 / 785 / 26	128 / 676 / 44	134 / 822 / 36		
Wind Speed [mph]		170						180													
Exposure Category : D	0	1	138 / 551 / 25	147 / 668 / 20	171 / 435 / 35	188 / 546 / 29	185 / 475 / 41	215 / 594 / 34	136 / 578 / 23	153 / 709 / 19	171 / 464 / 33	193 / 574 / 27	191 / 503 / 39	220 / 621 / 32							
	0	2	117 / 635 / 21	127 / 783 / 17	141 / 529 / 29	151 / 646 / 23	167 / 531 / 37	189 / 648 / 30	117 / 676 / 20	131 / 823 / 16	142 / 569 / 28	157 / 687 / 22	175 / 572 / 36	198 / 689 / 28							
	0	3	98 / 749 / 18	107 / 919 / 14	110 / 682 / 23	119 / 830 / 18	123 / 722 / 28	143 / 897 / 23	97 / 789 / 17	113 / 991 / 14	110 / 724 / 22	121 / 868 / 17	128 / 763 / 26	147 / 935 / 21							
	5	1	153 / 551 / 25	150 / 668 / 20	188 / 435 / 37	190 / 546 / 30	185 / 475 / 49	215 / 594 / 41	148 / 578 / 23	153 / 709 / 19	185 / 464 / 35	193 / 574 / 28	191 / 503 / 46	220 / 621 / 38							
	5	2	129 / 635 / 21	129 / 783 / 17	155 / 529 / 30	153 / 646 / 25	167 / 531 / 44	189 / 648 / 36	127 / 676 / 20	131 / 823 / 16	154 / 569 / 29	157 / 687 / 23	175 / 572 / 42	198 / 689 / 34							
	5	3	109 / 749 / 18	108 / 919 / 14	121 / 682 / 24	120 / 830 / 19	123 / 722 / 33	143 / 897 / 27	106 / 789 / 17	113 / 991 / 14	119 / 724 / 23	121 / 868 / 18	128 / 763 / 31	147 / 935 / 25							
	10	1	194 / 551 / 25	183 / 668 / 20	238 / 435 / 46	230 / 546 / 38	193 / 475 / 63	215 / 594 / 52	186 / 578 / 23	183 / 709 / 19	232 / 464 / 43	229 / 574 / 35	195 / 503 / 59	220 / 621 / 48							
	10	2	164 / 635 / 21	157 / 783 / 17	195 / 529 / 38	185 / 646 / 30	175 / 531 / 57	189 / 648 / 46	160 / 676 / 20	156 / 823 / 16	193 / 569 / 36	186 / 687 / 29	179 / 572 / 54	198 / 689 / 43							
	10	3	138 / 749 / 18	132 / 919 / 14	153 / 682 / 30	145 / 830 / 24	129 / 722 / 42	143 / 897 / 35	133 / 789 / 17	135 / 991 / 14	149 / 724 / 28	144 / 868 / 22	130 / 763 / 40	147 / 935 / 32							
Wind Speed [mph]		190						200													
Exposure Category : D	0	1	141 / 616 / 22	158 / 746 / 18	176 / 491 / 31	202 / 612 / 26	201 / 539 / 37	230 / 658 / 30	146 / 650 / 21	167 / 802 / 17	183 / 524 / 30	204 / 630 / 24	205 / 560 / 35	239 / 691 / 28							
	0	2	120 / 713 / 19	138 / 887 / 16	144 / 593 / 26	162 / 723 / 21	179 / 595 / 33	206 / 725 / 27	123 / 745 / 18	140 / 914 / 14	149 / 627 / 25	172 / 778 / 20	186 / 629 / 32	219 / 780 / 26							
	0	3	103 / 851 / 16	114 / 1017 / 13	113 / 761 / 20	128 / 933 / 17	131 / 798 / 24	156 / 1003 / 20	104 / 879 / 15	119 / 1079 / 12	115 / 792 / 19	134 / 995 / 16	138 / 856 / 24	157 / 1023 / 19							
	5	1	150 / 616 / 22	158 / 746 / 18	185 / 491 / 33	202 / 612 / 27	201 / 539 / 44	230 / 658 / 36	151 / 650 / 21	167 / 802 / 17	189 / 524 / 32	204 / 630 / 25	205 / 560 / 42	239 / 691 / 34							
	5	2	127 / 713 / 19	138 / 887 / 16	152 / 593 / 27	162 / 723 / 22	179 / 595 / 40	206 / 725 / 32	127 / 745 / 18	140 / 914 / 14	153 / 627 / 26	172 / 778 / 21	186 / 629 / 38	219 / 780 / 31							
	5	3	109 / 851 / 16	114 / 1017 / 13	119 / 761 / 21	128 / 933 / 17	131 / 798 / 29	156 / 1003 / 24	107 / 879 / 15	119 / 1079 / 12	118 / 792 / 20	134 / 995 / 17	138 / 856 / 28	157 / 1023 / 22							
	10	1	186 / 616 / 22	182 / 746 / 18	229 / 491 / 41	231 / 612 / 34	201 / 539 / 57	230 / 658 / 46	185 / 650 / 21	187 / 802 / 17	231 / 524 / 39	227 / 630 / 31	205 / 560 / 53	239 / 691 / 43							
	10	2	158 / 713 / 19	160 / 887 / 16	188 / 593 / 34	186 / 723 / 27	179 / 595 / 50	206 / 725 / 41	156 / 745 / 18	157 / 914 / 14	188 / 627 / 32	191 / 778 / 26	186 / 629 / 48	219 / 780 / 40							
	10	3	135 / 851 / 16	131 / 1017 / 13	147 / 761 / 26	147 / 933 / 21	131 / 798 / 37	156 / 1003 / 31	132 / 879 / 15	133 / 1079 / 12	145 / 792 / 25	150 / 995 / 21	138 / 856 / 36	157 / 1023 / 29							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 70in x 41in | Load: Up / Down / Side , lbs

Exposure Category : D	95				100				105																											
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																			
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
Ground Snow	15	1	370 / 346 / 40	297 / 429 / 32	379 / 222 / 72	364 / 335 / 69	294 / 287 / 116	249 / 377 / 98	354 / 365 / 38	287 / 454 / 31	379 / 246 / 72	354 / 359 / 67	282 / 304 / 112	237 / 395 / 94	339 / 382 / 37	271 / 470 / 29	379 / 271 / 72	338 / 376 / 64	275 / 325 / 109	226 / 412 / 90																
		2	318 / 411 / 34	256 / 506 / 28	369 / 329 / 70	303 / 417 / 57	271 / 332 / 107	222 / 420 / 88	302 / 430 / 33	245 / 533 / 27	359 / 352 / 68	287 / 434 / 54	264 / 356 / 104	211 / 437 / 84	287 / 446 / 31	235 / 557 / 25	344 / 369 / 65	277 / 458 / 52	252 / 373 / 100	204 / 461 / 81																
		3	266 / 487 / 29	214 / 596 / 23	292 / 438 / 55	236 / 540 / 45	200 / 460 / 79	162 / 567 / 64	256 / 513 / 28	203 / 621 / 22	277 / 456 / 52	226 / 566 / 43	192 / 485 / 76	155 / 593 / 61	240 / 527 / 26	198 / 661 / 22	267 / 480 / 51	216 / 590 / 41	185 / 509 / 73	147 / 615 / 58																
	20	1	428 / 166 / 43	349 / 429 / 35	421 / 210 / 79	421 / 330 / 79	330 / 287 / 139	279 / 377 / 118	416 / 365 / 41	337 / 454 / 34	421 / 233 / 79	415 / 359 / 78	317 / 304 / 134	266 / 395 / 113	398 / 382 / 40	318 / 470 / 32	421 / 256 / 79	397 / 376 / 74	308 / 325 / 130	254 / 412 / 107																
		2	373 / 411 / 37	300 / 506 / 30	421 / 320 / 79	355 / 417 / 67	304 / 332 / 129	249 / 420 / 105	355 / 430 / 35	288 / 533 / 29	421 / 352 / 79	337 / 434 / 63	296 / 356 / 125	237 / 437 / 100	337 / 446 / 34	276 / 557 / 28	403 / 369 / 75	325 / 458 / 61	283 / 373 / 120	228 / 461 / 97																
		3	312 / 487 / 31	251 / 596 / 25	343 / 438 / 64	277 / 540 / 52	224 / 460 / 95	182 / 567 / 77	300 / 513 / 30	239 / 621 / 24	325 / 456 / 61	265 / 566 / 50	216 / 485 / 91	173 / 593 / 73	282 / 527 / 28	233 / 661 / 23	313 / 480 / 59	253 / 590 / 47	207 / 509 / 88	165 / 615 / 70																
	25	1	428 / 166 / 43	349 / 429 / 35	421 / 210 / 79	421 / 330 / 79	356 / 280 / 163	309 / 377 / 141	416 / 365 / 41	337 / 454 / 34	421 / 233 / 79	415 / 359 / 78	351 / 304 / 160	295 / 395 / 135	398 / 382 / 40	318 / 470 / 32	421 / 256 / 79	397 / 376 / 74	342 / 325 / 156	281 / 412 / 128																
		2	373 / 411 / 37	300 / 506 / 30	421 / 320 / 79	355 / 417 / 67	337 / 332 / 154	277 / 420 / 126	355 / 430 / 35	288 / 533 / 29	421 / 352 / 79	337 / 434 / 63	328 / 356 / 150	262 / 437 / 120	337 / 446 / 34	276 / 557 / 28	403 / 369 / 75	325 / 458 / 61	314 / 373 / 143	253 / 461 / 116																
		3	312 / 487 / 31	251 / 596 / 25	343 / 438 / 64	277 / 540 / 52	248 / 460 / 114	202 / 567 / 92	300 / 513 / 30	239 / 621 / 24	325 / 456 / 61	265 / 566 / 50	239 / 485 / 109	192 / 593 / 88	282 / 527 / 28	233 / 661 / 23	313 / 480 / 59	253 / 590 / 47	230 / 509 / 105	183 / 615 / 84																
110	15	1	323 / 398 / 35	261 / 492 / 28	379 / 296 / 72	323 / 392 / 61	267 / 345 / 106	222 / 434 / 87	313 / 418 / 34	250 / 513 / 27	374 / 319 / 71	313 / 413 / 59	256 / 360 / 101	219 / 447 / 82	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panel Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	276 / 468 / 30	224 / 579 / 24	328 / 385 / 62	267 / 481 / 51	241 / 389 / 96	199 / 483 / 78	266 / 489 / 29	214 / 599 / 23	318 / 406 / 60	257 / 502 / 49	230 / 402 / 91	195 / 494 / 73																								
3	230 / 548 / 25	188 / 680 / 20	257 / 502 / 49	205 / 611 / 39	177 / 531 / 70	146 / 652 / 57	224 / 581 / 24	183 / 717 / 20	246 / 523 / 47	195 / 629 / 37	170 / 552 / 67	143 / 669 / 54																								
20	1	380 / 398 / 38	306 / 492 / 31	421 / 280 / 79	379 / 392 / 71	300 / 345 / 127	249 / 434 / 104	367 / 418 / 37	294 / 513 / 29	421 / 306 / 79	367 / 413 / 69	287 / 360 / 121	244 / 447 / 98																							
	2	325 / 468 / 32	263 / 579 / 26	385 / 385 / 72	313 / 481 / 59	271 / 389 / 114	223 / 483 / 93	312 / 489 / 31	251 / 599 / 25	373 / 406 / 70	301 / 502 / 56	258 / 402 / 109	218 / 494 / 88																							
	3	270 / 548 / 27	221 / 680 / 22	301 / 502 / 56	241 / 611 / 45	199 / 531 / 84	163 / 652 / 68	263 / 581 / 26	214 / 717 / 22	289 / 523 / 54	229 / 629 / 43	190 / 552 / 81	160 / 669 / 65																							
25	1	380 / 398 / 38	306 / 492 / 31	421 / 280 / 79	379 / 392 / 71	333 / 345 / 152	275 / 434 / 124	367 / 418 / 37	294 / 513 / 29	421 / 306 / 79	367 / 413 / 69	319 / 360 / 146	269 / 447 / 118																							
	2	325 / 468 / 32	263 / 579 / 26	385 / 385 / 72	313 / 481 / 59	300 / 389 / 137	247 / 483 / 111	312 / 489 / 31	251 / 599 / 25	373 / 406 / 70	301 / 502 / 56	286 / 402 / 131	240 / 494 / 105																							
	3	270 / 548 / 27	221 / 680 / 22	301 / 502 / 56	241 / 611 / 45	220 / 531 / 101	181 / 652 / 82	263 / 581 / 26	214 / 717 / 22	289 / 523 / 54	229 / 629 / 43	211 / 552 / 96	176 / 669 / 77																							
115	15	1	297 / 431 / 32	240 / 531 / 26	364 / 337 / 69	297 / 425 / 56	249 / 378 / 98	219 / 466 / 79	313 / 418 / 34	250 / 513 / 27	374 / 319 / 71	313 / 413 / 59	256 / 360 / 101	219 / 447 / 82																						
		2	256 / 508 / 28	203 / 615 / 22	303 / 418 / 57	246 / 521 / 47	222 / 421 / 88	198 / 523 / 72	266 / 489 / 29	214 / 599 / 23	318 / 406 / 60	257 / 502 / 49	230 / 402 / 91	195 / 494 / 73																						
		3	214 / 599 / 23	172 / 730 / 19	236 / 542 / 45	190 / 662 / 36	162 / 570 / 64	145 / 702 / 52	224 / 581 / 24	183 / 717 / 20	246 / 523 / 47	195 / 629 / 37	170 / 552 / 67	143 / 669 / 54																						
	20	1	349 / 431 / 35	282 / 531 / 28	421 / 332 / 79	349 / 425 / 65	279 / 378 / 118	243 / 466 / 95	367 / 418 / 37	294 / 513 / 29	421 / 306 / 79	367 / 413 / 69	287 / 360 / 121	244 / 447 / 98																						
		2	300 / 508 / 30	239 / 615 / 24	355 / 418 / 67	289 / 521 / 54	249 / 421 / 105	220 / 523 / 86	312 / 489 / 31	251 / 599 / 25	373 / 406 / 70	301 / 502 / 56	258 / 402 / 109	218 / 494 / 88																						
		3	251 / 599 / 25	202 / 730 / 20	277 / 542 / 52	223 / 662 / 42	182 / 570 / 77	161 / 702 / 63	263 / 581 / 26	214 / 717 / 22	289 / 523 / 54	229 / 629 / 43	190 / 552 / 81	160 / 669 / 65																						
	25	1	349 / 431 / 35	282 / 531 / 28	421 / 332 / 79	349 / 425 / 65	309 / 378 / 141	268 / 466 / 114	367 / 418 / 37	294 / 513 / 29	421 / 306 / 79	367 / 413 / 69	319 / 360 / 146	269 / 447 / 118																						
		2	300 / 508 / 30	239 / 615 / 24	355 / 418 / 67	289 / 521 / 54	277 / 421 / 126	242 / 523 / 103	312 / 489 / 31	251 / 599 / 25	373 / 406 / 70	301 / 502 / 56	286 / 402 / 131	240 / 494 / 105																						
		3	251 / 599 / 25	202 / 730 / 20	277 / 542 / 52	223 / 662 / 42	202 / 570 / 92	177 / 702 / 75	263 / 581 / 26	214 / 717 / 22	289 / 523 / 54	229 / 629 / 43	211 / 552 / 96	176 / 669 / 77																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ =Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	287 / 449 / 31	230 / 548 / 25	359 / 359 / 68	287 / 443 / 54	237 / 390 / 94	219 / 483 / 76	266 / 481 / 29	222 / 589 / 23	333 / 387 / 63	277 / 476 / 51	222 / 423 / 88	218 / 514 / 70	250 / 518 / 27	222 / 639 / 22	308 / 410 / 58	275 / 513 / 48	220 / 451 / 82	220 / 550 / 66
2		245 / 526 / 27	198 / 646 / 22	292 / 437 / 55	236 / 538 / 45	215 / 440 / 85	197 / 541 / 69	230 / 568 / 25	190 / 685 / 20	272 / 469 / 52	230 / 580 / 42	200 / 472 / 79	199 / 583 / 64	214 / 605 / 23	188 / 737 / 19	251 / 497 / 48	224 / 617 / 39	196 / 499 / 73	200 / 619 / 60	
3		203 / 614 / 22	167 / 762 / 18	226 / 559 / 43	185 / 694 / 35	155 / 585 / 61	146 / 735 / 51	193 / 671 / 21	163 / 822 / 17	210 / 601 / 40	176 / 732 / 32	147 / 641 / 58	144 / 771 / 47	177 / 703 / 19	160 / 875 / 16	195 / 636 / 37	174 / 785 / 30	144 / 676 / 54	145 / 822 / 44	
1		337 / 449 / 34	270 / 548 / 27	421 / 359 / 79	337 / 443 / 63	266 / 390 / 113	242 / 483 / 91	312 / 481 / 31	260 / 589 / 25	391 / 387 / 73	323 / 476 / 59	249 / 423 / 105	239 / 514 / 84	294 / 518 / 29	258 / 639 / 24	361 / 410 / 68	318 / 513 / 55	245 / 451 / 98	240 / 550 / 79	
2		288 / 526 / 29	233 / 646 / 23	343 / 437 / 64	277 / 538 / 52	241 / 440 / 102	219 / 541 / 82	270 / 568 / 27	222 / 685 / 22	319 / 469 / 60	268 / 580 / 49	224 / 472 / 95	219 / 583 / 77	251 / 605 / 25	218 / 737 / 20	295 / 497 / 55	260 / 617 / 45	218 / 499 / 88	218 / 619 / 72	
3		239 / 614 / 24	196 / 762 / 20	265 / 559 / 50	217 / 694 / 41	173 / 585 / 73	162 / 735 / 61	227 / 671 / 23	190 / 822 / 19	247 / 601 / 46	205 / 732 / 37	165 / 641 / 70	158 / 771 / 56	208 / 703 / 21	185 / 875 / 17	229 / 636 / 43	201 / 785 / 35	161 / 676 / 65	158 / 822 / 52	
1		337 / 449 / 34	270 / 548 / 27	421 / 359 / 79	337 / 443 / 63	295 / 390 / 135	266 / 483 / 109	312 / 481 / 31	260 / 589 / 25	391 / 387 / 73	323 / 476 / 59	277 / 423 / 126	261 / 514 / 101	294 / 518 / 29	258 / 639 / 24	361 / 410 / 68	318 / 513 / 55	270 / 451 / 118	260 / 550 / 94	
2		288 / 526 / 29	233 / 646 / 23	343 / 437 / 64	277 / 538 / 52	267 / 440 / 122	240 / 541 / 99	270 / 568 / 27	222 / 685 / 22	319 / 469 / 60	268 / 580 / 49	248 / 472 / 114	239 / 583 / 92	251 / 605 / 25	218 / 737 / 20	295 / 497 / 55	260 / 617 / 45	241 / 499 / 105	236 / 619 / 86	
3		239 / 614 / 24	196 / 762 / 20	265 / 559 / 50	217 / 694 / 41	192 / 585 / 88	177 / 735 / 73	227 / 671 / 23	190 / 822 / 19	247 / 601 / 46	205 / 732 / 37	183 / 641 / 84	172 / 771 / 67	208 / 703 / 21	185 / 875 / 17	229 / 636 / 43	201 / 785 / 35	177 / 676 / 77	172 / 822 / 62	
Wind Speed [mph]		170						180												
15	1	235 / 551 / 25	215 / 668 / 20	287 / 435 / 54	271 / 546 / 45	217 / 475 / 76	226 / 594 / 63	225 / 578 / 24	214 / 709 / 19	279 / 464 / 52	267 / 574 / 42	217 / 503 / 72	225 / 621 / 58							
	2	198 / 635 / 22	186 / 783 / 18	236 / 529 / 45	218 / 646 / 36	196 / 531 / 69	199 / 648 / 55	193 / 676 / 20	182 / 823 / 17	231 / 569 / 43	217 / 687 / 34	199 / 572 / 66	202 / 689 / 52							
	3	167 / 749 / 18	156 / 919 / 15	185 / 682 / 35	171 / 830 / 28	145 / 722 / 51	151 / 897 / 42	161 / 789 / 17	157 / 991 / 14	179 / 724 / 33	168 / 868 / 26	145 / 763 / 48	150 / 935 / 39							
	1	276 / 551 / 28	248 / 668 / 22	337 / 435 / 63	312 / 546 / 52	240 / 475 / 91	245 / 594 / 75	263 / 578 / 26	245 / 709 / 21	326 / 464 / 60	305 / 574 / 49	239 / 503 / 86	243 / 621 / 70							
	2	233 / 635 / 23	214 / 783 / 19	277 / 529 / 52	251 / 646 / 42	217 / 531 / 82	216 / 648 / 66	225 / 676 / 22	209 / 823 / 18	270 / 569 / 50	248 / 687 / 40	219 / 572 / 79	218 / 689 / 63							
	3	196 / 749 / 20	179 / 919 / 16	217 / 682 / 41	197 / 830 / 33	160 / 722 / 61	163 / 897 / 50	188 / 789 / 19	180 / 991 / 16	209 / 724 / 39	191 / 868 / 31	160 / 763 / 57	162 / 935 / 47							
	1	276 / 551 / 28	248 / 668 / 22	337 / 435 / 63	312 / 546 / 52	264 / 475 / 109	264 / 594 / 90	263 / 578 / 26	245 / 709 / 21	326 / 464 / 60	305 / 574 / 49	261 / 503 / 103	261 / 621 / 84							
	2	233 / 635 / 23	214 / 783 / 19	277 / 529 / 52	251 / 646 / 42	238 / 531 / 99	233 / 648 / 79	225 / 676 / 22	209 / 823 / 18	270 / 569 / 50	248 / 687 / 40	240 / 572 / 94	234 / 689 / 75							
	3	196 / 749 / 20	179 / 919 / 16	217 / 682 / 41	197 / 830 / 33	176 / 722 / 73	176 / 897 / 60	188 / 789 / 19	180 / 991 / 16	209 / 724 / 39	191 / 868 / 31	174 / 763 / 69	174 / 935 / 56							
Wind Speed [mph]		190						200												
15	1	222 / 616 / 23	212 / 746 / 18	274 / 491 / 49	267 / 612 / 40	221 / 539 / 69	230 / 658 / 55	220 / 650 / 22	215 / 802 / 18	274 / 524 / 47	261 / 630 / 37	220 / 560 / 64	239 / 691 / 52							
	2	189 / 713 / 19	185 / 887 / 16	224 / 593 / 40	215 / 723 / 32	197 / 595 / 61	206 / 725 / 49	185 / 745 / 18	181 / 914 / 15	222 / 627 / 38	220 / 778 / 31	199 / 629 / 58	219 / 780 / 48							
	3	161 / 851 / 17	152 / 1017 / 13	175 / 761 / 31	170 / 933 / 26	145 / 798 / 45	156 / 1003 / 38	156 / 879 / 15	153 / 1079 / 13	171 / 792 / 29	172 / 995 / 25	148 / 856 / 44	157 / 1023 / 35							
	1	259 / 616 / 25	241 / 746 / 20	318 / 491 / 56	304 / 612 / 46	242 / 539 / 82	247 / 658 / 66	254 / 650 / 23	244 / 802 / 19	316 / 524 / 54	294 / 630 / 43	240 / 560 / 77	249 / 691 / 63							
	2	220 / 713 / 21	211 / 887 / 17	261 / 593 / 46	244 / 723 / 37	216 / 595 / 73	220 / 725 / 59	214 / 745 / 20	204 / 914 / 16	257 / 627 / 44	248 / 778 / 36	217 / 629 / 70	228 / 780 / 57							
	3	188 / 851 / 18	173 / 1017 / 14	204 / 761 / 36	193 / 933 / 30	158 / 798 / 54	167 / 1003 / 45	181 / 879 / 17	173 / 1079 / 14	198 / 792 / 34	194 / 995 / 28	162 / 856 / 52	164 / 1023 / 41							
	1	259 / 616 / 25	241 / 746 / 20	318 / 491 / 56	304 / 612 / 46	264 / 539 / 99	264 / 658 / 79	254 / 650 / 23	244 / 802 / 19	316 / 524 / 54	294 / 630 / 43	259 / 560 / 92	265 / 691 / 75							
	2	220 / 713 / 21	211 / 887 / 17	261 / 593 / 46	244 / 723 / 37	235 / 595 / 88	235 / 725 / 71	214 / 745 / 20	204 / 914 / 16	257 / 627 / 44	248 / 778 / 36	235 / 629 / 84	243 / 780 / 69							
	3	188 / 851 / 18	173 / 1017 / 14	204 / 761 / 36	193 / 933 / 30	172 / 798 / 64	178 / 1003 / 54	181 / 879 / 17	173 / 1079 / 14	198 / 792 / 34	194 / 995 / 28	175 / 856 / 62	175 / 1023 / 50							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	431 / 166 / 43	351 / 429 / 35	423 / 210 / 79	423 / 330 / 79	381 / 272 / 184	340 / 377 / 165	418 / 365 / 42	338 / 454 / 34	423 / 233 / 79	417 / 359 / 78	381 / 300 / 184	324 / 395 / 157	400 / 382 / 40	320 / 470 / 32	423 / 256 / 79	399 / 376 / 75	376 / 325 / 182	309 / 412 / 150
30	2	375 / 411 / 37	302 / 506 / 30	423 / 320 / 79	356 / 417 / 67	370 / 332 / 180	304 / 420 / 147	357 / 430 / 36	289 / 533 / 29	423 / 352 / 79	338 / 434 / 63	360 / 356 / 175	288 / 437 / 140	338 / 446 / 34	277 / 557 / 28	405 / 369 / 76	326 / 458 / 61	345 / 373 / 167	278 / 461 / 135
	3	314 / 487 / 31	252 / 596 / 25	344 / 438 / 65	278 / 540 / 52	273 / 460 / 132	221 / 567 / 107	302 / 513 / 30	240 / 621 / 24	326 / 456 / 61	266 / 566 / 50	263 / 485 / 127	211 / 593 / 102	283 / 527 / 28	234 / 661 / 23	314 / 480 / 59	254 / 590 / 48	252 / 509 / 122	201 / 615 / 97
	1	460 / 162 / 44	385 / 429 / 37	451 / 204 / 84	451 / 321 / 84	403 / 265 / 205	370 / 377 / 188	460 / 179 / 44	372 / 454 / 35	451 / 226 / 84	451 / 354 / 84	403 / 292 / 205	353 / 395 / 179	440 / 382 / 42	352 / 470 / 34	451 / 249 / 84	438 / 376 / 82	403 / 321 / 205	336 / 412 / 171
35	2	412 / 411 / 39	331 / 506 / 32	451 / 310 / 84	391 / 417 / 73	403 / 332 / 205	331 / 420 / 168	392 / 430 / 37	318 / 533 / 30	451 / 342 / 84	372 / 434 / 69	392 / 356 / 199	314 / 437 / 160	372 / 446 / 35	304 / 557 / 29	444 / 369 / 83	358 / 458 / 67	376 / 373 / 191	303 / 461 / 154
	3	345 / 487 / 33	277 / 596 / 27	378 / 438 / 71	305 / 540 / 57	297 / 460 / 151	241 / 567 / 123	331 / 513 / 32	264 / 621 / 25	358 / 456 / 67	292 / 566 / 55	286 / 485 / 145	230 / 593 / 117	311 / 527 / 30	257 / 661 / 25	345 / 480 / 64	279 / 590 / 52	275 / 509 / 140	219 / 615 / 111
	1	487 / 157 / 45	420 / 429 / 39	484 / 201 / 90	484 / 316 / 90	424 / 258 / 224	400 / 377 / 211	487 / 174 / 45	406 / 454 / 37	484 / 223 / 90	484 / 348 / 90	424 / 284 / 224	382 / 395 / 202	479 / 382 / 44	383 / 470 / 35	484 / 245 / 90	477 / 376 / 88	424 / 312 / 224	364 / 412 / 192
40	2	450 / 411 / 41	361 / 506 / 33	484 / 306 / 90	426 / 417 / 79	424 / 323 / 224	358 / 420 / 189	428 / 430 / 39	347 / 533 / 32	484 / 337 / 90	405 / 434 / 75	424 / 356 / 224	340 / 437 / 179	406 / 446 / 37	332 / 557 / 31	484 / 369 / 90	390 / 458 / 72	406 / 373 / 214	328 / 461 / 173
	3	376 / 487 / 35	302 / 596 / 28	412 / 438 / 76	333 / 540 / 62	321 / 460 / 170	261 / 567 / 138	361 / 513 / 33	288 / 621 / 27	390 / 456 / 72	318 / 566 / 59	309 / 485 / 163	249 / 593 / 131	339 / 527 / 31	280 / 661 / 26	376 / 480 / 70	304 / 590 / 56	297 / 509 / 157	237 / 615 / 125
	1	381 / 398 / 38	308 / 492 / 31	423 / 280 / 79	381 / 392 / 71	365 / 345 / 177	302 / 434 / 145	369 / 418 / 37	295 / 513 / 29	423 / 306 / 79	368 / 413 / 69	350 / 360 / 170	295 / 447 / 137						
30	2	326 / 468 / 33	265 / 579 / 26	387 / 385 / 72	314 / 481 / 59	329 / 389 / 160	271 / 483 / 130	314 / 489 / 31	252 / 599 / 25	375 / 406 / 70	302 / 502 / 57	314 / 402 / 152	263 / 494 / 122						
	3	271 / 548 / 27	222 / 680 / 22	302 / 502 / 57	242 / 611 / 45	242 / 531 / 117	198 / 652 / 95	265 / 581 / 26	216 / 717 / 22	290 / 523 / 54	230 / 629 / 43	232 / 552 / 112	193 / 669 / 90						
	1	419 / 398 / 40	338 / 492 / 32	451 / 272 / 84	418 / 392 / 78	398 / 345 / 202	329 / 434 / 165	406 / 418 / 39	325 / 513 / 31	451 / 297 / 84	405 / 413 / 75	381 / 360 / 194	320 / 447 / 157						
35	2	358 / 468 / 34	291 / 579 / 28	425 / 385 / 79	345 / 481 / 64	359 / 389 / 182	295 / 483 / 148	345 / 489 / 33	277 / 599 / 27	411 / 406 / 77	332 / 502 / 62	342 / 402 / 174	285 / 494 / 140						
	3	298 / 548 / 28	244 / 680 / 23	332 / 502 / 62	266 / 611 / 50	264 / 531 / 134	216 / 652 / 108	291 / 581 / 28	237 / 717 / 23	319 / 523 / 59	252 / 629 / 47	252 / 552 / 128	210 / 669 / 103						
	1	457 / 398 / 42	369 / 492 / 34	484 / 268 / 90	455 / 392 / 84	424 / 340 / 224	355 / 434 / 186	442 / 418 / 41	354 / 513 / 33	484 / 293 / 90	441 / 413 / 82	412 / 360 / 218	345 / 447 / 176						
40	2	391 / 468 / 36	317 / 579 / 29	463 / 385 / 86	376 / 481 / 70	388 / 389 / 205	319 / 483 / 167	376 / 489 / 35	302 / 599 / 28	448 / 406 / 83	362 / 502 / 67	370 / 402 / 195	308 / 494 / 157						
	3	325 / 548 / 30	266 / 680 / 25	362 / 502 / 67	289 / 611 / 54	285 / 531 / 151	233 / 652 / 122	317 / 581 / 29	258 / 717 / 24	347 / 523 / 64	275 / 629 / 51	273 / 552 / 144	226 / 669 / 115						
	1	351 / 431 / 35	283 / 531 / 28	423 / 332 / 79	350 / 425 / 66	340 / 378 / 165	292 / 466 / 132	369 / 418 / 37	295 / 513 / 29	423 / 306 / 79	368 / 413 / 69	350 / 360 / 170	295 / 447 / 137						
30	2	302 / 508 / 30	240 / 615 / 24	356 / 418 / 67	290 / 521 / 54	304 / 421 / 147	265 / 523 / 120	314 / 489 / 31	252 / 599 / 25	375 / 406 / 70	302 / 502 / 57	314 / 402 / 152	263 / 494 / 122						
	3	252 / 599 / 25	203 / 730 / 20	278 / 542 / 52	224 / 662 / 42	221 / 570 / 107	193 / 702 / 88	265 / 581 / 26	216 / 717 / 22	290 / 523 / 54	230 / 629 / 43	232 / 552 / 112	193 / 669 / 90						
	1	385 / 431 / 37	311 / 531 / 30	451 / 322 / 84	385 / 425 / 72	370 / 378 / 188	316 / 466 / 151	406 / 418 / 39	325 / 513 / 31	451 / 297 / 84	405 / 413 / 75	381 / 360 / 194	320 / 447 / 157						
35	2	331 / 508 / 32	264 / 615 / 25	391 / 418 / 73	319 / 521 / 59	331 / 421 / 168	287 / 523 / 137	345 / 489 / 33	277 / 599 / 27	411 / 406 / 77	332 / 502 / 62	342 / 402 / 174	285 / 494 / 140						
	3	277 / 599 / 27	223 / 730 / 21	305 / 542 / 57	246 / 662 / 46	241 / 570 / 123	209 / 702 / 100	291 / 581 / 28	237 / 717 / 23	319 / 523 / 59	252 / 629 / 47	252 / 552 / 128	210 / 669 / 103						
	1	420 / 431 / 39	339 / 531 / 31	484 / 318 / 90	419 / 425 / 78	400 / 378 / 211	341 / 466 / 170	442 / 418 / 41	354 / 513 / 33	484 / 293 / 90	441 / 413 / 82	412 / 360 / 218	345 / 447 / 176						
40	2	361 / 508 / 33	288 / 615 / 27	426 / 418 / 79	347 / 521 / 64	358 / 421 / 189	309 / 523 / 154	376 / 489 / 35	302 / 599 / 28	448 / 406 / 83	362 / 502 / 67	370 / 402 / 195	308 / 494 / 157						
	3	302 / 599 / 28	244 / 730 / 23	333 / 542 / 62	268 / 662 / 50	261 / 570 / 138	225 / 702 / 112	317 / 581 / 29	258 / 717 / 24	347 / 523 / 64	275 / 629 / 51	273 / 552 / 144	226 / 669 / 115						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	338 / 449 / 34	271 / 548 / 27	423 / 359 / 79	338 / 443 / 63	324 / 390 / 157	289 / 483 / 127	314 / 481 / 31	261 / 589 / 25	393 / 387 / 74	325 / 476 / 59	304 / 423 / 147	282 / 514 / 117	295 / 518 / 29	259 / 639 / 24	362 / 410 / 68	319 / 513 / 56	296 / 451 / 137	280 / 550 / 110
2		289 / 526 / 29	234 / 646 / 23	344 / 437 / 65	278 / 538 / 52	293 / 440 / 142	261 / 541 / 115	271 / 568 / 27	223 / 685 / 22	320 / 469 / 60	269 / 580 / 49	273 / 472 / 132	258 / 583 / 107	252 / 605 / 25	219 / 737 / 20	296 / 497 / 56	261 / 617 / 45	263 / 499 / 122	255 / 619 / 100	
3		240 / 614 / 24	197 / 762 / 20	266 / 559 / 50	218 / 694 / 41	211 / 585 / 102	193 / 735 / 85	228 / 671 / 23	191 / 822 / 19	248 / 601 / 47	206 / 732 / 38	201 / 641 / 97	186 / 771 / 78	209 / 703 / 21	186 / 875 / 17	230 / 636 / 43	202 / 785 / 35	194 / 676 / 90	185 / 822 / 73	
35		1	372 / 449 / 35	298 / 548 / 28	451 / 349 / 84	372 / 443 / 69	353 / 390 / 179	313 / 483 / 145	345 / 481 / 33	286 / 589 / 27	431 / 387 / 80	356 / 476 / 64	331 / 423 / 168	304 / 514 / 134	325 / 518 / 31	282 / 639 / 25	398 / 410 / 74	349 / 513 / 61	321 / 451 / 157	300 / 550 / 125
		2	318 / 526 / 30	257 / 646 / 25	378 / 437 / 71	305 / 538 / 57	320 / 440 / 162	282 / 541 / 131	298 / 568 / 28	244 / 685 / 23	352 / 469 / 66	294 / 580 / 53	297 / 472 / 151	278 / 583 / 123	277 / 605 / 27	239 / 737 / 21	325 / 497 / 61	285 / 617 / 50	286 / 499 / 140	273 / 619 / 114
		3	264 / 614 / 25	217 / 762 / 21	292 / 559 / 55	239 / 694 / 45	230 / 585 / 117	209 / 735 / 97	250 / 671 / 24	209 / 822 / 20	272 / 601 / 51	226 / 732 / 41	219 / 641 / 111	201 / 771 / 89	230 / 703 / 22	203 / 875 / 18	252 / 636 / 47	221 / 785 / 39	210 / 676 / 103	198 / 822 / 83
40		1	406 / 449 / 37	325 / 548 / 30	484 / 344 / 90	405 / 443 / 75	382 / 390 / 202	336 / 483 / 163	376 / 481 / 35	311 / 589 / 28	470 / 387 / 87	387 / 476 / 70	358 / 423 / 189	326 / 514 / 151	354 / 518 / 33	306 / 639 / 27	434 / 410 / 80	378 / 513 / 66	346 / 451 / 176	321 / 550 / 141
		2	347 / 526 / 32	280 / 646 / 26	412 / 437 / 76	333 / 538 / 62	346 / 440 / 183	303 / 541 / 147	325 / 568 / 30	266 / 685 / 24	383 / 469 / 71	320 / 580 / 58	321 / 472 / 170	298 / 583 / 138	302 / 605 / 28	259 / 737 / 23	354 / 497 / 66	308 / 617 / 54	308 / 499 / 157	291 / 619 / 128
		3	288 / 614 / 27	236 / 762 / 22	318 / 559 / 59	260 / 694 / 48	249 / 585 / 131	224 / 735 / 109	273 / 671 / 25	228 / 822 / 21	297 / 601 / 55	246 / 732 / 44	237 / 641 / 125	215 / 771 / 100	251 / 703 / 23	220 / 875 / 19	275 / 636 / 51	239 / 785 / 42	227 / 676 / 115	211 / 822 / 93
Wind Speed [mph]		170						180												
30	1	277 / 551 / 28	249 / 668 / 22	338 / 435 / 63	313 / 546 / 52	287 / 475 / 127	284 / 594 / 105	264 / 578 / 26	246 / 709 / 21	327 / 464 / 60	306 / 574 / 49	283 / 503 / 120	279 / 621 / 97							
	2	234 / 635 / 23	215 / 783 / 19	278 / 529 / 52	252 / 646 / 42	259 / 531 / 115	250 / 648 / 92	226 / 676 / 22	210 / 823 / 18	272 / 569 / 50	249 / 687 / 40	260 / 572 / 110	251 / 689 / 88							
	3	197 / 749 / 20	180 / 919 / 16	218 / 682 / 41	198 / 830 / 33	192 / 722 / 85	189 / 897 / 70	189 / 789 / 19	181 / 991 / 16	210 / 724 / 39	192 / 868 / 31	189 / 763 / 80	186 / 935 / 65							
	35	1	304 / 551 / 29	271 / 668 / 23	372 / 435 / 69	340 / 546 / 57	311 / 475 / 145	303 / 594 / 120	290 / 578 / 27	266 / 709 / 22	359 / 464 / 66	331 / 574 / 53	305 / 503 / 137	297 / 621 / 111						
		2	257 / 635 / 25	234 / 783 / 20	305 / 529 / 57	274 / 646 / 46	280 / 531 / 131	267 / 648 / 106	248 / 676 / 23	227 / 823 / 19	298 / 569 / 55	270 / 687 / 43	280 / 572 / 125	267 / 689 / 100						
		3	217 / 749 / 21	196 / 919 / 17	239 / 682 / 45	215 / 830 / 36	207 / 722 / 97	202 / 897 / 80	207 / 789 / 20	196 / 991 / 16	230 / 724 / 42	208 / 868 / 34	204 / 763 / 91	198 / 935 / 74						
	40	1	332 / 551 / 31	293 / 668 / 25	405 / 435 / 75	368 / 546 / 62	334 / 475 / 163	322 / 594 / 135	315 / 578 / 29	287 / 709 / 23	390 / 464 / 71	357 / 574 / 58	327 / 503 / 154	315 / 621 / 125						
		2	280 / 635 / 26	252 / 783 / 21	333 / 529 / 62	296 / 646 / 50	301 / 531 / 147	284 / 648 / 119	270 / 676 / 25	245 / 823 / 20	324 / 569 / 59	291 / 687 / 47	300 / 572 / 141	283 / 689 / 112						
		3	236 / 749 / 22	212 / 919 / 18	260 / 682 / 48	232 / 830 / 39	223 / 722 / 109	215 / 897 / 90	225 / 789 / 21	211 / 991 / 17	250 / 724 / 46	224 / 868 / 36	218 / 763 / 103	210 / 935 / 84						
Wind Speed [mph]		190						200												
30	1	260 / 616 / 25	242 / 746 / 20	319 / 491 / 57	305 / 612 / 47	285 / 539 / 115	281 / 658 / 92	256 / 650 / 23	245 / 802 / 19	317 / 524 / 54	295 / 630 / 43	279 / 560 / 107	281 / 691 / 88							
	2	221 / 713 / 21	211 / 887 / 17	262 / 593 / 47	245 / 723 / 38	254 / 595 / 102	250 / 725 / 83	215 / 745 / 20	205 / 914 / 16	258 / 627 / 44	249 / 778 / 36	253 / 629 / 97	257 / 780 / 80							
	3	189 / 851 / 18	174 / 1017 / 14	205 / 761 / 36	193 / 933 / 30	186 / 798 / 75	190 / 1003 / 63	182 / 879 / 17	174 / 1079 / 14	199 / 792 / 34	195 / 995 / 29	188 / 856 / 73	185 / 1023 / 58							
	35	1	284 / 616 / 26	261 / 746 / 21	349 / 491 / 62	329 / 612 / 51	306 / 539 / 131	298 / 658 / 106	279 / 650 / 25	263 / 802 / 20	346 / 524 / 59	318 / 630 / 47	299 / 560 / 123	297 / 691 / 100						
		2	242 / 713 / 22	229 / 887 / 18	286 / 593 / 51	265 / 723 / 41	273 / 595 / 117	266 / 725 / 94	235 / 745 / 21	221 / 914 / 17	281 / 627 / 48	268 / 778 / 40	271 / 629 / 111	272 / 780 / 91						
		3	206 / 851 / 19	188 / 1017 / 15	224 / 761 / 40	209 / 933 / 32	200 / 798 / 86	201 / 1003 / 71	198 / 879 / 18	187 / 1079 / 14	216 / 792 / 37	209 / 995 / 31	202 / 856 / 83	196 / 1023 / 66						
	40	1	309 / 616 / 27	281 / 746 / 22	379 / 491 / 67	354 / 612 / 55	327 / 539 / 147	315 / 658 / 119	302 / 650 / 26	282 / 802 / 21	374 / 524 / 64	341 / 630 / 51	319 / 560 / 138	314 / 691 / 112						
		2	263 / 713 / 23	246 / 887 / 19	311 / 593 / 55	285 / 723 / 44	291 / 595 / 131	281 / 725 / 106	254 / 745 / 22	237 / 914 / 18	304 / 627 / 52	287 / 778 / 43	289 / 629 / 125	287 / 780 / 103						
		3	224 / 851 / 20	202 / 1017 / 16	243 / 761 / 43	224 / 933 / 35	213 / 798 / 96	213 / 1003 / 80	215 / 879 / 19	201 / 1079 / 15	234 / 792 / 40	224 / 995 / 34	215 / 856 / 93	206 / 1023 / 74						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	45	1	524 / 154 / 101	460 / 429 / 88	511 / 195 / 142	511 / 307 / 142	450 / 254 / 252	431 / 377 / 241	524 / 171 / 101	444 / 454 / 85	511 / 216 / 142	511 / 338 / 142	450 / 280 / 252	411 / 395 / 230	524 / 189 / 101	420 / 470 / 81	511 / 238 / 142	511 / 370 / 142	450 / 307 / 252	391 / 412 / 219
2		492 / 411 / 94	395 / 506 / 76	511 / 297 / 142	463 / 417 / 129	450 / 319 / 252	385 / 420 / 215	468 / 430 / 90	379 / 533 / 73	511 / 327 / 142	440 / 434 / 122	450 / 351 / 252	365 / 437 / 204	444 / 446 / 85	363 / 557 / 70	511 / 358 / 142	424 / 458 / 118	437 / 373 / 244	352 / 461 / 197	
3		411 / 487 / 79	331 / 596 / 64	448 / 438 / 124	361 / 540 / 100	346 / 460 / 194	281 / 567 / 157	395 / 513 / 76	315 / 621 / 61	424 / 456 / 118	346 / 566 / 96	333 / 485 / 186	268 / 593 / 150	371 / 527 / 71	307 / 661 / 59	409 / 480 / 113	330 / 590 / 92	320 / 509 / 179	255 / 615 / 143	
50		1	559 / 150 / 105	506 / 429 / 95	553 / 192 / 151	553 / 302 / 151	468 / 247 / 266	461 / 377 / 263	559 / 166 / 105	488 / 454 / 91	553 / 213 / 151	553 / 333 / 151	468 / 272 / 266	440 / 395 / 251	559 / 183 / 105	462 / 470 / 86	553 / 234 / 151	553 / 365 / 151	468 / 298 / 266	419 / 412 / 239
		2	542 / 411 / 101	435 / 506 / 81	553 / 292 / 151	510 / 417 / 139	468 / 309 / 266	412 / 420 / 235	515 / 430 / 96	418 / 533 / 78	553 / 322 / 151	484 / 434 / 132	468 / 340 / 266	391 / 437 / 223	488 / 446 / 91	400 / 557 / 75	553 / 353 / 151	467 / 458 / 128	468 / 373 / 266	377 / 461 / 215
		3	453 / 487 / 85	364 / 596 / 68	493 / 438 / 135	398 / 540 / 109	370 / 460 / 211	300 / 567 / 171	435 / 513 / 81	347 / 621 / 65	467 / 456 / 128	381 / 566 / 104	356 / 485 / 203	286 / 593 / 163	409 / 527 / 76	338 / 661 / 63	450 / 480 / 123	363 / 590 / 99	342 / 509 / 195	273 / 615 / 155
60		1	631 / 143 / 113	599 / 429 / 107	624 / 183 / 167	624 / 288 / 167	519 / 239 / 301	519 / 371 / 301	631 / 158 / 113	578 / 454 / 104	624 / 203 / 167	624 / 317 / 167	519 / 264 / 301	503 / 395 / 292	631 / 175 / 113	547 / 470 / 98	624 / 223 / 167	624 / 348 / 167	519 / 289 / 301	479 / 412 / 278
		2	631 / 405 / 113	515 / 506 / 92	624 / 279 / 167	604 / 417 / 161	519 / 300 / 301	471 / 420 / 273	610 / 430 / 109	494 / 533 / 89	624 / 307 / 167	573 / 434 / 153	519 / 330 / 301	447 / 437 / 260	578 / 446 / 104	473 / 557 / 85	624 / 336 / 167	553 / 458 / 148	519 / 362 / 301	431 / 461 / 250
		3	536 / 487 / 96	431 / 596 / 77	583 / 438 / 156	471 / 540 / 126	424 / 460 / 246	344 / 567 / 199	515 / 513 / 92	410 / 621 / 74	553 / 456 / 148	450 / 566 / 121	408 / 485 / 236	328 / 593 / 190	484 / 527 / 87	400 / 661 / 72	532 / 480 / 142	430 / 590 / 115	392 / 509 / 227	312 / 615 / 181
45	Wind Speed [mph]		110						115											
	1	500 / 398 / 96	403 / 492 / 77	511 / 260 / 142	495 / 392 / 137	450 / 336 / 252	382 / 434 / 212	484 / 418 / 93	387 / 513 / 74	511 / 284 / 142	479 / 413 / 133	444 / 360 / 248	370 / 447 / 201							
	2	428 / 468 / 82	347 / 579 / 67	503 / 385 / 139	409 / 481 / 113	418 / 389 / 234	343 / 483 / 190	411 / 489 / 79	331 / 599 / 64	487 / 406 / 135	393 / 502 / 109	398 / 402 / 223	330 / 494 / 179							
	3	355 / 548 / 68	291 / 680 / 56	393 / 502 / 109	314 / 611 / 87	307 / 531 / 172	250 / 652 / 139	347 / 581 / 67	283 / 717 / 54	377 / 523 / 105	299 / 629 / 83	294 / 552 / 164	243 / 669 / 132							
	50	1	551 / 398 / 103	444 / 492 / 83	553 / 256 / 151	545 / 392 / 149	468 / 326 / 266	409 / 434 / 231	533 / 418 / 100	426 / 513 / 80	553 / 279 / 151	527 / 413 / 144	468 / 354 / 266	396 / 447 / 219						
		2	471 / 468 / 88	382 / 579 / 72	553 / 385 / 151	450 / 481 / 123	447 / 389 / 255	366 / 483 / 207	453 / 489 / 85	364 / 599 / 68	536 / 406 / 147	432 / 502 / 118	426 / 402 / 243	353 / 494 / 195						
		3	391 / 548 / 73	320 / 680 / 60	432 / 502 / 118	346 / 611 / 95	328 / 531 / 187	268 / 652 / 151	382 / 581 / 72	311 / 717 / 58	415 / 523 / 114	329 / 629 / 90	314 / 552 / 179	259 / 669 / 143						
	60	1	631 / 192 / 113	526 / 492 / 94	624 / 244 / 167	624 / 379 / 167	519 / 316 / 301	463 / 434 / 269	631 / 209 / 113	505 / 513 / 90	624 / 266 / 167	624 / 413 / 167	519 / 344 / 301	446 / 447 / 255						
		2	557 / 468 / 100	452 / 579 / 81	624 / 367 / 167	532 / 481 / 142	511 / 389 / 297	416 / 483 / 241	536 / 489 / 96	431 / 599 / 77	624 / 399 / 167	512 / 502 / 137	487 / 402 / 283	398 / 494 / 227						
3		463 / 548 / 83	379 / 680 / 68	512 / 502 / 137	409 / 611 / 110	376 / 531 / 218	304 / 652 / 176	452 / 581 / 81	368 / 717 / 66	491 / 523 / 131	389 / 629 / 104	360 / 552 / 209	292 / 669 / 167							
45	Wind Speed [mph]		120						130											
	1	460 / 431 / 88	371 / 531 / 71	511 / 308 / 142	456 / 425 / 126	431 / 378 / 241	365 / 466 / 194	484 / 418 / 93	387 / 513 / 74	511 / 284 / 142	479 / 413 / 133	444 / 360 / 248	370 / 447 / 201							
	2	395 / 508 / 76	315 / 615 / 61	463 / 418 / 129	377 / 521 / 105	385 / 421 / 215	331 / 523 / 175	411 / 489 / 79	331 / 599 / 64	487 / 406 / 135	393 / 502 / 109	398 / 402 / 223	330 / 494 / 179							
	3	331 / 599 / 64	266 / 730 / 51	361 / 542 / 100	291 / 662 / 81	281 / 570 / 157	241 / 702 / 128	347 / 581 / 67	283 / 717 / 54	377 / 523 / 105	299 / 629 / 83	294 / 552 / 164	243 / 669 / 132							
	50	1	506 / 431 / 95	409 / 531 / 76	553 / 304 / 151	502 / 425 / 137	461 / 378 / 263	389 / 466 / 211	533 / 418 / 100	426 / 513 / 80	553 / 279 / 151	527 / 413 / 144	468 / 354 / 266	396 / 447 / 219						
		2	435 / 508 / 81	347 / 615 / 65	510 / 418 / 139	415 / 521 / 114	412 / 421 / 235	353 / 523 / 191	453 / 489 / 85	364 / 599 / 68	536 / 406 / 147	432 / 502 / 118	426 / 402 / 243	353 / 494 / 195						
		3	364 / 599 / 68	293 / 730 / 55	398 / 542 / 109	320 / 662 / 88	300 / 570 / 171	257 / 702 / 139	382 / 581 / 72	311 / 717 / 58	415 / 523 / 114	329 / 629 / 90	314 / 552 / 179	259 / 669 / 143						
	60	1	599 / 431 / 107	484 / 531 / 87	624 / 289 / 167	593 / 425 / 159	519 / 373 / 301	438 / 466 / 246	631 / 209 / 113	505 / 513 / 90	624 / 266 / 167	624 / 413 / 167	519 / 344 / 301	446 / 447 / 255						
		2	515 / 508 / 92	410 / 615 / 74	604 / 418 / 161	491 / 521 / 131	471 / 421 / 273	397 / 523 / 223	536 / 489 / 96	431 / 599 / 77	624 / 399 / 167	512 / 502 / 137	487 / 402 / 283	398 / 494 / 227						
3		431 / 599 / 77	347 / 730 / 62	471 / 542 / 126	379 / 662 / 101	344 / 570 / 199	290 / 702 / 162	452 / 581 / 81	368 / 717 / 66	491 / 523 / 131	389 / 629 / 104	360 / 552 / 209	292 / 669 / 167							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	444 / 449 / 85	355 / 548 / 68	511 / 334 / 142	440 / 443 / 122	411 / 390 / 230	359 / 483 / 186	411 / 481 / 79	336 / 589 / 64	511 / 387 / 142	418 / 476 / 113	385 / 423 / 215	347 / 514 / 172	387 / 518 / 74	330 / 639 / 61	471 / 410 / 131	407 / 513 / 107	371 / 451 / 201
2		379 / 526 / 73	307 / 646 / 59	448 / 437 / 124	361 / 538 / 100	372 / 440 / 208	324 / 541 / 168	355 / 568 / 68	287 / 685 / 54	416 / 469 / 115	345 / 580 / 94	346 / 472 / 194	318 / 583 / 157	331 / 605 / 64	279 / 737 / 51	385 / 497 / 107	332 / 617 / 87	331 / 499 / 179	310 / 619 / 146
3		315 / 614 / 61	258 / 762 / 50	346 / 559 / 96	283 / 694 / 79	268 / 585 / 150	240 / 735 / 124	299 / 671 / 57	246 / 822 / 47	322 / 601 / 89	265 / 732 / 72	255 / 641 / 143	229 / 771 / 113	274 / 703 / 53	237 / 875 / 44	299 / 636 / 83	258 / 785 / 68	243 / 676 / 132	225 / 822 / 106
50	1	488 / 449 / 91	391 / 548 / 73	553 / 328 / 151	484 / 443 / 132	440 / 390 / 251	383 / 483 / 203	453 / 481 / 85	364 / 589 / 68	553 / 381 / 151	450 / 476 / 123	412 / 423 / 235	369 / 514 / 187	426 / 518 / 80	354 / 639 / 65	519 / 410 / 142	436 / 513 / 116	397 / 451 / 219	361 / 550 / 175
	2	418 / 526 / 78	338 / 646 / 63	493 / 437 / 135	398 / 538 / 109	398 / 440 / 227	345 / 541 / 183	391 / 568 / 73	311 / 685 / 58	458 / 469 / 125	372 / 580 / 102	370 / 472 / 211	337 / 583 / 171	364 / 605 / 68	300 / 737 / 55	424 / 497 / 116	356 / 617 / 95	354 / 499 / 195	328 / 619 / 159
	3	347 / 614 / 65	284 / 762 / 53	381 / 559 / 104	311 / 694 / 85	286 / 585 / 163	255 / 735 / 135	329 / 671 / 62	267 / 822 / 50	355 / 601 / 97	286 / 732 / 78	273 / 641 / 155	243 / 771 / 124	302 / 703 / 57	254 / 875 / 47	329 / 636 / 90	276 / 785 / 74	260 / 676 / 143	238 / 822 / 116
60	1	578 / 449 / 104	463 / 548 / 83	624 / 313 / 167	573 / 443 / 153	503 / 390 / 292	430 / 483 / 236	536 / 481 / 96	431 / 589 / 77	624 / 363 / 167	532 / 476 / 142	471 / 423 / 273	412 / 514 / 218	505 / 518 / 90	410 / 639 / 74	614 / 410 / 164	501 / 513 / 134	447 / 451 / 255	401 / 550 / 204
	2	494 / 526 / 89	400 / 646 / 72	583 / 437 / 156	471 / 538 / 126	455 / 440 / 264	388 / 541 / 213	463 / 568 / 83	368 / 685 / 66	542 / 469 / 145	440 / 580 / 118	424 / 472 / 246	377 / 583 / 199	431 / 605 / 77	347 / 737 / 62	501 / 497 / 134	409 / 617 / 110	399 / 499 / 227	365 / 619 / 186
	3	410 / 614 / 74	337 / 762 / 60	450 / 559 / 121	369 / 694 / 99	328 / 585 / 190	287 / 735 / 158	389 / 671 / 70	316 / 822 / 57	420 / 601 / 112	338 / 732 / 91	312 / 641 / 181	272 / 771 / 144	358 / 703 / 64	295 / 875 / 53	389 / 636 / 104	317 / 785 / 85	293 / 676 / 167	265 / 822 / 135
Wind Speed [mph]		170						180											
45	1	363 / 551 / 70	315 / 668 / 56	440 / 435 / 122	395 / 546 / 100	357 / 475 / 186	341 / 594 / 153	341 / 578 / 65	308 / 709 / 53	421 / 464 / 115	382 / 574 / 94	349 / 503 / 175	333 / 621 / 143						
	2	307 / 635 / 59	271 / 783 / 48	361 / 529 / 100	318 / 646 / 81	322 / 531 / 168	301 / 648 / 135	292 / 676 / 56	263 / 823 / 45	350 / 569 / 96	311 / 687 / 76	320 / 572 / 161	299 / 689 / 128						
	3	258 / 749 / 50	228 / 919 / 41	283 / 682 / 79	249 / 830 / 63	238 / 722 / 124	228 / 897 / 102	244 / 789 / 47	227 / 991 / 39	271 / 724 / 74	240 / 868 / 59	233 / 763 / 117	222 / 935 / 95						
50	1	400 / 551 / 75	337 / 668 / 60	484 / 435 / 132	422 / 546 / 109	381 / 475 / 203	361 / 594 / 167	373 / 578 / 70	329 / 709 / 57	458 / 464 / 125	408 / 574 / 102	372 / 503 / 191	351 / 621 / 155						
	2	338 / 635 / 63	290 / 783 / 52	398 / 529 / 109	340 / 646 / 88	344 / 531 / 183	318 / 648 / 147	320 / 676 / 60	280 / 823 / 48	381 / 569 / 104	332 / 687 / 83	341 / 572 / 175	315 / 689 / 139						
	3	284 / 749 / 53	244 / 919 / 43	311 / 682 / 85	266 / 830 / 69	254 / 722 / 135	241 / 897 / 112	267 / 789 / 50	242 / 991 / 42	294 / 724 / 81	256 / 868 / 64	248 / 763 / 128	234 / 935 / 104						
60	1	473 / 551 / 85	381 / 668 / 68	573 / 435 / 153	477 / 546 / 126	428 / 475 / 236	399 / 594 / 195	442 / 578 / 79	370 / 709 / 64	542 / 464 / 145	459 / 574 / 118	416 / 503 / 223	387 / 621 / 181						
	2	400 / 635 / 72	328 / 783 / 59	471 / 529 / 126	384 / 646 / 101	386 / 531 / 213	352 / 648 / 172	379 / 676 / 68	316 / 823 / 55	450 / 569 / 121	374 / 687 / 96	381 / 572 / 204	347 / 689 / 162						
	3	337 / 749 / 60	275 / 919 / 49	369 / 682 / 99	301 / 830 / 80	285 / 722 / 158	266 / 897 / 130	316 / 789 / 57	272 / 991 / 47	348 / 724 / 93	288 / 868 / 74	277 / 763 / 149	258 / 935 / 121						
Wind Speed [mph]		190						200											
45	1	333 / 616 / 62	300 / 746 / 50	408 / 491 / 109	378 / 612 / 89	348 / 539 / 168	332 / 658 / 135	325 / 650 / 59	301 / 802 / 48	403 / 524 / 105	363 / 630 / 83	338 / 560 / 157	330 / 691 / 128						
	2	283 / 713 / 53	263 / 887 / 44	335 / 593 / 89	304 / 723 / 72	310 / 595 / 150	296 / 725 / 121	274 / 745 / 50	253 / 914 / 41	327 / 627 / 85	306 / 778 / 70	307 / 629 / 143	301 / 780 / 117						
	3	242 / 851 / 45	216 / 1017 / 36	262 / 761 / 70	240 / 933 / 57	227 / 798 / 110	224 / 1003 / 92	231 / 879 / 42	214 / 1079 / 34	252 / 792 / 66	239 / 995 / 55	228 / 856 / 106	217 / 1023 / 84						
50	1	358 / 616 / 67	320 / 746 / 53	438 / 491 / 118	402 / 612 / 97	369 / 539 / 183	349 / 658 / 147	348 / 650 / 63	320 / 802 / 52	431 / 524 / 114	386 / 630 / 90	358 / 560 / 171	346 / 691 / 139						
	2	304 / 713 / 57	280 / 887 / 47	359 / 593 / 97	324 / 723 / 78	329 / 595 / 163	311 / 725 / 132	293 / 745 / 53	269 / 914 / 43	351 / 627 / 92	325 / 778 / 76	325 / 629 / 155	316 / 780 / 128						
	3	259 / 851 / 48	230 / 1017 / 38	281 / 761 / 76	255 / 933 / 62	241 / 798 / 120	236 / 1003 / 100	248 / 879 / 45	227 / 1079 / 37	270 / 792 / 71	254 / 995 / 59	242 / 856 / 116	227 / 1023 / 92						
60	1	421 / 616 / 75	359 / 746 / 60	512 / 491 / 137	451 / 612 / 112	411 / 539 / 213	383 / 658 / 172	400 / 650 / 72	358 / 802 / 59	491 / 524 / 131	431 / 630 / 104	398 / 560 / 199	378 / 691 / 162						
	2	358 / 713 / 64	314 / 887 / 53	420 / 593 / 112	363 / 723 / 91	367 / 595 / 190	341 / 725 / 153	337 / 745 / 60	300 / 914 / 49	399 / 627 / 107	363 / 778 / 88	361 / 629 / 181	346 / 780 / 149						
	3	305 / 851 / 55	258 / 1017 / 44	328 / 761 / 88	286 / 933 / 71	269 / 798 / 139	259 / 1003 / 116	284 / 879 / 51	254 / 1079 / 42	307 / 792 / 82	284 / 995 / 69	268 / 856 / 135	248 / 1023 / 107						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs																													
Wind Speed [mph]		95				100				105																									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	70	1	680 / 133 / 118	680 / 212 / 118	673 / 171 / 177	673 / 269 / 177	581 / 232 / 335	581 / 360 / 335	680 / 148 / 118	668 / 454 / 116	673 / 190 / 177	673 / 296 / 177	581 / 256 / 335	581 / 395 / 335	680 / 163 / 118	631 / 470 / 110	673 / 209 / 177	673 / 325 / 177	581 / 281 / 335	553 / 412 / 319															
2		680 / 378 / 118	595 / 506 / 103	673 / 260 / 177	673 / 402 / 177	581 / 291 / 335	544 / 420 / 314	680 / 415 / 118	571 / 533 / 99	673 / 287 / 177	662 / 434 / 174	581 / 320 / 335	516 / 437 / 298	668 / 446 / 116	546 / 557 / 95	673 / 314 / 177	638 / 458 / 168	581 / 351 / 335	498 / 461 / 288																
3		619 / 487 / 107	498 / 596 / 86	673 / 438 / 177	544 / 540 / 143	488 / 460 / 282	396 / 567 / 229	595 / 513 / 103	474 / 621 / 82	638 / 456 / 168	520 / 566 / 137	470 / 485 / 272	378 / 593 / 218	558 / 527 / 97	461 / 661 / 80	614 / 480 / 162	496 / 590 / 131	452 / 509 / 261	360 / 615 / 208																
80		1	730 / 126 / 123	730 / 200 / 123	724 / 162 / 188	724 / 255 / 188	637 / 225 / 368	637 / 348 / 368	730 / 140 / 123	730 / 221 / 123	724 / 180 / 188	724 / 281 / 188	637 / 248 / 368	637 / 383 / 368	730 / 154 / 123	716 / 470 / 121	724 / 198 / 188	724 / 308 / 188	637 / 272 / 368	626 / 412 / 362															
		2	730 / 357 / 123	675 / 506 / 114	724 / 247 / 188	724 / 381 / 188	637 / 282 / 368	616 / 420 / 356	730 / 393 / 123	647 / 533 / 110	724 / 272 / 188	724 / 419 / 188	637 / 310 / 368	585 / 437 / 338	730 / 430 / 123	620 / 557 / 105	724 / 298 / 188	724 / 458 / 188	637 / 340 / 368	564 / 461 / 326															
		3	702 / 487 / 119	565 / 596 / 96	724 / 415 / 188	616 / 540 / 160	553 / 460 / 320	449 / 567 / 259	675 / 513 / 114	537 / 621 / 91	724 / 456 / 188	590 / 566 / 153	533 / 485 / 308	428 / 593 / 247	633 / 527 / 107	523 / 661 / 89	697 / 480 / 181	563 / 590 / 146	512 / 509 / 296	407 / 615 / 235															
90		1	770 / 119 / 128	770 / 189 / 128	764 / 153 / 197	764 / 241 / 197	677 / 214 / 391	677 / 331 / 391	770 / 132 / 128	770 / 209 / 128	764 / 170 / 197	764 / 265 / 197	677 / 235 / 391	677 / 364 / 391	770 / 146 / 128	770 / 229 / 128	764 / 187 / 197	764 / 291 / 197	677 / 258 / 391	677 / 398 / 391															
		2	770 / 337 / 128	755 / 506 / 125	764 / 233 / 197	764 / 360 / 197	677 / 268 / 391	677 / 413 / 391	770 / 371 / 128	724 / 533 / 120	764 / 257 / 197	764 / 396 / 197	677 / 295 / 391	653 / 437 / 377	770 / 405 / 128	693 / 557 / 115	764 / 281 / 197	764 / 433 / 197	677 / 323 / 391	630 / 461 / 364															
		3	770 / 478 / 128	631 / 596 / 105	764 / 392 / 197	689 / 540 / 177	618 / 460 / 357	502 / 567 / 290	755 / 513 / 125	601 / 621 / 100	764 / 430 / 197	659 / 566 / 170	595 / 485 / 344	478 / 593 / 276	708 / 527 / 117	585 / 661 / 97	764 / 471 / 197	629 / 590 / 162	572 / 509 / 330	455 / 615 / 263															
Wind Speed [mph]		110				115																													
70	1	680 / 179 / 118	607 / 492 / 105	673 / 228 / 177	673 / 355 / 177	581 / 306 / 335	534 / 434 / 309	680 / 196 / 118	583 / 513 / 101	673 / 249 / 177	673 / 386 / 177	581 / 333 / 335	507 / 447 / 293	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
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	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	643 / 468 / 112	522 / 579 / 91	673 / 343 / 177	614 / 481 / 162	581 / 382 / 335	479 / 483 / 277	619 / 489 / 107	498 / 599 / 86	673 / 373 / 177	591 / 502 / 155	562 / 402 / 325	452 / 494 / 261																							
3	534 / 548 / 93	437 / 680 / 76	591 / 502 / 155	473 / 611 / 124	433 / 531 / 250	350 / 652 / 202	522 / 581 / 91	425 / 717 / 74	567 / 523 / 149	449 / 629 / 118	415 / 552 / 240	332 / 669 / 192																							
80	1	730 / 169 / 123	688 / 492 / 117	724 / 216 / 188	724 / 336 / 188	637 / 297 / 368	606 / 434 / 350	730 / 185 / 123	661 / 513 / 112	724 / 236 / 188	724 / 365 / 188	637 / 323 / 368	574 / 447 / 332																						
	2	730 / 468 / 123	592 / 579 / 100	724 / 325 / 188	697 / 481 / 181	637 / 370 / 368	543 / 483 / 314	702 / 489 / 119	565 / 599 / 96	724 / 353 / 188	670 / 502 / 174	637 / 402 / 368	512 / 494 / 296																						
	3	606 / 548 / 103	496 / 680 / 84	670 / 502 / 174	536 / 611 / 139	491 / 531 / 284	397 / 652 / 229	592 / 581 / 100	482 / 717 / 82	643 / 523 / 167	509 / 629 / 132	470 / 552 / 272	376 / 669 / 217																						
90	1	770 / 160 / 128	770 / 250 / 128	764 / 204 / 197	764 / 317 / 197	677 / 282 / 391	677 / 434 / 391	770 / 175 / 128	739 / 513 / 123	764 / 223 / 197	764 / 345 / 197	677 / 307 / 391	642 / 447 / 371																						
	2	770 / 442 / 128	662 / 579 / 110	764 / 307 / 197	764 / 471 / 197	677 / 352 / 391	607 / 483 / 350	770 / 479 / 128	631 / 599 / 105	764 / 334 / 197	749 / 502 / 193	677 / 383 / 391	572 / 494 / 330																						
	3	678 / 548 / 112	554 / 680 / 92	749 / 502 / 193	599 / 611 / 154	548 / 531 / 317	443 / 652 / 256	662 / 581 / 110	539 / 717 / 90	719 / 523 / 185	570 / 629 / 147	525 / 552 / 303	420 / 669 / 243																						
Wind Speed [mph]		120				130																													
70	1	680 / 213 / 118	558 / 531 / 97	673 / 270 / 177	673 / 418 / 177	581 / 361 / 335	488 / 466 / 282	680 / 196 / 118	583 / 513 / 101	673 / 249 / 177	673 / 386 / 177	581 / 333 / 335	507 / 447 / 293	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	595 / 508 / 103	474 / 615 / 82	673 / 404 / 177	567 / 521 / 149	544 / 421 / 314	442 / 523 / 256	619 / 489 / 107	498 / 599 / 86	673 / 373 / 177	591 / 502 / 155	562 / 402 / 325	452 / 494 / 261																							
3	498 / 599 / 86	401 / 730 / 70	544 / 542 / 143	437 / 662 / 115	396 / 570 / 229	323 / 702 / 187	522 / 581 / 91	425 / 717 / 74	567 / 523 / 149	449 / 629 / 118	415 / 552 / 240	332 / 669 / 192																							
80	1	730 / 201 / 123	633 / 531 / 107	724 / 256 / 188	724 / 396 / 188	637 / 350 / 368	553 / 466 / 320	730 / 185 / 123	661 / 513 / 112	724 / 236 / 188	724 / 365 / 188	637 / 323 / 368	574 / 447 / 332																						
	2	675 / 508 / 114	537 / 615 / 91	724 / 383 / 188	643 / 521 / 167	616 / 421 / 356	501 / 523 / 290	702 / 489 / 119	565 / 599 / 96	724 / 353 / 188	670 / 502 / 174	637 / 402 / 368	512 / 494 / 296																						
	3	565 / 599 / 96	455 / 730 / 77	616 / 542 / 160	496 / 662 / 129	449 / 570 / 259	366 / 702 / 211	592 / 581 / 100	482 / 717 / 82	643 / 523 / 167	509 / 629 / 132	470 / 552 / 272	376 / 669 / 217																						
90	1	770 / 190 / 128	708 / 531 / 117	764 / 242 / 197	764 / 374 / 197	677 / 333 / 391	618 / 466 / 357	770 / 175 / 128	739 / 513 / 123	764 / 223 / 197	764 / 345 / 197	677 / 307 / 391	642 / 447 / 371																						
	2	755 / 508 / 125	601 / 615 / 100	764 / 362 / 197	719 / 521 / 185	677 / 414 / 391	560 / 523 / 324	770 / 479 / 128	631 / 599 / 105	764 / 334 / 197	749 / 502 / 193	677 / 383 / 391	572 / 494 / 330																						
	3	631 / 599 / 105	508 / 730 / 84	689 / 542 / 177	555 / 662 / 143	502 / 570 / 290	408 / 702 / 236	662 / 581 / 110	539 / 717 / 90	719 / 523 / 185	570 / 629 / 147	525 / 552 / 303	420 / 669 / 243																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						70in x 41in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	70	1	668 / 449 / 116	534 / 548 / 93	673 / 293 / 177	662 / 443 / 174	581 / 390 / 335	477 / 483 / 272	619 / 481 / 107	498 / 589 / 86	673 / 339 / 177	614 / 476 / 162	544 / 423 / 314	455 / 514 / 250	583 / 518 / 101	474 / 639 / 82	673 / 390 / 177	579 / 513 / 152	507 / 451 / 293	442 / 550 / 234															
2		571 / 526 / 99	461 / 646 / 80	673 / 437 / 177	544 / 538 / 143	525 / 440 / 303	430 / 541 / 245	534 / 568 / 93	425 / 685 / 74	626 / 469 / 165	508 / 580 / 134	488 / 472 / 282	416 / 583 / 229	498 / 605 / 86	401 / 737 / 70	579 / 497 / 152	473 / 617 / 124	452 / 499 / 261	402 / 619 / 213																
3		474 / 614 / 82	389 / 762 / 68	520 / 559 / 137	426 / 694 / 112	378 / 585 / 218	318 / 735 / 181	449 / 671 / 78	364 / 822 / 63	485 / 601 / 128	390 / 732 / 103	360 / 641 / 208	300 / 771 / 165	413 / 703 / 72	340 / 875 / 59	449 / 636 / 118	367 / 785 / 97	332 / 676 / 192	291 / 822 / 155																
80		1	730 / 218 / 123	606 / 548 / 103	724 / 277 / 188	724 / 427 / 188	637 / 378 / 368	533 / 483 / 308	702 / 481 / 119	565 / 589 / 96	724 / 322 / 188	697 / 476 / 181	616 / 423 / 356	498 / 514 / 284	661 / 518 / 112	537 / 639 / 91	724 / 369 / 188	657 / 513 / 171	574 / 451 / 332	482 / 550 / 265															
		2	647 / 526 / 110	523 / 646 / 89	724 / 414 / 188	616 / 538 / 160	595 / 440 / 344	480 / 541 / 278	606 / 568 / 103	482 / 685 / 82	710 / 469 / 185	576 / 580 / 150	553 / 472 / 320	456 / 583 / 259	565 / 605 / 96	455 / 737 / 77	657 / 497 / 171	536 / 617 / 139	512 / 499 / 296	438 / 619 / 241															
		3	537 / 614 / 91	441 / 762 / 75	590 / 559 / 153	483 / 694 / 125	428 / 585 / 247	355 / 735 / 205	510 / 671 / 86	413 / 822 / 70	550 / 601 / 143	442 / 732 / 115	407 / 641 / 235	329 / 771 / 187	468 / 703 / 79	386 / 875 / 65	509 / 636 / 132	416 / 785 / 108	376 / 676 / 217	318 / 822 / 175															
90		1	770 / 206 / 128	678 / 548 / 112	764 / 262 / 197	764 / 404 / 197	677 / 359 / 391	595 / 483 / 344	770 / 240 / 128	631 / 589 / 105	764 / 304 / 197	764 / 466 / 197	677 / 416 / 391	548 / 514 / 317	739 / 518 / 123	601 / 639 / 100	764 / 349 / 197	734 / 513 / 189	642 / 451 / 371	523 / 550 / 297															
		2	724 / 526 / 120	585 / 646 / 97	764 / 391 / 197	689 / 538 / 177	665 / 440 / 384	537 / 541 / 310	678 / 568 / 112	539 / 685 / 90	764 / 452 / 197	644 / 580 / 166	618 / 472 / 357	502 / 583 / 290	631 / 605 / 105	508 / 737 / 84	734 / 497 / 189	599 / 617 / 154	572 / 499 / 330	475 / 619 / 270															
		3	601 / 614 / 100	493 / 762 / 82	659 / 559 / 170	540 / 694 / 139	478 / 585 / 276	397 / 735 / 229	570 / 671 / 95	462 / 822 / 77	614 / 601 / 158	495 / 732 / 127	455 / 641 / 263	362 / 771 / 209	524 / 703 / 87	431 / 875 / 72	570 / 636 / 147	465 / 785 / 120	420 / 676 / 243	345 / 822 / 196															
Wind Speed [mph]		170						180																											
70	1	546 / 551 / 95	437 / 668 / 76	662 / 435 / 174	544 / 546 / 143	475 / 475 / 272	438 / 594 / 224	510 / 578 / 89	413 / 709 / 72	626 / 464 / 165	510 / 574 / 134	460 / 503 / 256	422 / 621 / 208	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	461 / 635 / 80	377 / 783 / 66	544 / 529 / 143	437 / 646 / 115	428 / 531 / 245	386 / 648 / 197	437 / 676 / 76	352 / 823 / 61	520 / 569 / 137	415 / 687 / 109	421 / 572 / 234	379 / 689 / 187																							
3	389 / 749 / 68	316 / 919 / 55	426 / 682 / 112	343 / 830 / 90	317 / 722 / 181	292 / 897 / 149	364 / 789 / 63	304 / 991 / 53	402 / 724 / 106	321 / 868 / 84	307 / 763 / 171	282 / 935 / 139																							
80	1	620 / 551 / 105	496 / 668 / 84	724 / 420 / 188	616 / 546 / 160	533 / 475 / 308	476 / 594 / 253	578 / 578 / 98	468 / 709 / 79	710 / 464 / 185	576 / 574 / 150	504 / 503 / 290	458 / 621 / 235																						
	2	523 / 635 / 89	427 / 783 / 72	616 / 529 / 160	496 / 646 / 129	480 / 531 / 278	420 / 648 / 223	496 / 676 / 84	400 / 823 / 68	590 / 569 / 153	469 / 687 / 122	462 / 572 / 265	411 / 689 / 211																						
	3	441 / 749 / 75	358 / 919 / 61	483 / 682 / 125	389 / 830 / 101	355 / 722 / 205	318 / 897 / 169	413 / 789 / 70	344 / 991 / 59	456 / 724 / 119	362 / 868 / 94	336 / 763 / 193	306 / 935 / 157																						
90	1	693 / 551 / 115	554 / 668 / 92	764 / 396 / 197	689 / 546 / 177	595 / 475 / 344	515 / 594 / 283	647 / 578 / 107	524 / 709 / 87	764 / 447 / 197	644 / 574 / 166	560 / 503 / 324	494 / 621 / 263																						
	2	585 / 635 / 97	478 / 783 / 79	689 / 529 / 177	555 / 646 / 143	537 / 531 / 310	454 / 648 / 250	554 / 676 / 92	447 / 823 / 74	659 / 569 / 170	525 / 687 / 135	513 / 572 / 297	443 / 689 / 236																						
	3	493 / 749 / 82	401 / 919 / 67	540 / 682 / 139	435 / 830 / 112	397 / 722 / 229	344 / 897 / 189	462 / 789 / 77	385 / 991 / 64	510 / 724 / 131	405 / 868 / 104	374 / 763 / 216	330 / 935 / 175																						
Wind Speed [mph]		190						200																											
70	1	486 / 616 / 84	398 / 746 / 68	591 / 491 / 155	500 / 612 / 128	454 / 539 / 245	417 / 658 / 197	461 / 650 / 80	396 / 802 / 66	567 / 524 / 149	476 / 630 / 118	437 / 560 / 229	410 / 691 / 187																						
	2	413 / 713 / 72	348 / 887 / 59	485 / 593 / 128	402 / 723 / 103	404 / 595 / 218	372 / 725 / 176	389 / 745 / 68	332 / 914 / 55	461 / 627 / 121	401 / 778 / 100	397 / 629 / 208	375 / 780 / 171																						
	3	352 / 851 / 61	286 / 1017 / 49	378 / 761 / 100	317 / 933 / 81	296 / 798 / 160	282 / 1003 / 133	328 / 879 / 57	281 / 1079 / 47	355 / 792 / 93	313 / 995 / 78	295 / 856 / 155	270 / 1023 / 123																						
	80	1	551 / 616 / 93	441 / 746 / 75	670 / 491 / 174	550 / 612 / 143	496 / 539 / 278	451 / 658 / 223	523 / 650 / 89	434 / 802 / 72	643 / 524 / 167	521 / 630 / 132	477 / 560 / 259	442 / 691 / 211																					
		2	468 / 713 / 79	386 / 887 / 65	550 / 593 / 143	442 / 723 / 115	442 / 595 / 247	402 / 725 / 199	441 / 745 / 75	364 / 914 / 61	523 / 627 / 136	439 / 778 / 112	432 / 629 / 235	404 / 780 / 193																					
		3	400 / 851 / 68	317 / 1017 / 54	429 / 761 / 112	349 / 933 / 91	324 / 798 / 181	305 / 1003 / 151	372 / 879 / 63	308 / 1079 / 52	402 / 792 / 105	343 / 995 / 87	322 / 856 / 175	291 / 1023 / 139																					
	90	1	616 / 616 / 102	493 / 746 / 82	749 / 491 / 193	614 / 612 / 158	538 / 539 / 310	485 / 658 / 250	585 / 650 / 97	478 / 802 / 79	719 / 524 / 185	570 / 630 / 147	516 / 560 / 290	474 / 691 / 236																					
		2	524 / 713 / 87	431 / 887 / 72	614 / 593 / 158	495 / 723 / 127	480 / 595 / 276	432 / 725 / 223	493 / 745 / 82	401 / 914 / 67	585 / 627 / 150	480 / 778 / 124	468 / 629 / 263	434 / 780 / 216																					
		3	447 / 851 / 74	354 / 1017 / 59	480 / 761 / 124	390 / 933 / 100	351 / 798 / 202	328 / 1003 / 169	416 / 879 / 69	339 / 1079 / 56	450 / 792 / 116	375 / 995 / 97	348 / 856 / 196	312 / 1023 / 155																					

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 70in x 41in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	242 / 273 / 43	209 / 367 / 37	254 / 173 / 51	245 / 268 / 50	250 / 218 / 67	223 / 306 / 60	236 / 294 / 41	199 / 386 / 35	254 / 193 / 51	239 / 288 / 48	250 / 241 / 67	217 / 328 / 58	227 / 310 / 40	190 / 403 / 33	254 / 213 / 51	229 / 305 / 47	244 / 259 / 66	208 / 345 / 56	
	2	218 / 343 / 38	178 / 432 / 31	248 / 262 / 50	214 / 354 / 43	241 / 266 / 65	208 / 358 / 56	209 / 361 / 37	169 / 450 / 30	242 / 282 / 49	205 / 373 / 42	232 / 283 / 62	196 / 371 / 53	199 / 379 / 35	163 / 474 / 29	232 / 298 / 47	196 / 391 / 40	226 / 302 / 61	187 / 388 / 50	
	3	184 / 413 / 32	147 / 506 / 26	205 / 370 / 42	165 / 458 / 34	187 / 394 / 50	152 / 488 / 41	175 / 431 / 31	141 / 532 / 25	196 / 388 / 40	156 / 475 / 32	178 / 412 / 48	143 / 504 / 39	169 / 455 / 30	135 / 556 / 24	187 / 405 / 38	150 / 499 / 31	169 / 428 / 46	137 / 527 / 37	
	5	1	268 / 273 / 43	231 / 367 / 37	275 / 171 / 54	269 / 268 / 52	250 / 218 / 83	223 / 306 / 74	261 / 294 / 41	221 / 386 / 35	275 / 190 / 54	262 / 288 / 51	250 / 241 / 83	217 / 328 / 72	251 / 310 / 40	211 / 403 / 33	275 / 210 / 54	252 / 305 / 49	244 / 259 / 81	208 / 345 / 69
		2	241 / 343 / 38	197 / 432 / 31	272 / 262 / 53	235 / 354 / 46	241 / 266 / 80	208 / 358 / 69	231 / 361 / 37	187 / 450 / 30	265 / 282 / 52	225 / 373 / 44	232 / 283 / 77	196 / 371 / 65	221 / 379 / 35	180 / 474 / 29	255 / 298 / 50	215 / 391 / 42	226 / 302 / 75	187 / 388 / 63
		3	204 / 413 / 32	163 / 506 / 26	225 / 370 / 44	182 / 458 / 35	187 / 394 / 63	152 / 488 / 51	194 / 431 / 31	156 / 532 / 25	215 / 388 / 42	171 / 475 / 34	178 / 412 / 60	143 / 504 / 48	187 / 455 / 30	150 / 556 / 24	205 / 405 / 40	165 / 499 / 32	169 / 428 / 57	137 / 527 / 46
	10	1	331 / 147 / 41	293 / 367 / 37	327 / 161 / 62	327 / 258 / 62	281 / 213 / 106	257 / 306 / 97	331 / 147 / 41	280 / 386 / 35	327 / 179 / 62	327 / 285 / 62	281 / 236 / 106	250 / 328 / 94	318 / 310 / 40	267 / 403 / 33	327 / 198 / 62	318 / 305 / 61	281 / 259 / 106	240 / 345 / 90
		2	306 / 343 / 38	250 / 432 / 31	327 / 249 / 62	297 / 354 / 57	277 / 266 / 104	240 / 358 / 90	293 / 361 / 37	237 / 450 / 30	327 / 275 / 62	284 / 373 / 54	267 / 283 / 101	226 / 371 / 85	280 / 379 / 35	228 / 474 / 29	322 / 298 / 62	272 / 391 / 52	260 / 302 / 98	216 / 388 / 81
		3	258 / 413 / 32	207 / 506 / 26	284 / 370 / 54	229 / 458 / 44	216 / 394 / 81	175 / 488 / 66	245 / 431 / 31	198 / 532 / 25	272 / 388 / 52	217 / 475 / 41	205 / 412 / 77	164 / 504 / 62	237 / 455 / 30	190 / 556 / 24	259 / 405 / 50	208 / 499 / 40	195 / 428 / 74	158 / 527 / 59
0	Wind Speed [mph]																			
	110						115													
	1	221 / 330 / 39	181 / 419 / 32	254 / 234 / 51	223 / 324 / 45	235 / 274 / 63	202 / 366 / 54	215 / 350 / 38	175 / 439 / 31	251 / 253 / 51	217 / 344 / 44	229 / 291 / 62	193 / 380 / 52							
	2	190 / 394 / 33	154 / 488 / 27	226 / 318 / 46	187 / 406 / 38	217 / 317 / 58	181 / 409 / 49	184 / 415 / 32	147 / 508 / 26	220 / 337 / 45	177 / 420 / 36	211 / 336 / 57	172 / 423 / 46							
	3	160 / 469 / 28	129 / 577 / 23	177 / 420 / 36	144 / 521 / 29	164 / 450 / 44	131 / 548 / 35	154 / 489 / 27	126 / 611 / 22	171 / 441 / 35	138 / 541 / 28	158 / 471 / 43	128 / 581 / 35							
	5	1	244 / 330 / 39	200 / 419 / 32	275 / 231 / 54	245 / 324 / 48	235 / 274 / 78	202 / 366 / 67	238 / 350 / 38	194 / 439 / 31	275 / 253 / 54	238 / 344 / 46	229 / 291 / 76	193 / 380 / 64						
		2	211 / 394 / 33	170 / 488 / 27	249 / 318 / 48	205 / 406 / 40	217 / 317 / 72	181 / 409 / 61	204 / 415 / 32	163 / 508 / 26	242 / 337 / 47	195 / 420 / 38	211 / 336 / 70	172 / 423 / 58						
		3	177 / 469 / 28	143 / 577 / 23	195 / 420 / 38	158 / 521 / 31	164 / 450 / 55	131 / 548 / 44	170 / 489 / 27	139 / 611 / 22	188 / 441 / 37	151 / 541 / 30	158 / 471 / 53	128 / 581 / 43						
	10	1	310 / 330 / 39	254 / 419 / 32	327 / 217 / 62	310 / 324 / 59	270 / 274 / 102	233 / 366 / 88	301 / 350 / 38	245 / 439 / 31	327 / 238 / 62	301 / 344 / 58	263 / 291 / 99	222 / 380 / 84						
2		267 / 394 / 33	215 / 488 / 27	314 / 318 / 60	259 / 406 / 50	250 / 317 / 94	209 / 409 / 79	258 / 415 / 32	207 / 508 / 26	305 / 337 / 58	246 / 420 / 47	243 / 336 / 92	199 / 423 / 75							
3		224 / 469 / 28	181 / 577 / 23	246 / 420 / 47	200 / 521 / 38	188 / 450 / 71	151 / 548 / 57	215 / 489 / 27	177 / 611 / 22	238 / 441 / 46	191 / 541 / 37	181 / 471 / 68	147 / 581 / 56							
0	Wind Speed [mph]																			
	120						130													
	1	209 / 369 / 37	166 / 451 / 29	245 / 269 / 50	211 / 363 / 43	223 / 308 / 60	187 / 399 / 50	215 / 350 / 38	175 / 439 / 31	251 / 253 / 51	217 / 344 / 44	229 / 291 / 62	193 / 380 / 52							
	2	175 / 427 / 31	141 / 527 / 25	214 / 356 / 43	171 / 439 / 35	205 / 354 / 55	167 / 442 / 45	184 / 415 / 32	147 / 508 / 26	220 / 337 / 45	177 / 420 / 36	211 / 336 / 57	172 / 423 / 46							
	3	147 / 508 / 26	120 / 628 / 21	165 / 460 / 34	132 / 559 / 27	152 / 490 / 41	122 / 599 / 33	154 / 489 / 27	126 / 611 / 22	171 / 441 / 35	138 / 541 / 28	158 / 471 / 43	128 / 581 / 35							
	5	1	231 / 369 / 37	183 / 451 / 29	269 / 269 / 52	232 / 363 / 45	223 / 308 / 74	187 / 399 / 63	238 / 350 / 38	194 / 439 / 31	275 / 253 / 54	238 / 344 / 46	229 / 291 / 76	193 / 380 / 64						
		2	194 / 427 / 31	156 / 527 / 25	235 / 356 / 46	188 / 439 / 37	205 / 354 / 68	167 / 442 / 56	204 / 415 / 32	163 / 508 / 26	242 / 337 / 47	195 / 420 / 38	211 / 336 / 70	172 / 423 / 58						
		3	163 / 508 / 26	133 / 628 / 21	182 / 460 / 35	145 / 559 / 28	152 / 490 / 51	122 / 599 / 41	170 / 489 / 27	139 / 611 / 22	188 / 441 / 37	151 / 541 / 30	158 / 471 / 53	128 / 581 / 43						
	10	1	293 / 369 / 37	232 / 451 / 29	327 / 259 / 62	293 / 363 / 56	257 / 308 / 97	216 / 399 / 81	301 / 350 / 38	245 / 439 / 31	327 / 238 / 62	301 / 344 / 58	263 / 291 / 99	222 / 380 / 84						
2		245 / 427 / 31	198 / 527 / 25	297 / 356 / 57	238 / 439 / 46	236 / 354 / 89	192 / 442 / 72	258 / 415 / 32	207 / 508 / 26	305 / 337 / 58	246 / 420 / 47	243 / 336 / 92	199 / 423 / 75							
3		207 / 508 / 26	168 / 628 / 21	229 / 460 / 44	183 / 559 / 35	175 / 490 / 66	141 / 599 / 53	215 / 489 / 27	177 / 611 / 22	238 / 441 / 46	191 / 541 / 37	181 / 471 / 68	147 / 581 / 56							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	0	1	199 / 381 / 35	160 / 468 / 28	239 / 284 / 48	202 / 375 / 41	217 / 324 / 58	178 / 411 / 48	184 / 408 / 32	151 / 510 / 27	226 / 314 / 46	187 / 402 / 38	205 / 355 / 55	179 / 443 / 45	172 / 436 / 30	138 / 535 / 24	217 / 347 / 44	174 / 431 / 35	193 / 384 / 52	184 / 471 / 42
2		169 / 445 / 30	138 / 555 / 24	205 / 368 / 42	165 / 457 / 34	199 / 372 / 54	161 / 460 / 43	157 / 477 / 28	129 / 598 / 23	190 / 395 / 39	153 / 489 / 31	184 / 398 / 50	160 / 491 / 40	147 / 513 / 26	120 / 634 / 21	177 / 424 / 36	144 / 525 / 29	172 / 427 / 46	166 / 528 / 38	
3		141 / 525 / 25	117 / 659 / 21	159 / 478 / 32	129 / 589 / 26	146 / 508 / 39	116 / 614 / 31	132 / 566 / 23	108 / 699 / 19	147 / 510 / 30	120 / 630 / 24	134 / 538 / 36	118 / 670 / 30	123 / 602 / 22	102 / 752 / 18	138 / 547 / 28	110 / 664 / 23	125 / 573 / 34	121 / 703 / 27	
5		1	221 / 381 / 35	177 / 468 / 28	262 / 284 / 51	222 / 375 / 43	217 / 324 / 72	178 / 411 / 60	204 / 408 / 32	166 / 510 / 27	249 / 314 / 48	205 / 402 / 40	205 / 355 / 68	179 / 443 / 56	190 / 436 / 30	153 / 535 / 24	238 / 347 / 46	192 / 431 / 37	193 / 384 / 64	184 / 471 / 52
		2	187 / 445 / 30	153 / 555 / 24	225 / 368 / 44	182 / 457 / 35	199 / 372 / 66	161 / 460 / 54	173 / 477 / 28	143 / 598 / 23	208 / 395 / 41	168 / 489 / 33	184 / 398 / 62	160 / 491 / 50	163 / 513 / 26	133 / 634 / 21	195 / 424 / 38	158 / 525 / 31	172 / 427 / 58	166 / 528 / 47
		3	156 / 525 / 25	129 / 659 / 21	175 / 478 / 34	141 / 589 / 28	146 / 508 / 49	116 / 614 / 39	146 / 566 / 23	119 / 699 / 19	161 / 510 / 32	131 / 630 / 26	134 / 538 / 45	118 / 670 / 37	136 / 602 / 22	112 / 752 / 18	151 / 547 / 30	121 / 664 / 24	125 / 573 / 42	121 / 703 / 34
10		1	280 / 381 / 35	224 / 468 / 28	327 / 281 / 62	280 / 375 / 54	250 / 324 / 94	205 / 411 / 77	258 / 408 / 32	211 / 510 / 27	314 / 314 / 60	259 / 402 / 50	236 / 355 / 89	201 / 443 / 72	241 / 436 / 30	194 / 535 / 24	301 / 347 / 58	242 / 431 / 46	222 / 384 / 84	200 / 471 / 67
		2	237 / 445 / 30	194 / 555 / 24	284 / 368 / 54	229 / 457 / 44	229 / 372 / 86	185 / 460 / 70	220 / 477 / 28	181 / 598 / 23	263 / 395 / 50	212 / 489 / 41	212 / 398 / 80	179 / 491 / 65	207 / 513 / 26	168 / 634 / 21	246 / 424 / 47	200 / 525 / 38	199 / 427 / 75	181 / 528 / 61
		3	198 / 525 / 25	164 / 659 / 21	221 / 478 / 42	178 / 589 / 34	168 / 508 / 63	134 / 614 / 51	185 / 566 / 23	151 / 699 / 19	204 / 510 / 39	166 / 630 / 32	154 / 538 / 58	133 / 670 / 48	172 / 602 / 22	142 / 752 / 18	191 / 547 / 37	153 / 664 / 29	144 / 573 / 54	131 / 703 / 44
0	1	163 / 469 / 29	137 / 580 / 23	205 / 374 / 42	172 / 463 / 34	181 / 410 / 49	192 / 503 / 39	154 / 499 / 27	140 / 607 / 22	193 / 397 / 39	178 / 493 / 32	176 / 432 / 46	198 / 532 / 37							
	2	138 / 546 / 24	115 / 662 / 20	168 / 457 / 34	140 / 558 / 27	161 / 451 / 43	172 / 560 / 35	129 / 573 / 23	119 / 703 / 19	156 / 478 / 32	146 / 599 / 26	158 / 480 / 41	177 / 587 / 33							
	3	117 / 647 / 21	99 / 799 / 17	129 / 578 / 26	108 / 709 / 21	119 / 618 / 32	125 / 748 / 26	111 / 690 / 20	101 / 839 / 16	123 / 619 / 25	112 / 750 / 20	117 / 660 / 31	130 / 787 / 24							
	5	1	180 / 469 / 29	150 / 580 / 23	225 / 374 / 44	186 / 463 / 35	181 / 410 / 61	192 / 503 / 49	170 / 499 / 27	149 / 607 / 22	212 / 397 / 41	188 / 493 / 34	176 / 432 / 57	198 / 532 / 46						
		2	153 / 546 / 24	126 / 662 / 20	185 / 457 / 36	152 / 558 / 29	161 / 451 / 54	172 / 560 / 44	143 / 573 / 23	126 / 703 / 19	171 / 478 / 34	155 / 599 / 28	158 / 480 / 51	177 / 587 / 41						
		3	129 / 647 / 21	108 / 799 / 17	141 / 578 / 28	118 / 709 / 23	119 / 618 / 40	125 / 748 / 32	122 / 690 / 20	108 / 839 / 16	135 / 619 / 26	118 / 750 / 21	117 / 660 / 38	130 / 787 / 30						
	10	1	228 / 469 / 29	189 / 580 / 23	284 / 374 / 54	234 / 463 / 44	209 / 410 / 79	202 / 503 / 63	215 / 499 / 27	185 / 607 / 22	267 / 397 / 51	233 / 493 / 41	200 / 432 / 74	204 / 532 / 59						
		2	194 / 546 / 24	158 / 662 / 20	233 / 457 / 45	191 / 558 / 36	185 / 451 / 70	182 / 560 / 57	181 / 573 / 23	157 / 703 / 19	217 / 478 / 41	192 / 599 / 34	179 / 480 / 66	182 / 587 / 53						
		3	164 / 647 / 21	137 / 799 / 17	178 / 578 / 34	148 / 709 / 28	137 / 618 / 52	132 / 748 / 42	155 / 690 / 20	134 / 839 / 16	170 / 619 / 33	146 / 750 / 26	134 / 660 / 49	133 / 787 / 39						
0	1	144 / 525 / 26	145 / 644 / 21	181 / 417 / 37	182 / 520 / 30	182 / 459 / 43	208 / 569 / 35	138 / 559 / 24	149 / 678 / 20	171 / 442 / 35	186 / 542 / 28	187 / 482 / 41	212 / 589 / 33							
	2	123 / 610 / 22	126 / 762 / 18	147 / 503 / 30	148 / 622 / 24	162 / 506 / 39	185 / 624 / 31	117 / 644 / 21	128 / 795 / 17	141 / 537 / 29	153 / 655 / 23	169 / 539 / 37	192 / 657 / 30							
	3	105 / 727 / 19	103 / 872 / 15	116 / 658 / 24	118 / 811 / 20	121 / 698 / 29	137 / 849 / 23	98 / 760 / 18	108 / 932 / 14	110 / 692 / 23	120 / 842 / 18	125 / 732 / 27	140 / 877 / 22							
	5	1	160 / 525 / 26	150 / 644 / 21	198 / 417 / 39	188 / 520 / 32	182 / 459 / 54	208 / 569 / 44	153 / 559 / 24	151 / 678 / 20	188 / 442 / 37	187 / 542 / 30	187 / 482 / 51	212 / 589 / 41						
		2	136 / 610 / 22	130 / 762 / 18	161 / 503 / 32	153 / 622 / 26	162 / 506 / 48	185 / 624 / 39	129 / 644 / 21	130 / 795 / 17	155 / 537 / 30	154 / 655 / 24	169 / 539 / 46	192 / 657 / 37						
		3	116 / 727 / 19	107 / 872 / 15	128 / 658 / 25	121 / 811 / 21	121 / 698 / 36	137 / 849 / 29	109 / 760 / 18	109 / 932 / 14	121 / 692 / 24	121 / 842 / 19	125 / 732 / 34	140 / 877 / 27						
	10	1	202 / 525 / 26	185 / 644 / 21	250 / 417 / 48	230 / 520 / 39	201 / 459 / 70	209 / 569 / 57	194 / 559 / 24	184 / 678 / 20	238 / 442 / 46	227 / 542 / 37	201 / 482 / 66	212 / 589 / 53						
		2	172 / 610 / 22	160 / 762 / 18	204 / 503 / 39	187 / 622 / 32	179 / 506 / 62	185 / 624 / 51	164 / 644 / 21	158 / 795 / 17	195 / 537 / 37	187 / 655 / 30	181 / 539 / 59	192 / 657 / 48						
		3	147 / 727 / 19	131 / 872 / 15	161 / 658 / 31	149 / 811 / 25	134 / 698 / 47	138 / 849 / 38	138 / 760 / 18	133 / 932 / 14	153 / 692 / 29	147 / 842 / 24	134 / 732 / 44	140 / 877 / 35						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 70in x 41in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	95						100						105							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
15	1	380 / 139 / 41	354 / 367 / 38	379 / 155 / 72	379 / 248 / 72	311 / 205 / 125	295 / 306 / 119	380 / 139 / 41	339 / 386 / 36	379 / 172 / 72	379 / 274 / 72	311 / 227 / 125	288 / 328 / 116	380 / 147 / 41	323 / 403 / 35	379 / 190 / 72	379 / 301 / 72	311 / 250 / 125	276 / 345 / 111	
	2	370 / 343 / 40	302 / 432 / 32	379 / 239 / 72	359 / 354 / 68	311 / 259 / 125	276 / 358 / 111	354 / 361 / 38	287 / 450 / 31	379 / 264 / 72	344 / 373 / 65	307 / 283 / 124	260 / 371 / 105	339 / 379 / 36	276 / 474 / 30	379 / 291 / 72	328 / 391 / 62	299 / 302 / 121	248 / 388 / 100	
	3	313 / 413 / 34	250 / 506 / 27	344 / 370 / 65	277 / 458 / 52	248 / 394 / 100	201 / 488 / 81	297 / 431 / 32	240 / 532 / 26	328 / 388 / 62	262 / 475 / 49	236 / 412 / 95	189 / 504 / 76	287 / 455 / 31	230 / 556 / 25	313 / 405 / 59	251 / 499 / 48	225 / 428 / 91	181 / 527 / 73	
	20	1	428 / 133 / 42	416 / 367 / 41	421 / 146 / 79	421 / 234 / 79	343 / 200 / 151	334 / 306 / 147	428 / 133 / 42	398 / 386 / 39	421 / 163 / 79	421 / 259 / 79	343 / 221 / 151	325 / 328 / 143	428 / 141 / 42	380 / 403 / 38	421 / 180 / 79	421 / 284 / 79	343 / 243 / 151	312 / 345 / 137
		2	428 / 338 / 42	355 / 432 / 35	421 / 226 / 79	421 / 354 / 79	343 / 253 / 151	312 / 358 / 137	416 / 361 / 41	337 / 450 / 33	421 / 250 / 79	403 / 373 / 75	343 / 279 / 151	294 / 371 / 130	398 / 379 / 39	325 / 474 / 32	421 / 275 / 79	385 / 391 / 72	339 / 302 / 149	281 / 388 / 124
		3	367 / 413 / 36	294 / 506 / 29	403 / 370 / 75	325 / 458 / 61	281 / 394 / 124	227 / 488 / 100	349 / 431 / 35	282 / 532 / 28	385 / 388 / 72	307 / 475 / 57	267 / 412 / 118	214 / 504 / 94	337 / 455 / 33	270 / 556 / 27	367 / 405 / 69	295 / 499 / 55	254 / 428 / 112	205 / 527 / 90
	25	1	428 / 133 / 42	416 / 367 / 41	421 / 146 / 79	421 / 234 / 79	368 / 192 / 175	368 / 302 / 175	428 / 133 / 42	398 / 386 / 39	421 / 163 / 79	421 / 259 / 79	368 / 213 / 175	363 / 328 / 172	428 / 141 / 42	380 / 403 / 38	421 / 180 / 79	421 / 284 / 79	368 / 234 / 175	348 / 345 / 165
		2	428 / 338 / 42	355 / 432 / 35	421 / 226 / 79	421 / 354 / 79	368 / 243 / 175	348 / 358 / 165	416 / 361 / 41	337 / 450 / 33	421 / 250 / 79	403 / 373 / 75	368 / 268 / 175	328 / 371 / 156	398 / 379 / 39	325 / 474 / 32	421 / 275 / 79	385 / 391 / 72	368 / 294 / 175	313 / 388 / 149
		3	367 / 413 / 36	294 / 506 / 29	403 / 370 / 75	325 / 458 / 61	313 / 394 / 149	254 / 488 / 121	349 / 431 / 35	282 / 532 / 28	385 / 388 / 72	307 / 475 / 57	298 / 412 / 142	239 / 504 / 113	337 / 455 / 33	270 / 556 / 27	367 / 405 / 69	295 / 499 / 55	284 / 428 / 135	229 / 527 / 109
15	Wind Speed [mph]																			
	110						115													
	1	375 / 330 / 40	308 / 419 / 33	379 / 209 / 72	374 / 324 / 71	311 / 274 / 125	268 / 366 / 108	365 / 350 / 39	297 / 439 / 32	379 / 228 / 72	364 / 344 / 69	303 / 291 / 122	256 / 380 / 103							
	2	323 / 394 / 35	261 / 488 / 28	379 / 318 / 72	313 / 406 / 59	288 / 317 / 116	240 / 409 / 97	313 / 415 / 34	250 / 508 / 27	369 / 337 / 70	297 / 420 / 56	280 / 336 / 113	229 / 423 / 92							
	3	271 / 469 / 29	219 / 577 / 24	297 / 420 / 56	241 / 521 / 46	217 / 450 / 87	174 / 548 / 70	261 / 489 / 28	214 / 611 / 23	287 / 441 / 54	231 / 541 / 44	209 / 471 / 84	170 / 581 / 68							
	20	1	428 / 156 / 42	361 / 419 / 36	421 / 198 / 79	421 / 311 / 79	343 / 267 / 151	303 / 366 / 134	428 / 171 / 42	349 / 439 / 35	421 / 216 / 79	421 / 339 / 79	343 / 291 / 151	290 / 380 / 128						
		2	380 / 394 / 38	306 / 488 / 30	421 / 301 / 79	367 / 406 / 69	325 / 317 / 143	272 / 409 / 120	367 / 415 / 36	294 / 508 / 29	421 / 328 / 79	349 / 420 / 65	316 / 336 / 139	259 / 423 / 114						
		3	318 / 469 / 32	257 / 577 / 26	349 / 420 / 65	283 / 521 / 53	245 / 450 / 108	196 / 548 / 87	306 / 489 / 30	251 / 611 / 25	337 / 441 / 63	271 / 541 / 51	236 / 471 / 104	192 / 581 / 85						
	25	1	428 / 156 / 42	361 / 419 / 36	421 / 198 / 79	421 / 311 / 79	368 / 256 / 175	338 / 366 / 161	428 / 171 / 42	349 / 439 / 35	421 / 216 / 79	421 / 339 / 79	368 / 279 / 175	323 / 380 / 153						
2		380 / 394 / 38	306 / 488 / 30	421 / 301 / 79	367 / 406 / 69	363 / 317 / 172	303 / 409 / 144	367 / 415 / 36	294 / 508 / 29	421 / 328 / 79	349 / 420 / 65	353 / 336 / 168	288 / 423 / 137							
3		318 / 469 / 32	257 / 577 / 26	349 / 420 / 65	283 / 521 / 53	274 / 450 / 130	219 / 548 / 104	306 / 489 / 30	251 / 611 / 25	337 / 441 / 63	271 / 541 / 51	264 / 471 / 125	214 / 581 / 102							
15	Wind Speed [mph]																			
	120						130													
	1	354 / 369 / 38	282 / 451 / 30	379 / 249 / 72	354 / 363 / 67	295 / 308 / 119	248 / 399 / 100	365 / 350 / 39	297 / 439 / 32	379 / 228 / 72	364 / 344 / 69	303 / 291 / 122	256 / 380 / 103							
	2	297 / 427 / 32	240 / 527 / 26	359 / 356 / 68	287 / 439 / 54	272 / 354 / 110	221 / 442 / 89	313 / 415 / 34	250 / 508 / 27	369 / 337 / 70	297 / 420 / 56	280 / 336 / 113	229 / 423 / 92							
	3	250 / 508 / 27	203 / 628 / 22	277 / 460 / 52	221 / 559 / 42	201 / 490 / 81	162 / 599 / 65	261 / 489 / 28	214 / 611 / 23	287 / 441 / 54	231 / 541 / 44	209 / 471 / 84	170 / 581 / 68							
	20	1	416 / 369 / 41	331 / 451 / 33	421 / 235 / 79	415 / 363 / 77	334 / 308 / 147	281 / 399 / 124	428 / 171 / 42	349 / 439 / 35	421 / 216 / 79	421 / 339 / 79	343 / 291 / 151	290 / 380 / 128						
		2	349 / 427 / 35	282 / 527 / 28	421 / 356 / 79	337 / 439 / 63	307 / 354 / 135	250 / 442 / 110	367 / 415 / 36	294 / 508 / 29	421 / 328 / 79	349 / 420 / 65	316 / 336 / 139	259 / 423 / 114						
		3	294 / 508 / 29	239 / 628 / 24	325 / 460 / 61	259 / 559 / 48	227 / 490 / 100	183 / 599 / 81	306 / 489 / 30	251 / 611 / 25	337 / 441 / 63	271 / 541 / 51	236 / 471 / 104	192 / 581 / 85						
	25	1	416 / 369 / 41	331 / 451 / 33	421 / 235 / 79	415 / 363 / 77	368 / 303 / 175	313 / 399 / 149	428 / 171 / 42	349 / 439 / 35	421 / 216 / 79	421 / 339 / 79	368 / 279 / 175	323 / 380 / 153						
2		349 / 427 / 35	282 / 527 / 28	421 / 356 / 79	337 / 439 / 63	343 / 354 / 163	279 / 442 / 132	367 / 415 / 36	294 / 508 / 29	421 / 328 / 79	349 / 420 / 65	353 / 336 / 168	288 / 423 / 137							
3		294 / 508 / 29	239 / 628 / 24	325 / 460 / 61	259 / 559 / 48	254 / 490 / 121	204 / 599 / 97	306 / 489 / 30	251 / 611 / 25	337 / 441 / 63	271 / 541 / 51	264 / 471 / 125	214 / 581 / 102							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	339 / 381 / 36	271 / 468 / 29	379 / 270 / 72	338 / 375 / 64	288 / 324 / 116	236 / 411 / 95	313 / 408 / 34	256 / 510 / 28	379 / 314 / 72	313 / 402 / 59	272 / 355 / 110	230 / 443 / 89	292 / 436 / 31	235 / 535 / 25	364 / 347 / 69	292 / 431 / 55	256 / 384 / 103
2		287 / 445 / 31	235 / 555 / 25	344 / 368 / 65	277 / 457 / 52	264 / 372 / 106	213 / 460 / 86	266 / 477 / 29	219 / 598 / 24	318 / 395 / 60	257 / 489 / 48	244 / 398 / 99	205 / 491 / 80	250 / 513 / 27	203 / 634 / 22	297 / 424 / 56	241 / 525 / 46	229 / 427 / 92	205 / 528 / 75
3		240 / 525 / 26	198 / 659 / 21	267 / 478 / 50	216 / 589 / 41	193 / 508 / 78	154 / 614 / 62	224 / 566 / 24	183 / 699 / 20	246 / 510 / 47	200 / 630 / 38	177 / 538 / 72	152 / 670 / 59	209 / 602 / 23	172 / 752 / 19	231 / 547 / 44	185 / 664 / 35	166 / 573 / 67	149 / 703 / 54
1		398 / 381 / 39	318 / 468 / 32	421 / 255 / 79	397 / 375 / 74	325 / 324 / 143	267 / 411 / 118	367 / 408 / 36	300 / 510 / 30	421 / 297 / 79	367 / 402 / 69	307 / 355 / 135	259 / 443 / 110	343 / 436 / 34	276 / 535 / 27	421 / 343 / 79	343 / 431 / 64	290 / 384 / 128	254 / 471 / 102
2		337 / 445 / 33	276 / 555 / 27	403 / 368 / 75	325 / 457 / 61	299 / 372 / 132	241 / 460 / 106	312 / 477 / 31	257 / 598 / 26	373 / 395 / 70	301 / 489 / 56	276 / 398 / 122	231 / 491 / 98	294 / 513 / 29	239 / 634 / 24	349 / 424 / 65	283 / 525 / 53	259 / 427 / 114	230 / 528 / 92
3		282 / 525 / 28	233 / 659 / 23	313 / 478 / 58	253 / 589 / 47	218 / 508 / 96	174 / 614 / 77	263 / 566 / 26	214 / 699 / 21	289 / 510 / 54	235 / 630 / 44	201 / 538 / 89	171 / 670 / 73	245 / 602 / 24	202 / 752 / 20	271 / 547 / 51	217 / 664 / 41	187 / 573 / 83	166 / 703 / 67
1		398 / 381 / 39	318 / 468 / 32	421 / 255 / 79	397 / 375 / 74	363 / 324 / 172	298 / 411 / 142	367 / 408 / 36	300 / 510 / 30	421 / 297 / 79	367 / 402 / 69	343 / 355 / 163	288 / 443 / 132	343 / 436 / 34	276 / 535 / 27	421 / 343 / 79	343 / 431 / 64	323 / 384 / 153	281 / 471 / 123
2		337 / 445 / 33	276 / 555 / 27	403 / 368 / 75	325 / 457 / 61	333 / 372 / 158	269 / 460 / 128	312 / 477 / 31	257 / 598 / 26	373 / 395 / 70	301 / 489 / 56	308 / 398 / 146	257 / 491 / 118	294 / 513 / 29	239 / 634 / 24	349 / 424 / 65	283 / 525 / 53	288 / 427 / 137	254 / 528 / 111
3		282 / 525 / 28	233 / 659 / 23	313 / 478 / 58	253 / 589 / 47	244 / 508 / 116	194 / 614 / 92	263 / 566 / 26	214 / 699 / 21	289 / 510 / 54	235 / 630 / 44	224 / 538 / 106	190 / 670 / 88	245 / 602 / 24	202 / 752 / 20	271 / 547 / 51	217 / 664 / 41	209 / 573 / 99	184 / 703 / 81
20	1	276 / 469 / 30	228 / 580 / 24	344 / 374 / 65	282 / 463 / 52	240 / 410 / 97	228 / 503 / 78	261 / 499 / 28	221 / 607 / 23	323 / 397 / 61	278 / 493 / 49	229 / 432 / 91	227 / 532 / 73						
	2	235 / 546 / 25	191 / 662 / 20	282 / 457 / 53	230 / 558 / 43	213 / 451 / 86	205 / 560 / 70	219 / 573 / 24	188 / 703 / 19	262 / 478 / 49	229 / 599 / 41	205 / 480 / 81	203 / 587 / 65						
	3	198 / 647 / 21	165 / 799 / 18	216 / 578 / 41	178 / 709 / 33	158 / 618 / 64	149 / 748 / 51	188 / 690 / 20	161 / 839 / 16	205 / 619 / 39	174 / 750 / 31	153 / 660 / 61	149 / 787 / 48						
	1	325 / 469 / 32	267 / 580 / 26	403 / 374 / 75	330 / 463 / 61	272 / 410 / 120	253 / 503 / 96	306 / 499 / 30	258 / 607 / 24	379 / 397 / 71	323 / 493 / 57	259 / 432 / 112	251 / 532 / 90						
	2	276 / 546 / 27	224 / 662 / 22	331 / 457 / 62	269 / 558 / 50	241 / 451 / 106	227 / 560 / 87	257 / 573 / 26	219 / 703 / 21	307 / 478 / 57	266 / 599 / 47	232 / 480 / 100	224 / 587 / 81						
	3	233 / 647 / 23	193 / 799 / 19	253 / 578 / 47	208 / 709 / 38	178 / 618 / 79	165 / 748 / 63	221 / 690 / 22	187 / 839 / 18	241 / 619 / 45	203 / 750 / 36	173 / 660 / 75	164 / 787 / 59						
	1	325 / 469 / 32	267 / 580 / 26	403 / 374 / 75	330 / 463 / 61	303 / 410 / 144	278 / 503 / 116	306 / 499 / 30	258 / 607 / 24	379 / 397 / 71	323 / 493 / 57	288 / 432 / 135	275 / 532 / 109						
	2	276 / 546 / 27	224 / 662 / 22	331 / 457 / 62	269 / 558 / 50	269 / 451 / 128	250 / 560 / 104	257 / 573 / 26	219 / 703 / 21	307 / 478 / 57	266 / 599 / 47	258 / 480 / 121	245 / 587 / 97						
	3	233 / 647 / 23	193 / 799 / 19	253 / 578 / 47	208 / 709 / 38	199 / 618 / 95	182 / 748 / 76	221 / 690 / 22	187 / 839 / 18	241 / 619 / 45	203 / 750 / 36	192 / 660 / 90	180 / 787 / 71						
25	1	245 / 525 / 26	219 / 644 / 21	303 / 417 / 57	273 / 520 / 47	229 / 459 / 86	231 / 569 / 70	235 / 559 / 25	217 / 678 / 20	287 / 442 / 54	267 / 542 / 44	227 / 482 / 81	229 / 589 / 65						
	2	209 / 610 / 23	190 / 762 / 19	246 / 503 / 47	222 / 622 / 38	203 / 506 / 76	205 / 624 / 62	198 / 644 / 21	187 / 795 / 18	236 / 537 / 45	220 / 655 / 36	205 / 539 / 73	207 / 657 / 59						
	3	177 / 727 / 19	156 / 872 / 15	195 / 658 / 37	176 / 811 / 30	153 / 698 / 57	153 / 849 / 46	167 / 760 / 18	157 / 932 / 15	185 / 692 / 35	172 / 842 / 28	152 / 732 / 54	151 / 877 / 43						
	1	288 / 525 / 29	254 / 644 / 23	355 / 417 / 66	315 / 520 / 54	257 / 459 / 106	254 / 569 / 87	276 / 559 / 27	249 / 678 / 22	337 / 442 / 63	307 / 542 / 51	254 / 482 / 100	250 / 589 / 81						
	2	245 / 610 / 24	220 / 762 / 20	289 / 503 / 54	256 / 622 / 44	228 / 506 / 94	225 / 624 / 77	233 / 644 / 23	215 / 795 / 19	277 / 537 / 52	252 / 655 / 42	229 / 539 / 90	226 / 657 / 73						
	3	208 / 727 / 21	180 / 872 / 17	229 / 658 / 43	204 / 811 / 35	171 / 698 / 71	168 / 849 / 57	196 / 760 / 20	180 / 932 / 16	217 / 692 / 41	198 / 842 / 33	169 / 732 / 67	165 / 877 / 53						
	1	288 / 525 / 29	254 / 644 / 23	355 / 417 / 66	315 / 520 / 54	285 / 459 / 128	277 / 569 / 104	276 / 559 / 27	249 / 678 / 22	337 / 442 / 63	307 / 542 / 51	280 / 482 / 121	272 / 589 / 97						
	2	245 / 610 / 24	220 / 762 / 20	289 / 503 / 54	256 / 622 / 44	253 / 506 / 113	246 / 624 / 92	233 / 644 / 23	215 / 795 / 19	277 / 537 / 52	252 / 655 / 42	253 / 539 / 109	245 / 657 / 88						
	3	208 / 727 / 21	180 / 872 / 17	229 / 658 / 43	204 / 811 / 35	190 / 698 / 85	183 / 849 / 69	196 / 760 / 20	180 / 932 / 16	217 / 692 / 41	198 / 842 / 33	187 / 732 / 81	179 / 877 / 64						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 70in x 41in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	449 / 129 / 43	449 / 181 / 43	447 / 144 / 83	447 / 231 / 83	395 / 187 / 199	395 / 294 / 199	449 / 129 / 43	430 / 386 / 41	447 / 160 / 83	447 / 255 / 83	395 / 207 / 199	395 / 324 / 199	449 / 137 / 43	410 / 403 / 39	447 / 177 / 83	447 / 280 / 83	395 / 228 / 199	384 / 345 / 193	
	2	449 / 328 / 43	383 / 432 / 37	447 / 223 / 83	447 / 349 / 83	395 / 236 / 199	384 / 358 / 193	449 / 361 / 43	364 / 450 / 35	447 / 246 / 83	435 / 373 / 81	395 / 261 / 199	362 / 371 / 182	430 / 379 / 41	350 / 474 / 34	447 / 271 / 83	415 / 391 / 77	395 / 286 / 199	346 / 388 / 174	
	3	397 / 413 / 38	317 / 506 / 30	435 / 370 / 81	350 / 458 / 65	346 / 394 / 174	280 / 488 / 141	377 / 431 / 36	304 / 532 / 29	415 / 388 / 77	331 / 475 / 62	329 / 412 / 166	264 / 504 / 133	364 / 455 / 35	291 / 556 / 28	396 / 405 / 74	318 / 499 / 59	313 / 428 / 157	253 / 527 / 127	
	35	1	489 / 128 / 45	489 / 178 / 45	479 / 140 / 89	479 / 224 / 89	420 / 182 / 221	420 / 286 / 221	489 / 128 / 45	474 / 386 / 43	479 / 156 / 89	479 / 248 / 89	420 / 201 / 221	420 / 315 / 221	489 / 135 / 45	452 / 403 / 41	479 / 172 / 89	479 / 272 / 89	420 / 221 / 221	420 / 345 / 221
		2	489 / 323 / 45	423 / 432 / 39	479 / 217 / 89	479 / 339 / 89	420 / 230 / 221	420 / 358 / 221	489 / 356 / 45	401 / 450 / 37	479 / 239 / 89	479 / 373 / 89	420 / 254 / 221	396 / 371 / 208	474 / 379 / 43	387 / 474 / 36	479 / 263 / 89	458 / 391 / 85	420 / 278 / 221	378 / 388 / 199
		3	438 / 413 / 40	350 / 506 / 32	479 / 370 / 89	386 / 458 / 72	378 / 394 / 199	306 / 488 / 161	416 / 431 / 38	336 / 532 / 31	458 / 388 / 85	365 / 475 / 68	360 / 412 / 189	288 / 504 / 152	401 / 455 / 37	321 / 556 / 30	436 / 405 / 81	351 / 499 / 65	342 / 428 / 180	276 / 527 / 145
	40	1	524 / 124 / 100	524 / 173 / 100	511 / 136 / 141	511 / 218 / 141	450 / 179 / 251	450 / 282 / 251	524 / 124 / 100	524 / 191 / 100	511 / 151 / 141	511 / 240 / 141	450 / 198 / 251	450 / 310 / 251	524 / 131 / 100	500 / 403 / 95	511 / 167 / 141	511 / 264 / 141	450 / 218 / 251	450 / 340 / 251
		2	524 / 314 / 100	468 / 432 / 89	511 / 210 / 141	511 / 329 / 141	450 / 227 / 251	450 / 353 / 251	524 / 345 / 100	444 / 450 / 84	511 / 232 / 141	511 / 362 / 141	450 / 250 / 251	431 / 371 / 240	524 / 379 / 100	428 / 474 / 81	511 / 255 / 141	503 / 391 / 139	450 / 275 / 251	411 / 388 / 229
		3	484 / 413 / 92	387 / 506 / 74	511 / 359 / 141	424 / 458 / 117	411 / 394 / 229	333 / 488 / 186	460 / 431 / 87	371 / 532 / 71	503 / 388 / 139	401 / 475 / 111	391 / 412 / 219	313 / 504 / 175	444 / 455 / 84	355 / 556 / 68	479 / 405 / 132	385 / 499 / 106	372 / 428 / 208	300 / 527 / 168
30	Wind Speed [mph]																			
	110						115													
	1	449 / 151 / 43	390 / 419 / 37	447 / 195 / 83	447 / 307 / 83	395 / 249 / 199	373 / 366 / 188	449 / 166 / 43	377 / 439 / 36	447 / 213 / 83	447 / 334 / 83	395 / 272 / 199	357 / 380 / 179							
	2	410 / 394 / 39	331 / 488 / 32	447 / 296 / 83	396 / 406 / 74	395 / 313 / 199	335 / 409 / 168	397 / 415 / 38	317 / 508 / 30	447 / 323 / 83	376 / 420 / 70	390 / 336 / 196	318 / 423 / 160							
	3	344 / 469 / 33	278 / 577 / 27	376 / 420 / 70	305 / 521 / 57	302 / 450 / 152	242 / 548 / 122	331 / 489 / 32	271 / 611 / 26	363 / 441 / 68	292 / 541 / 54	291 / 471 / 146	236 / 581 / 119							
	35	1	489 / 149 / 45	431 / 419 / 39	479 / 189 / 89	479 / 298 / 89	420 / 242 / 221	408 / 366 / 215	489 / 164 / 45	416 / 439 / 38	479 / 207 / 89	479 / 324 / 89	420 / 264 / 221	390 / 380 / 205						
		2	452 / 394 / 41	365 / 488 / 34	479 / 288 / 89	436 / 406 / 81	420 / 304 / 221	366 / 409 / 193	438 / 415 / 40	350 / 508 / 32	479 / 314 / 89	415 / 420 / 77	420 / 331 / 221	348 / 423 / 183						
		3	379 / 469 / 35	307 / 577 / 28	415 / 420 / 77	336 / 521 / 62	330 / 450 / 174	264 / 548 / 139	365 / 489 / 34	299 / 611 / 28	401 / 441 / 74	322 / 541 / 60	318 / 471 / 167	258 / 581 / 136						
	40	1	524 / 145 / 100	476 / 419 / 91	511 / 183 / 141	511 / 289 / 141	450 / 239 / 251	444 / 366 / 248	524 / 159 / 100	460 / 439 / 87	511 / 201 / 141	511 / 315 / 141	450 / 261 / 251	424 / 380 / 237						
2		500 / 394 / 95	403 / 488 / 77	511 / 279 / 141	479 / 406 / 132	450 / 300 / 251	398 / 409 / 222	484 / 415 / 92	387 / 508 / 74	511 / 304 / 141	456 / 420 / 126	450 / 327 / 251	378 / 423 / 211							
3		420 / 469 / 80	339 / 577 / 65	456 / 420 / 126	369 / 521 / 102	359 / 450 / 200	287 / 548 / 160	403 / 489 / 77	331 / 611 / 63	440 / 441 / 121	354 / 541 / 98	346 / 471 / 193	281 / 581 / 157							
30	Wind Speed [mph]																			
	120						130													
	1	449 / 181 / 43	357 / 451 / 34	447 / 232 / 83	447 / 363 / 83	395 / 295 / 199	346 / 399 / 174	449 / 166 / 43	377 / 439 / 36	447 / 213 / 83	447 / 334 / 83	395 / 272 / 199	357 / 380 / 179							
	2	377 / 427 / 36	304 / 527 / 29	447 / 351 / 83	363 / 439 / 68	379 / 354 / 190	308 / 442 / 155	397 / 415 / 38	317 / 508 / 30	447 / 323 / 83	376 / 420 / 70	390 / 336 / 196	318 / 423 / 160							
	3	317 / 508 / 30	258 / 628 / 25	350 / 460 / 65	279 / 559 / 52	280 / 490 / 141	225 / 599 / 113	331 / 489 / 32	271 / 611 / 26	363 / 441 / 68	292 / 541 / 54	291 / 471 / 146	236 / 581 / 119							
	35	1	489 / 179 / 45	394 / 451 / 36	479 / 225 / 89	479 / 352 / 89	420 / 287 / 221	378 / 399 / 199	489 / 164 / 45	416 / 439 / 38	479 / 207 / 89	479 / 324 / 89	420 / 264 / 221	390 / 380 / 205						
		2	416 / 427 / 38	336 / 527 / 31	479 / 341 / 89	401 / 439 / 74	414 / 354 / 218	336 / 442 / 177	438 / 415 / 40	350 / 508 / 32	479 / 314 / 89	415 / 420 / 77	420 / 331 / 221	348 / 423 / 183						
		3	350 / 508 / 32	285 / 628 / 26	386 / 460 / 72	308 / 559 / 57	306 / 490 / 161	246 / 599 / 130	365 / 489 / 34	299 / 611 / 28	401 / 441 / 74	322 / 541 / 60	318 / 471 / 167	258 / 581 / 136						
	40	1	524 / 173 / 100	436 / 451 / 83	511 / 219 / 141	511 / 342 / 141	450 / 283 / 251	411 / 399 / 229	524 / 159 / 100	460 / 439 / 87	511 / 201 / 141	511 / 315 / 141	450 / 261 / 251	424 / 380 / 237						
2		460 / 427 / 87	371 / 527 / 71	511 / 330 / 141	440 / 439 / 121	450 / 354 / 251	365 / 442 / 204	484 / 415 / 92	387 / 508 / 74	511 / 304 / 141	456 / 420 / 126	450 / 327 / 251	378 / 423 / 211							
3		387 / 508 / 74	315 / 628 / 60	424 / 460 / 117	338 / 559 / 93	333 / 490 / 186	268 / 599 / 149	403 / 489 / 77	331 / 611 / 63	440 / 441 / 121	354 / 541 / 98	346 / 471 / 193	281 / 581 / 157							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	430 / 381 / 41	344 / 468 / 33	447 / 252 / 83	428 / 375 / 80	395 / 320 / 199	329 / 411 / 166	397 / 408 / 38	324 / 510 / 31	447 / 293 / 83	396 / 402 / 74	379 / 355 / 190	317 / 443 / 155	370 / 436 / 35	298 / 535 / 29	447 / 338 / 83	370 / 431 / 69	357 / 384 / 179	308 / 471 / 144
2		364 / 445 / 35	298 / 555 / 29	435 / 368 / 81	350 / 457 / 65	368 / 372 / 185	297 / 460 / 149	337 / 477 / 32	278 / 598 / 27	402 / 395 / 75	324 / 489 / 60	340 / 398 / 171	283 / 491 / 138	317 / 513 / 30	258 / 634 / 25	376 / 424 / 70	305 / 525 / 57	318 / 427 / 160	278 / 528 / 130	
3		304 / 525 / 29	251 / 659 / 24	337 / 478 / 63	273 / 589 / 51	269 / 508 / 135	214 / 614 / 108	284 / 566 / 27	232 / 699 / 22	311 / 510 / 58	253 / 630 / 47	247 / 538 / 124	209 / 670 / 102	265 / 602 / 25	218 / 752 / 21	292 / 547 / 54	234 / 664 / 44	231 / 573 / 116	201 / 703 / 94	
35		1	474 / 381 / 43	379 / 468 / 35	479 / 244 / 89	472 / 375 / 87	420 / 311 / 221	360 / 411 / 189	438 / 408 / 40	358 / 510 / 33	479 / 285 / 89	436 / 402 / 81	414 / 355 / 218	346 / 443 / 177	409 / 436 / 37	328 / 535 / 30	479 / 328 / 89	408 / 431 / 76	390 / 384 / 205	335 / 471 / 164
		2	401 / 445 / 37	328 / 555 / 30	479 / 368 / 89	386 / 457 / 72	402 / 372 / 212	324 / 460 / 171	372 / 477 / 34	307 / 598 / 28	444 / 395 / 82	358 / 489 / 66	372 / 398 / 196	309 / 491 / 158	350 / 513 / 32	285 / 634 / 26	415 / 424 / 77	336 / 525 / 62	348 / 427 / 183	302 / 528 / 149
		3	336 / 525 / 31	277 / 659 / 26	372 / 478 / 69	301 / 589 / 56	294 / 508 / 155	234 / 614 / 123	314 / 566 / 29	256 / 699 / 24	344 / 510 / 64	279 / 630 / 52	270 / 538 / 142	228 / 670 / 117	292 / 602 / 27	241 / 752 / 22	322 / 547 / 60	258 / 664 / 48	252 / 573 / 133	219 / 703 / 108
40		1	524 / 189 / 100	420 / 468 / 80	511 / 237 / 141	511 / 369 / 141	450 / 306 / 251	391 / 411 / 219	484 / 408 / 92	395 / 510 / 75	511 / 276 / 141	479 / 402 / 132	450 / 355 / 251	374 / 443 / 204	452 / 436 / 86	363 / 535 / 69	511 / 318 / 141	448 / 431 / 124	424 / 384 / 237	361 / 471 / 189
		2	444 / 445 / 84	363 / 555 / 69	511 / 357 / 141	424 / 457 / 117	437 / 372 / 244	352 / 460 / 197	411 / 477 / 78	339 / 598 / 65	487 / 395 / 134	393 / 489 / 108	404 / 398 / 226	334 / 491 / 182	387 / 513 / 74	315 / 634 / 60	456 / 424 / 126	369 / 525 / 102	378 / 427 / 211	327 / 528 / 171
		3	371 / 525 / 71	307 / 659 / 58	409 / 478 / 113	330 / 589 / 91	320 / 508 / 179	255 / 614 / 142	347 / 566 / 66	283 / 699 / 54	377 / 510 / 104	307 / 630 / 85	294 / 538 / 164	248 / 670 / 135	323 / 602 / 62	266 / 752 / 51	354 / 547 / 98	283 / 664 / 78	274 / 573 / 153	236 / 703 / 124
30	1	350 / 469 / 34	288 / 580 / 27	435 / 374 / 81	355 / 463 / 65	335 / 410 / 168	304 / 503 / 135	331 / 499 / 32	277 / 607 / 25	409 / 397 / 76	347 / 493 / 62	318 / 432 / 157	299 / 532 / 127							
	2	298 / 546 / 29	241 / 662 / 23	357 / 457 / 66	290 / 558 / 53	297 / 451 / 149	273 / 560 / 122	278 / 573 / 27	236 / 703 / 22	331 / 478 / 62	286 / 599 / 51	284 / 480 / 141	266 / 587 / 113							
	3	251 / 647 / 24	208 / 799 / 20	273 / 578 / 51	224 / 709 / 41	220 / 618 / 111	199 / 748 / 89	238 / 690 / 23	201 / 839 / 19	260 / 619 / 48	218 / 750 / 39	212 / 660 / 105	195 / 787 / 83							
	35	1	387 / 469 / 36	318 / 580 / 29	479 / 374 / 89	391 / 463 / 72	366 / 410 / 193	329 / 503 / 155	365 / 499 / 34	305 / 607 / 27	451 / 397 / 83	381 / 493 / 68	347 / 432 / 180	323 / 532 / 145						
		2	328 / 546 / 30	266 / 662 / 24	394 / 457 / 73	319 / 558 / 58	324 / 451 / 171	296 / 560 / 139	307 / 573 / 28	259 / 703 / 23	365 / 478 / 68	314 / 599 / 56	311 / 480 / 161	288 / 587 / 130						
		3	277 / 647 / 26	229 / 799 / 21	301 / 578 / 56	247 / 709 / 45	240 / 618 / 126	215 / 748 / 101	263 / 690 / 24	221 / 839 / 20	286 / 619 / 53	239 / 750 / 43	232 / 660 / 120	211 / 787 / 95						
	40	1	428 / 469 / 81	347 / 580 / 66	511 / 363 / 141	427 / 463 / 117	398 / 410 / 222	354 / 503 / 179	403 / 499 / 77	332 / 607 / 62	495 / 397 / 137	415 / 493 / 111	377 / 432 / 208	346 / 532 / 168						
		2	363 / 546 / 69	291 / 662 / 55	432 / 457 / 119	348 / 558 / 96	352 / 451 / 197	318 / 560 / 160	339 / 573 / 65	282 / 703 / 52	401 / 478 / 111	342 / 599 / 91	337 / 480 / 186	309 / 587 / 149						
		3	307 / 647 / 58	251 / 799 / 48	330 / 578 / 91	269 / 709 / 74	261 / 618 / 146	232 / 748 / 117	291 / 690 / 55	241 / 839 / 45	314 / 619 / 87	261 / 750 / 70	251 / 660 / 139	226 / 787 / 110						
30	1	311 / 525 / 30	272 / 644 / 24	383 / 417 / 71	338 / 520 / 58	312 / 459 / 149	300 / 569 / 122	298 / 559 / 29	267 / 678 / 23	363 / 442 / 68	328 / 542 / 54	306 / 482 / 141	293 / 589 / 113							
	2	265 / 610 / 25	237 / 762 / 21	311 / 503 / 58	275 / 622 / 47	278 / 506 / 133	266 / 624 / 108	251 / 644 / 24	230 / 795 / 20	298 / 537 / 56	270 / 655 / 45	276 / 539 / 127	264 / 657 / 102							
	3	225 / 727 / 22	194 / 872 / 17	247 / 658 / 46	218 / 811 / 38	208 / 698 / 100	198 / 849 / 80	212 / 760 / 20	193 / 932 / 17	234 / 692 / 44	212 / 842 / 35	204 / 732 / 94	193 / 877 / 75							
	35	1	343 / 525 / 32	298 / 644 / 26	422 / 417 / 78	370 / 520 / 64	340 / 459 / 171	322 / 569 / 139	328 / 559 / 30	292 / 678 / 24	401 / 442 / 74	358 / 542 / 60	333 / 482 / 161	314 / 589 / 130						
		2	292 / 610 / 27	259 / 762 / 22	344 / 503 / 64	301 / 622 / 52	303 / 506 / 152	286 / 624 / 123	277 / 644 / 26	251 / 795 / 21	329 / 537 / 61	294 / 655 / 49	300 / 539 / 145	283 / 657 / 117						
		3	248 / 727 / 23	212 / 872 / 18	272 / 658 / 51	239 / 811 / 41	227 / 698 / 114	213 / 849 / 92	234 / 760 / 22	211 / 932 / 18	258 / 692 / 48	231 / 842 / 39	222 / 732 / 108	207 / 877 / 86						
	40	1	379 / 525 / 72	324 / 644 / 58	463 / 417 / 128	402 / 520 / 104	368 / 459 / 197	345 / 569 / 160	363 / 559 / 69	316 / 678 / 55	440 / 442 / 121	388 / 542 / 98	359 / 482 / 186	335 / 589 / 149						
		2	323 / 610 / 62	282 / 762 / 51	377 / 503 / 104	327 / 622 / 85	327 / 506 / 175	306 / 624 / 142	307 / 644 / 58	273 / 795 / 48	361 / 537 / 100	319 / 655 / 80	324 / 539 / 168	303 / 657 / 135						
		3	274 / 727 / 52	231 / 872 / 42	299 / 658 / 83	260 / 811 / 67	246 / 698 / 131	228 / 849 / 106	258 / 760 / 49	229 / 932 / 40	283 / 692 / 78	250 / 842 / 63	240 / 732 / 124	221 / 877 / 99						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof

30-60ft

70in x 41in

Exposure Category : B	Enclosed Mono Slope Roof																					
	95						100						105									
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																			
45	1	566 / 120 / 104	566 / 167 / 104	560 / 134 / 152	560 / 214 / 152	472 / 174 / 269	472 / 274 / 269	566 / 120 / 104	566 / 185 / 104	560 / 149 / 152	560 / 237 / 152	472 / 193 / 269	472 / 301 / 269	566 / 127 / 104	557 / 403 / 103	560 / 164 / 152	560 / 260 / 152	472 / 212 / 269	472 / 330 / 269			
	2	566 / 304 / 104	521 / 432 / 96	560 / 207 / 152	560 / 324 / 152	472 / 220 / 269	472 / 342 / 269	566 / 335 / 104	494 / 450 / 91	560 / 229 / 152	560 / 356 / 152	472 / 243 / 269	465 / 371 / 265	566 / 367 / 104	476 / 474 / 88	560 / 251 / 152	560 / 391 / 152	472 / 267 / 269	444 / 388 / 253			
	3	539 / 413 / 100	431 / 506 / 80	560 / 353 / 152	472 / 458 / 128	444 / 394 / 253	359 / 488 / 205	512 / 431 / 95	413 / 532 / 76	560 / 388 / 152	446 / 475 / 121	422 / 412 / 241	338 / 504 / 193	494 / 455 / 91	395 / 556 / 73	533 / 405 / 145	429 / 499 / 117	401 / 428 / 229	324 / 527 / 185			
	50	1	614 / 118 / 111	614 / 165 / 111	597 / 130 / 160	597 / 208 / 160	499 / 172 / 289	499 / 270 / 289	614 / 118 / 111	614 / 182 / 111	597 / 144 / 160	597 / 229 / 160	499 / 190 / 289	499 / 297 / 289	614 / 125 / 111	614 / 201 / 111	597 / 159 / 160	597 / 252 / 160	499 / 209 / 289	499 / 325 / 289		
		2	614 / 299 / 111	574 / 432 / 103	597 / 200 / 160	597 / 314 / 160	499 / 217 / 289	499 / 337 / 289	614 / 329 / 111	544 / 450 / 98	597 / 221 / 160	597 / 345 / 160	499 / 239 / 289	499 / 371 / 289	614 / 361 / 111	525 / 474 / 95	597 / 244 / 160	597 / 378 / 160	499 / 263 / 289	476 / 388 / 276		
		3	594 / 413 / 107	475 / 506 / 86	597 / 342 / 160	520 / 458 / 140	476 / 394 / 276	386 / 488 / 223	564 / 431 / 102	455 / 532 / 82	597 / 376 / 160	492 / 475 / 132	453 / 412 / 263	363 / 504 / 210	544 / 455 / 98	436 / 556 / 79	588 / 405 / 158	472 / 499 / 127	431 / 428 / 250	348 / 527 / 202		
	60	1	669 / 109 / 116	669 / 151 / 116	662 / 121 / 174	662 / 194 / 174	561 / 164 / 324	561 / 257 / 324	669 / 109 / 116	669 / 168 / 116	662 / 135 / 174	662 / 214 / 174	561 / 181 / 324	561 / 283 / 324	669 / 115 / 116	669 / 185 / 116	662 / 149 / 174	662 / 236 / 174	561 / 199 / 324	561 / 311 / 324		
		2	669 / 275 / 116	669 / 425 / 116	662 / 188 / 174	662 / 294 / 174	561 / 207 / 324	561 / 322 / 324	669 / 303 / 116	645 / 450 / 112	662 / 207 / 174	662 / 323 / 174	561 / 228 / 324	561 / 354 / 324	669 / 332 / 116	622 / 474 / 108	662 / 228 / 174	662 / 354 / 174	561 / 251 / 324	561 / 388 / 324		
		3	669 / 392 / 116	563 / 506 / 98	662 / 320 / 174	617 / 458 / 162	561 / 394 / 324	454 / 488 / 263	669 / 431 / 116	540 / 532 / 94	662 / 352 / 174	582 / 475 / 153	535 / 412 / 309	428 / 504 / 247	645 / 455 / 112	516 / 556 / 90	662 / 386 / 174	560 / 499 / 147	508 / 428 / 293	410 / 527 / 237		
45	Wind Speed [mph]																					
	110						115															
	1	566 / 140 / 104	530 / 419 / 98	560 / 181 / 152	560 / 284 / 152	472 / 232 / 269	472 / 361 / 269	566 / 154 / 104	512 / 439 / 95	560 / 198 / 152	560 / 310 / 152	472 / 253 / 269	458 / 380 / 261	ASCE Group Zone								
	45	2	557 / 394 / 103	449 / 488 / 83	560 / 275 / 152	533 / 406 / 145	472 / 291 / 269	429 / 409 / 245	539 / 415 / 100	431 / 508 / 80	560 / 300 / 152	507 / 420 / 138	472 / 317 / 269	408 / 423 / 233	Panal Angle				Mono Slope			
		3	467 / 469 / 86	377 / 577 / 70	507 / 420 / 138	411 / 521 / 112	387 / 450 / 221	310 / 548 / 177	449 / 489 / 83	368 / 611 / 68	490 / 441 / 133	394 / 541 / 107	373 / 471 / 213	303 / 581 / 173	0 - 3				1 = 1' / 1			
		1	614 / 138 / 111	584 / 419 / 105	597 / 175 / 160	597 / 276 / 160	499 / 229 / 289	499 / 355 / 289	614 / 151 / 111	564 / 439 / 102	597 / 191 / 160	597 / 300 / 160	499 / 249 / 289	491 / 380 / 285	3 - 10				2 = 2			
	50	2	614 / 394 / 111	495 / 488 / 89	597 / 266 / 160	588 / 406 / 158	499 / 287 / 289	461 / 409 / 267	594 / 415 / 107	475 / 508 / 86	597 / 290 / 160	559 / 420 / 150	499 / 312 / 289	438 / 423 / 254	10 - 30				3 = 3			
		3	515 / 469 / 93	416 / 577 / 75	559 / 420 / 150	453 / 521 / 122	416 / 450 / 241	333 / 548 / 193	495 / 489 / 89	406 / 611 / 73	540 / 441 / 145	434 / 541 / 116	401 / 471 / 232	325 / 581 / 188	1 = 1				2 = 2' / 2			
		1	669 / 127 / 116	669 / 203 / 116	662 / 164 / 174	662 / 258 / 174	561 / 218 / 324	561 / 339 / 324	669 / 139 / 116	669 / 221 / 116	662 / 179 / 174	662 / 281 / 174	561 / 238 / 324	561 / 369 / 324	3 = 3' / 3				1 = 1			
60	2	669 / 362 / 116	587 / 488 / 102	662 / 249 / 174	662 / 386 / 174	561 / 274 / 324	543 / 409 / 314	669 / 394 / 116	563 / 508 / 98	662 / 272 / 174	662 / 420 / 174	561 / 298 / 324	517 / 423 / 299	2 = 2				3 = 3				
	3	610 / 469 / 106	493 / 577 / 85	662 / 420 / 174	537 / 521 / 141	490 / 450 / 283	392 / 548 / 227	587 / 489 / 102	481 / 611 / 83	639 / 441 / 168	514 / 541 / 135	472 / 471 / 273	383 / 581 / 221	3 = 3								

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	45	1	566 / 183 / 104	467 / 468 / 86	560 / 233 / 152	560 / 364 / 152	472 / 297 / 269	422 / 411 / 241	539 / 408 / 100	440 / 510 / 81	560 / 272 / 152	533 / 402 / 145	472 / 345 / 269	403 / 443 / 225	503 / 436 / 93	404 / 535 / 75	560 / 313 / 152	499 / 431 / 135	458 / 384 / 261	388 / 471 / 209
2		494 / 445 / 91	404 / 555 / 75	560 / 352 / 152	472 / 457 / 128	472 / 372 / 269	380 / 460 / 217	458 / 477 / 85	377 / 598 / 70	542 / 395 / 147	437 / 489 / 119	437 / 398 / 249	360 / 491 / 201	431 / 513 / 80	350 / 634 / 65	507 / 424 / 138	411 / 525 / 112	408 / 427 / 233	351 / 528 / 189	
3		413 / 525 / 76	342 / 659 / 63	455 / 478 / 124	367 / 589 / 100	345 / 508 / 197	275 / 614 / 157	386 / 566 / 71	315 / 699 / 58	420 / 510 / 114	341 / 630 / 93	317 / 538 / 181	267 / 670 / 149	359 / 602 / 67	297 / 752 / 55	394 / 547 / 107	315 / 664 / 86	296 / 573 / 169	254 / 703 / 137	
50		1	614 / 180 / 111	515 / 468 / 93	597 / 226 / 160	597 / 352 / 160	499 / 293 / 289	453 / 411 / 263	594 / 408 / 107	485 / 510 / 87	597 / 264 / 160	588 / 402 / 158	499 / 340 / 289	432 / 443 / 245	554 / 436 / 100	446 / 535 / 80	597 / 303 / 160	549 / 431 / 147	491 / 384 / 285	415 / 471 / 228
		2	544 / 445 / 98	446 / 555 / 80	597 / 341 / 160	520 / 457 / 140	499 / 366 / 289	408 / 460 / 237	505 / 477 / 91	416 / 598 / 75	597 / 395 / 160	482 / 489 / 129	469 / 398 / 271	386 / 491 / 219	475 / 513 / 86	386 / 634 / 70	559 / 424 / 150	453 / 525 / 122	438 / 427 / 254	375 / 528 / 206
		3	455 / 525 / 82	376 / 659 / 68	501 / 478 / 134	405 / 589 / 109	370 / 508 / 215	295 / 614 / 171	426 / 566 / 77	347 / 699 / 63	463 / 510 / 124	376 / 630 / 101	340 / 538 / 197	286 / 670 / 162	396 / 602 / 71	327 / 752 / 59	434 / 547 / 116	347 / 664 / 93	318 / 573 / 184	272 / 703 / 149
60		1	669 / 165 / 116	610 / 468 / 106	662 / 212 / 174	662 / 330 / 174	561 / 280 / 324	535 / 411 / 309	669 / 194 / 116	575 / 510 / 100	662 / 247 / 174	662 / 382 / 174	561 / 325 / 324	499 / 443 / 288	657 / 436 / 114	528 / 535 / 92	662 / 284 / 174	651 / 431 / 171	561 / 373 / 324	469 / 471 / 268
		2	645 / 445 / 112	528 / 555 / 92	662 / 319 / 174	617 / 457 / 162	561 / 350 / 324	481 / 460 / 278	598 / 477 / 104	493 / 598 / 85	662 / 370 / 174	571 / 489 / 150	552 / 398 / 319	446 / 491 / 257	563 / 513 / 98	458 / 634 / 79	662 / 424 / 174	537 / 525 / 141	517 / 427 / 299	424 / 528 / 242
		3	540 / 525 / 94	446 / 659 / 77	594 / 478 / 156	480 / 589 / 126	437 / 508 / 252	348 / 614 / 201	505 / 566 / 88	411 / 699 / 71	548 / 510 / 144	446 / 630 / 117	401 / 538 / 232	330 / 670 / 191	469 / 602 / 81	387 / 752 / 67	514 / 547 / 135	411 / 664 / 108	374 / 573 / 216	307 / 703 / 175
Wind Speed [mph]		170						180												
45	1	476 / 469 / 88	386 / 580 / 71	560 / 357 / 152	472 / 463 / 128	429 / 410 / 245	380 / 503 / 197	449 / 499 / 83	360 / 607 / 67	551 / 397 / 150	449 / 493 / 121	406 / 432 / 229	370 / 532 / 185							
	2	404 / 546 / 75	324 / 662 / 60	481 / 457 / 131	385 / 558 / 105	380 / 451 / 217	341 / 560 / 177	377 / 573 / 70	306 / 703 / 57	446 / 478 / 121	370 / 599 / 100	364 / 480 / 205	330 / 587 / 165							
	3	342 / 647 / 63	279 / 799 / 52	367 / 578 / 100	298 / 709 / 81	282 / 618 / 161	248 / 748 / 129	324 / 690 / 60	261 / 839 / 48	350 / 619 / 95	282 / 750 / 76	271 / 660 / 153	242 / 787 / 121							
	50	1	525 / 469 / 95	426 / 580 / 77	597 / 346 / 160	520 / 463 / 140	461 / 410 / 267	405 / 503 / 215	495 / 499 / 89	396 / 607 / 71	597 / 391 / 160	492 / 493 / 132	436 / 432 / 250	394 / 532 / 202						
		2	446 / 546 / 80	357 / 662 / 64	530 / 457 / 142	424 / 558 / 114	408 / 451 / 237	364 / 560 / 193	416 / 573 / 75	337 / 703 / 61	492 / 478 / 132	405 / 599 / 109	390 / 480 / 223	351 / 587 / 180						
		3	376 / 647 / 68	307 / 799 / 56	405 / 578 / 109	328 / 709 / 88	302 / 618 / 175	265 / 748 / 140	357 / 690 / 64	287 / 839 / 52	386 / 619 / 104	309 / 750 / 83	291 / 660 / 167	257 / 787 / 132						
	60	1	622 / 469 / 108	505 / 580 / 88	662 / 324 / 174	617 / 463 / 162	543 / 410 / 314	456 / 503 / 252	587 / 499 / 102	469 / 607 / 81	662 / 366 / 174	582 / 493 / 153	508 / 432 / 293	441 / 532 / 237						
		2	528 / 546 / 92	423 / 662 / 73	628 / 457 / 165	503 / 558 / 132	481 / 451 / 278	409 / 560 / 227	493 / 573 / 85	399 / 703 / 69	582 / 478 / 153	480 / 599 / 126	454 / 480 / 263	394 / 587 / 211						
		3	446 / 647 / 77	364 / 799 / 63	480 / 578 / 126	388 / 709 / 102	357 / 618 / 206	298 / 748 / 165	423 / 690 / 73	340 / 839 / 59	457 / 619 / 120	366 / 750 / 96	339 / 660 / 196	288 / 787 / 155						
Wind Speed [mph]		190						200												
45	1	422 / 525 / 78	351 / 644 / 63	516 / 417 / 140	434 / 520 / 114	396 / 459 / 217	368 / 569 / 177	404 / 559 / 75	341 / 678 / 60	490 / 442 / 133	418 / 542 / 107	385 / 482 / 205	356 / 589 / 165							
	2	359 / 610 / 67	305 / 762 / 55	420 / 503 / 114	353 / 622 / 93	352 / 506 / 193	326 / 624 / 157	342 / 644 / 63	294 / 795 / 52	402 / 537 / 109	344 / 655 / 88	348 / 539 / 185	322 / 657 / 149							
	3	306 / 727 / 57	249 / 872 / 45	333 / 658 / 90	281 / 811 / 74	264 / 698 / 145	243 / 849 / 117	288 / 760 / 53	247 / 932 / 43	315 / 692 / 86	270 / 842 / 69	257 / 732 / 137	235 / 877 / 109							
	50	1	465 / 525 / 84	377 / 644 / 68	569 / 417 / 153	466 / 520 / 124	424 / 459 / 237	391 / 569 / 193	446 / 559 / 80	366 / 678 / 64	540 / 442 / 145	448 / 542 / 116	412 / 482 / 223	378 / 589 / 180						
		2	396 / 610 / 71	327 / 762 / 59	463 / 503 / 124	379 / 622 / 101	377 / 506 / 210	346 / 624 / 171	376 / 644 / 68	315 / 795 / 56	443 / 537 / 119	369 / 655 / 96	371 / 539 / 202	341 / 657 / 162						
		3	337 / 727 / 61	268 / 872 / 48	366 / 658 / 98	301 / 811 / 80	283 / 698 / 158	258 / 849 / 127	317 / 760 / 57	264 / 932 / 47	347 / 692 / 93	289 / 842 / 75	275 / 732 / 149	249 / 877 / 119						
	60	1	551 / 525 / 96	446 / 644 / 77	662 / 410 / 174	548 / 520 / 144	481 / 459 / 278	436 / 569 / 227	528 / 559 / 92	423 / 678 / 73	639 / 442 / 168	514 / 542 / 135	465 / 482 / 263	420 / 589 / 211						
		2	469 / 610 / 81	387 / 762 / 67	548 / 503 / 144	446 / 622 / 117	428 / 506 / 247	387 / 624 / 201	446 / 644 / 77	364 / 795 / 63	525 / 537 / 138	423 / 655 / 111	419 / 539 / 237	379 / 657 / 191						
		3	399 / 727 / 69	317 / 872 / 55	434 / 658 / 114	354 / 811 / 93	321 / 698 / 185	288 / 849 / 150	376 / 760 / 65	305 / 932 / 53	411 / 692 / 108	331 / 842 / 87	310 / 732 / 175	277 / 877 / 139						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	70	1	719 / 101 / 121	719 / 141 / 121	713 / 113 / 185	713 / 181 / 185	627 / 159 / 362	627 / 249 / 362	719 / 101 / 121	719 / 156 / 121	713 / 126 / 185	713 / 200 / 185	627 / 175 / 362	627 / 274 / 362	719 / 107 / 121	719 / 172 / 121	713 / 139 / 185	713 / 219 / 185	627 / 193 / 362	627 / 301 / 362
2		719 / 256 / 121	719 / 395 / 121	713 / 175 / 185	713 / 273 / 185	627 / 200 / 362	627 / 312 / 362	719 / 282 / 121	719 / 434 / 121	713 / 193 / 185	713 / 301 / 185	627 / 221 / 362	627 / 343 / 362	719 / 309 / 121	719 / 474 / 121	713 / 212 / 185	713 / 330 / 185	627 / 243 / 362	627 / 375 / 362	
3		719 / 365 / 121	651 / 506 / 110	713 / 298 / 185	713 / 458 / 185	627 / 382 / 362	525 / 488 / 303	719 / 401 / 121	624 / 532 / 105	713 / 328 / 185	673 / 475 / 174	617 / 412 / 357	494 / 504 / 285	719 / 438 / 121	597 / 556 / 100	713 / 359 / 185	647 / 499 / 168	586 / 428 / 339	473 / 527 / 273	
80		1	770 / 95 / 127	770 / 133 / 127	764 / 107 / 196	764 / 171 / 196	677 / 151 / 391	677 / 237 / 391	770 / 95 / 127	770 / 147 / 127	764 / 119 / 196	764 / 189 / 196	677 / 167 / 391	677 / 261 / 391	770 / 101 / 127	770 / 162 / 127	764 / 131 / 196	764 / 207 / 196	677 / 184 / 391	677 / 286 / 391
		2	770 / 241 / 127	770 / 373 / 127	764 / 165 / 196	764 / 258 / 196	677 / 191 / 391	677 / 297 / 391	770 / 266 / 127	770 / 409 / 127	764 / 182 / 196	764 / 284 / 196	677 / 210 / 391	677 / 326 / 391	770 / 291 / 127	770 / 448 / 127	764 / 200 / 196	764 / 311 / 196	677 / 231 / 391	677 / 357 / 391
		3	770 / 344 / 127	739 / 506 / 121	764 / 281 / 196	764 / 433 / 196	677 / 363 / 391	595 / 488 / 344	770 / 378 / 127	708 / 532 / 116	764 / 310 / 196	764 / 475 / 196	677 / 399 / 391	560 / 504 / 324	770 / 414 / 127	678 / 556 / 111	764 / 339 / 196	734 / 499 / 188	665 / 428 / 384	537 / 527 / 310
90		1	810 / 90 / 131	810 / 125 / 131	805 / 100 / 204	805 / 161 / 204	717 / 143 / 414	717 / 225 / 414	810 / 90 / 131	810 / 138 / 131	805 / 112 / 204	805 / 178 / 204	717 / 158 / 414	717 / 247 / 414	810 / 95 / 131	810 / 152 / 131	805 / 123 / 204	805 / 195 / 204	717 / 174 / 414	717 / 271 / 414
		2	810 / 227 / 131	810 / 350 / 131	805 / 155 / 204	805 / 243 / 204	717 / 181 / 414	717 / 281 / 414	810 / 250 / 131	810 / 385 / 131	805 / 172 / 204	805 / 267 / 204	717 / 199 / 414	717 / 309 / 414	810 / 274 / 131	810 / 421 / 131	805 / 189 / 204	805 / 293 / 204	717 / 219 / 414	717 / 339 / 414
		3	810 / 324 / 131	810 / 495 / 131	805 / 265 / 204	805 / 408 / 204	717 / 344 / 414	665 / 488 / 384	810 / 356 / 131	793 / 532 / 128	805 / 291 / 204	805 / 447 / 204	717 / 378 / 414	626 / 504 / 362	810 / 389 / 131	758 / 556 / 122	805 / 319 / 204	805 / 489 / 204	717 / 413 / 414	600 / 527 / 347
Wind Speed [mph]		110						115												
70	1	719 / 118 / 121	719 / 188 / 121	713 / 152 / 185	713 / 240 / 185	627 / 211 / 362	627 / 328 / 362	719 / 130 / 121	719 / 206 / 121	713 / 167 / 185	713 / 262 / 185	627 / 230 / 362	627 / 357 / 362							
	2	719 / 337 / 121	678 / 488 / 114	713 / 232 / 185	713 / 360 / 185	627 / 265 / 362	627 / 409 / 362	719 / 366 / 121	651 / 508 / 110	713 / 253 / 185	713 / 391 / 185	627 / 289 / 362	597 / 423 / 345							
	3	705 / 469 / 119	570 / 577 / 96	713 / 391 / 185	621 / 521 / 161	566 / 450 / 327	453 / 548 / 262	678 / 489 / 114	556 / 611 / 94	713 / 425 / 185	594 / 541 / 154	545 / 471 / 315	442 / 581 / 256							
	80	1	770 / 111 / 127	770 / 178 / 127	764 / 144 / 196	764 / 227 / 196	677 / 201 / 391	677 / 312 / 391	770 / 122 / 127	770 / 194 / 127	764 / 158 / 196	764 / 247 / 196	677 / 219 / 391	677 / 339 / 391						
		2	770 / 318 / 127	770 / 488 / 127	764 / 219 / 196	764 / 340 / 196	677 / 252 / 391	677 / 389 / 391	770 / 346 / 127	739 / 508 / 121	764 / 239 / 196	764 / 369 / 196	677 / 275 / 391	677 / 423 / 391						
		3	770 / 451 / 127	647 / 577 / 106	764 / 370 / 196	704 / 521 / 180	642 / 450 / 371	513 / 548 / 297	770 / 489 / 127	631 / 611 / 104	764 / 402 / 196	674 / 541 / 173	618 / 471 / 357	502 / 581 / 290						
	90	1	810 / 105 / 131	810 / 167 / 131	805 / 136 / 204	805 / 213 / 204	717 / 191 / 414	717 / 296 / 414	810 / 115 / 131	810 / 182 / 131	805 / 148 / 204	805 / 233 / 204	717 / 208 / 414	717 / 322 / 414						
		2	810 / 299 / 131	810 / 458 / 131	805 / 206 / 204	805 / 320 / 204	717 / 239 / 414	717 / 369 / 414	810 / 325 / 131	810 / 497 / 131	805 / 225 / 204	805 / 347 / 204	717 / 260 / 414	717 / 401 / 414						
		3	810 / 424 / 131	724 / 577 / 117	805 / 348 / 204	788 / 521 / 200	717 / 450 / 414	574 / 548 / 332	810 / 460 / 131	707 / 611 / 114	805 / 378 / 204	755 / 541 / 192	691 / 471 / 399	561 / 581 / 324						
Wind Speed [mph]		120						130												
70	1	719 / 141 / 121	719 / 224 / 121	713 / 182 / 185	713 / 284 / 185	627 / 250 / 362	627 / 387 / 362	719 / 130 / 121	719 / 206 / 121	713 / 167 / 185	713 / 262 / 185	627 / 230 / 362	627 / 357 / 362							
	2	719 / 397 / 121	624 / 527 / 105	713 / 275 / 185	713 / 423 / 185	627 / 313 / 362	576 / 442 / 333	719 / 366 / 121	651 / 508 / 110	713 / 253 / 185	713 / 391 / 185	627 / 289 / 362	597 / 423 / 345							
	3	651 / 508 / 110	529 / 628 / 89	713 / 460 / 185	568 / 559 / 147	525 / 490 / 303	422 / 599 / 244	678 / 489 / 114	556 / 611 / 94	713 / 425 / 185	594 / 541 / 154	545 / 471 / 315	442 / 581 / 256							
	80	1	770 / 134 / 127	770 / 211 / 127	764 / 172 / 196	764 / 268 / 196	677 / 238 / 391	677 / 368 / 391	770 / 122 / 127	770 / 194 / 127	764 / 158 / 196	764 / 247 / 196	677 / 219 / 391	677 / 339 / 391						
		2	770 / 374 / 127	708 / 527 / 116	764 / 259 / 196	764 / 400 / 196	677 / 298 / 391	653 / 442 / 377	770 / 346 / 127	739 / 508 / 121	764 / 239 / 196	764 / 369 / 196	677 / 275 / 391	677 / 423 / 391						
		3	739 / 508 / 121	601 / 628 / 99	764 / 435 / 196	644 / 559 / 165	595 / 490 / 344	478 / 599 / 276	770 / 489 / 127	631 / 611 / 104	764 / 402 / 196	674 / 541 / 173	618 / 471 / 357	502 / 581 / 290						
	90	1	810 / 126 / 131	810 / 198 / 131	805 / 162 / 204	805 / 252 / 204	717 / 226 / 414	717 / 349 / 414	810 / 115 / 131	810 / 182 / 131	805 / 148 / 204	805 / 233 / 204	717 / 208 / 414	717 / 322 / 414						
		2	810 / 352 / 131	793 / 527 / 128	805 / 244 / 204	805 / 376 / 204	717 / 282 / 414	717 / 434 / 414	810 / 325 / 131	810 / 497 / 131	805 / 225 / 204	805 / 347 / 204	717 / 260 / 414	717 / 401 / 414						
		3	810 / 498 / 131	672 / 628 / 108	805 / 409 / 204	721 / 559 / 183	665 / 490 / 384	535 / 599 / 309	810 / 460 / 131	707 / 611 / 114	805 / 378 / 204	755 / 541 / 192	691 / 471 / 399	561 / 581 / 324						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	70	1	719 / 154 / 121	705 / 468 / 119	713 / 197 / 185	713 / 307 / 185	627 / 271 / 362	617 / 411 / 357	719 / 180 / 121	665 / 510 / 112	713 / 230 / 185	713 / 356 / 185	627 / 314 / 362	576 / 443 / 333	719 / 208 / 121	610 / 535 / 103	713 / 264 / 185	713 / 408 / 185	627 / 361 / 362	535 / 471 / 309															
2		719 / 428 / 121	610 / 555 / 103	713 / 297 / 185	713 / 457 / 185	627 / 339 / 362	556 / 460 / 321	692 / 477 / 116	570 / 598 / 96	713 / 344 / 185	660 / 489 / 171	627 / 392 / 362	514 / 491 / 297	651 / 513 / 110	529 / 634 / 89	713 / 395 / 185	621 / 525 / 161	597 / 427 / 345	484 / 528 / 279																
3		624 / 525 / 105	516 / 659 / 87	687 / 478 / 178	555 / 589 / 144	504 / 508 / 291	401 / 614 / 232	583 / 566 / 98	475 / 699 / 80	634 / 510 / 164	515 / 630 / 134	463 / 538 / 268	381 / 670 / 220	543 / 602 / 91	448 / 752 / 75	594 / 547 / 154	475 / 664 / 123	432 / 573 / 250	350 / 703 / 202																
80		1	770 / 145 / 127	770 / 228 / 127	764 / 186 / 196	764 / 290 / 196	677 / 258 / 391	677 / 397 / 391	770 / 170 / 127	755 / 510 / 124	764 / 217 / 196	764 / 336 / 196	677 / 299 / 391	653 / 443 / 377	770 / 196 / 127	693 / 535 / 114	764 / 250 / 196	764 / 385 / 196	677 / 343 / 391	607 / 471 / 350															
		2	770 / 404 / 127	693 / 555 / 114	764 / 281 / 196	764 / 431 / 196	677 / 322 / 391	630 / 460 / 364	770 / 467 / 127	647 / 598 / 106	764 / 325 / 196	749 / 489 / 192	677 / 373 / 391	583 / 491 / 337	739 / 513 / 121	601 / 634 / 99	764 / 373 / 196	704 / 525 / 180	677 / 427 / 391	548 / 528 / 317															
		3	708 / 525 / 116	585 / 659 / 96	764 / 469 / 196	629 / 589 / 161	572 / 508 / 330	455 / 614 / 263	662 / 566 / 109	539 / 699 / 89	719 / 510 / 184	585 / 630 / 150	525 / 538 / 303	432 / 670 / 250	616 / 602 / 101	508 / 752 / 84	674 / 547 / 173	540 / 664 / 138	490 / 573 / 283	397 / 703 / 229															
90		1	810 / 137 / 131	810 / 215 / 131	805 / 175 / 204	805 / 273 / 204	717 / 244 / 414	717 / 377 / 414	810 / 160 / 131	810 / 250 / 131	805 / 204 / 204	805 / 316 / 204	717 / 283 / 414	717 / 435 / 414	810 / 184 / 131	775 / 535 / 125	805 / 235 / 204	805 / 363 / 204	717 / 325 / 414	678 / 471 / 392															
		2	810 / 380 / 131	775 / 555 / 125	805 / 264 / 204	805 / 406 / 204	717 / 305 / 414	704 / 460 / 407	810 / 439 / 131	724 / 598 / 117	805 / 306 / 204	805 / 469 / 204	717 / 354 / 414	652 / 491 / 377	810 / 502 / 131	672 / 634 / 108	805 / 351 / 204	788 / 525 / 200	717 / 405 / 414	613 / 528 / 354															
		3	793 / 525 / 128	655 / 659 / 106	805 / 442 / 204	704 / 589 / 179	639 / 508 / 369	509 / 614 / 294	741 / 566 / 120	603 / 699 / 97	805 / 510 / 204	654 / 630 / 166	587 / 538 / 339	483 / 670 / 279	689 / 602 / 111	569 / 752 / 92	755 / 547 / 192	604 / 664 / 153	548 / 573 / 317	444 / 703 / 256															
Wind Speed [mph]		170						180																											
70	1	719 / 238 / 121	583 / 580 / 98	713 / 301 / 185	713 / 463 / 185	627 / 410 / 362	506 / 503 / 291	678 / 499 / 114	543 / 607 / 91	713 / 341 / 185	673 / 493 / 174	586 / 432 / 339	489 / 532 / 273	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	610 / 546 / 103	488 / 662 / 82	713 / 449 / 185	581 / 558 / 151	556 / 451 / 321	455 / 560 / 262	570 / 573 / 96	461 / 703 / 78	673 / 478 / 174	555 / 599 / 144	525 / 480 / 303	436 / 587 / 244																							
3	516 / 647 / 87	421 / 799 / 71	555 / 578 / 144	449 / 709 / 116	412 / 618 / 238	331 / 748 / 190	488 / 690 / 82	394 / 839 / 66	528 / 619 / 137	423 / 750 / 110	391 / 660 / 226	319 / 787 / 179																							
80	1	770 / 224 / 127	662 / 580 / 109	764 / 285 / 196	764 / 438 / 196	677 / 390 / 391	572 / 503 / 330	770 / 254 / 127	616 / 607 / 101	764 / 322 / 196	764 / 493 / 196	665 / 432 / 384	537 / 532 / 310																						
	2	693 / 546 / 114	554 / 662 / 91	764 / 424 / 196	659 / 558 / 169	630 / 451 / 364	513 / 560 / 297	647 / 573 / 106	524 / 703 / 86	764 / 478 / 196	629 / 599 / 161	595 / 480 / 344	478 / 587 / 276																						
	3	585 / 647 / 96	478 / 799 / 79	629 / 578 / 161	510 / 709 / 131	467 / 618 / 270	374 / 748 / 216	554 / 690 / 91	447 / 839 / 74	599 / 619 / 154	480 / 750 / 123	443 / 660 / 256	350 / 787 / 202																						
90	1	810 / 211 / 131	741 / 580 / 120	805 / 268 / 204	805 / 412 / 204	717 / 370 / 414	639 / 503 / 369	810 / 239 / 131	689 / 607 / 111	805 / 303 / 204	805 / 464 / 204	717 / 417 / 414	600 / 532 / 347																						
	2	775 / 546 / 125	620 / 662 / 100	805 / 399 / 204	738 / 558 / 187	704 / 451 / 407	574 / 560 / 332	724 / 573 / 117	586 / 703 / 95	805 / 450 / 204	704 / 599 / 179	665 / 480 / 384	535 / 587 / 309																						
	3	655 / 647 / 106	534 / 799 / 86	704 / 578 / 179	570 / 709 / 145	522 / 618 / 302	418 / 748 / 241	620 / 690 / 100	500 / 839 / 81	671 / 619 / 170	537 / 750 / 136	496 / 660 / 286	392 / 787 / 226																						
Wind Speed [mph]		190						200																											
70	1	638 / 525 / 107	516 / 644 / 87	713 / 382 / 185	634 / 520 / 164	556 / 459 / 321	482 / 569 / 262	610 / 559 / 103	488 / 678 / 82	713 / 426 / 185	594 / 542 / 154	525 / 482 / 303	462 / 589 / 244																						
	2	543 / 610 / 91	448 / 762 / 75	634 / 503 / 164	515 / 622 / 134	494 / 506 / 285	427 / 624 / 232	516 / 644 / 87	421 / 795 / 71	607 / 537 / 157	489 / 655 / 127	473 / 539 / 273	417 / 657 / 220																						
	3	461 / 727 / 78	366 / 872 / 62	502 / 658 / 130	409 / 811 / 106	371 / 698 / 214	318 / 849 / 173	434 / 760 / 73	353 / 932 / 60	475 / 692 / 123	383 / 842 / 99	350 / 732 / 202	305 / 877 / 161																						
	80	1	724 / 525 / 119	585 / 644 / 96	764 / 361 / 196	719 / 520 / 184	630 / 459 / 364	527 / 569 / 297	693 / 559 / 114	554 / 678 / 91	764 / 402 / 196	674 / 542 / 173	595 / 482 / 344	505 / 589 / 276																					
		2	616 / 610 / 101	508 / 762 / 84	719 / 503 / 184	585 / 622 / 150	560 / 506 / 324	467 / 624 / 263	585 / 644 / 96	478 / 795 / 79	689 / 537 / 177	555 / 655 / 142	537 / 539 / 310	456 / 657 / 250																					
		3	524 / 727 / 86	416 / 872 / 69	570 / 658 / 146	465 / 811 / 119	420 / 698 / 243	348 / 849 / 196	493 / 760 / 81	401 / 932 / 66	540 / 692 / 138	435 / 842 / 112	397 / 732 / 229	333 / 877 / 182																					
	90	1	810 / 268 / 131	655 / 644 / 106	805 / 340 / 204	805 / 520 / 204	704 / 459 / 407	574 / 569 / 332	775 / 559 / 125	620 / 678 / 100	805 / 379 / 204	755 / 542 / 192	665 / 482 / 384	547 / 589 / 309																					
		2	689 / 610 / 111	569 / 762 / 92	805 / 503 / 204	654 / 622 / 166	626 / 506 / 362	509 / 624 / 294	655 / 644 / 106	534 / 795 / 86	771 / 537 / 196	621 / 655 / 158	600 / 539 / 347	494 / 657 / 279																					
		3	586 / 727 / 95	465 / 872 / 75	637 / 658 / 162	520 / 811 / 132	470 / 698 / 271	379 / 849 / 219	552 / 760 / 89	448 / 932 / 72	604 / 692 / 153	486 / 842 / 124	444 / 732 / 256	360 / 877 / 204																					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 70in x 41in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]	95						100						105					
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																
100	1	858 / 86 / 136	858 / 120 / 136	853 / 96 / 215	853 / 154 / 215	750 / 135 / 433	750 / 212 / 433	858 / 86 / 136	858 / 133 / 136	853 / 107 / 215	853 / 170 / 215	750 / 150 / 433	750 / 234 / 433	858 / 91 / 136	858 / 146 / 136	853 / 118 / 215	853 / 187 / 215	750 / 165 / 433	750 / 256 / 433
	2	858 / 217 / 136	858 / 336 / 136	853 / 149 / 215	853 / 233 / 215	750 / 171 / 433	750 / 266 / 433	858 / 239 / 136	858 / 369 / 136	853 / 164 / 215	853 / 256 / 215	750 / 189 / 433	750 / 292 / 433	858 / 262 / 136	858 / 403 / 136	853 / 181 / 215	853 / 281 / 215	750 / 207 / 433	750 / 320 / 433
	3	858 / 310 / 136	858 / 474 / 136	853 / 254 / 215	853 / 391 / 215	750 / 325 / 433	736 / 488 / 425	858 / 340 / 136	858 / 520 / 136	853 / 279 / 215	853 / 429 / 215	750 / 357 / 433	692 / 504 / 400	858 / 372 / 136	839 / 556 / 133	853 / 306 / 215	853 / 468 / 215	750 / 391 / 433	663 / 527 / 383
100	1	858 / 100 / 136	858 / 160 / 136	853 / 130 / 215	853 / 205 / 215	750 / 180 / 433	750 / 280 / 433	858 / 110 / 136	858 / 175 / 136	853 / 142 / 215	853 / 223 / 215	750 / 197 / 433	750 / 304 / 433						
	2	858 / 286 / 136	858 / 439 / 136	853 / 198 / 215	853 / 306 / 215	750 / 226 / 433	750 / 349 / 433	858 / 311 / 136	858 / 476 / 136	853 / 216 / 215	853 / 333 / 215	750 / 246 / 433	750 / 379 / 433						
	3	858 / 406 / 136	801 / 577 / 127	853 / 334 / 215	853 / 510 / 215	750 / 426 / 433	635 / 548 / 367	858 / 440 / 136	782 / 611 / 124	853 / 362 / 215	835 / 541 / 210	750 / 462 / 433	620 / 581 / 358						
100	1	858 / 120 / 136	858 / 190 / 136	853 / 155 / 215	853 / 242 / 215	750 / 213 / 433	750 / 330 / 433	858 / 110 / 136	858 / 175 / 136	853 / 142 / 215	853 / 223 / 215	750 / 197 / 433	750 / 304 / 433						
	2	858 / 337 / 136	858 / 515 / 136	853 / 234 / 215	853 / 361 / 215	750 / 267 / 433	750 / 410 / 433	858 / 311 / 136	858 / 476 / 136	853 / 216 / 215	853 / 333 / 215	750 / 246 / 433	750 / 379 / 433						
	3	858 / 476 / 136	744 / 628 / 118	853 / 392 / 215	798 / 559 / 201	736 / 490 / 425	591 / 599 / 342	858 / 440 / 136	782 / 611 / 124	853 / 362 / 215	835 / 541 / 210	750 / 462 / 433	620 / 581 / 358						

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	0	1	218 / 339 / 38	178 / 428 / 31	254 / 244 / 51	220 / 333 / 45	232 / 282 / 62	199 / 375 / 54	212 / 363 / 37	169 / 446 / 30	248 / 264 / 50	214 / 357 / 43	226 / 303 / 61	187 / 388 / 50	203 / 381 / 36	163 / 470 / 29	239 / 280 / 48	205 / 375 / 42	217 / 319 / 58	181 / 411 / 49
2		187 / 404 / 33	151 / 497 / 27	223 / 327 / 45	184 / 416 / 37	214 / 326 / 58	178 / 419 / 48	178 / 422 / 31	144 / 523 / 26	214 / 345 / 43	174 / 434 / 35	208 / 349 / 56	169 / 437 / 46	172 / 446 / 30	138 / 547 / 24	208 / 368 / 42	165 / 450 / 34	199 / 366 / 54	161 / 453 / 43	
3		157 / 478 / 28	126 / 586 / 22	174 / 430 / 35	141 / 530 / 29	161 / 460 / 43	131 / 570 / 35	151 / 504 / 27	123 / 626 / 22	168 / 456 / 34	135 / 556 / 27	152 / 476 / 41	125 / 596 / 34	144 / 528 / 26	117 / 649 / 21	159 / 471 / 32	129 / 580 / 26	146 / 500 / 39	119 / 620 / 32	
5		1	241 / 339 / 38	197 / 428 / 31	275 / 242 / 54	242 / 333 / 47	232 / 282 / 77	199 / 375 / 66	234 / 363 / 37	187 / 446 / 30	272 / 264 / 53	235 / 357 / 46	226 / 303 / 75	187 / 388 / 63	224 / 381 / 36	180 / 470 / 29	262 / 280 / 51	225 / 375 / 44	217 / 319 / 72	181 / 411 / 61
		2	207 / 404 / 33	166 / 497 / 27	245 / 327 / 48	202 / 416 / 39	214 / 326 / 71	178 / 419 / 60	197 / 422 / 31	160 / 523 / 26	235 / 345 / 46	192 / 434 / 37	208 / 349 / 69	169 / 437 / 57	190 / 446 / 30	153 / 547 / 24	228 / 368 / 45	182 / 450 / 35	199 / 366 / 66	161 / 453 / 54
		3	173 / 478 / 28	139 / 586 / 22	192 / 430 / 37	155 / 530 / 30	161 / 460 / 54	131 / 570 / 44	166 / 504 / 27	136 / 626 / 22	185 / 456 / 36	148 / 556 / 29	152 / 476 / 51	125 / 596 / 42	160 / 528 / 26	129 / 649 / 21	175 / 471 / 34	141 / 580 / 28	146 / 500 / 49	119 / 620 / 40
10		1	306 / 339 / 38	250 / 428 / 31	327 / 227 / 62	305 / 333 / 58	267 / 282 / 101	229 / 375 / 86	297 / 363 / 37	237 / 446 / 30	327 / 251 / 62	297 / 357 / 57	260 / 303 / 98	216 / 388 / 81	284 / 381 / 36	228 / 470 / 29	327 / 276 / 62	284 / 375 / 54	250 / 319 / 94	209 / 411 / 79
		2	263 / 404 / 33	211 / 497 / 27	310 / 327 / 59	255 / 416 / 49	246 / 326 / 93	205 / 419 / 77	250 / 422 / 31	202 / 523 / 26	297 / 345 / 57	242 / 434 / 46	240 / 349 / 90	195 / 437 / 74	241 / 446 / 30	194 / 547 / 24	289 / 368 / 55	229 / 450 / 44	229 / 366 / 86	185 / 453 / 70
		3	220 / 478 / 28	177 / 586 / 22	242 / 430 / 46	195 / 530 / 37	185 / 460 / 70	151 / 570 / 57	211 / 504 / 27	172 / 626 / 22	233 / 456 / 45	187 / 556 / 36	175 / 476 / 66	144 / 596 / 54	202 / 528 / 26	164 / 649 / 21	221 / 471 / 42	178 / 580 / 34	168 / 500 / 63	137 / 620 / 52
Wind Speed [mph]		110						115												
0	1	193 / 397 / 34	157 / 493 / 28	232 / 299 / 47	196 / 391 / 40	211 / 339 / 57	175 / 426 / 46	184 / 411 / 32	147 / 503 / 26	226 / 317 / 46	187 / 405 / 38	205 / 358 / 55	180 / 447 / 45							
	2	163 / 460 / 29	132 / 569 / 23	199 / 384 / 40	159 / 472 / 32	190 / 381 / 51	157 / 475 / 42	157 / 480 / 28	126 / 588 / 22	190 / 398 / 39	153 / 493 / 31	184 / 402 / 50	160 / 495 / 40							
	3	138 / 551 / 24	111 / 668 / 20	153 / 493 / 31	123 / 601 / 25	140 / 522 / 38	115 / 640 / 31	132 / 571 / 23	108 / 704 / 19	147 / 514 / 30	120 / 635 / 24	134 / 542 / 36	119 / 675 / 30							
	5	1	214 / 397 / 34	173 / 493 / 28	255 / 299 / 50	215 / 391 / 42	211 / 339 / 70	175 / 426 / 58	204 / 411 / 32	163 / 503 / 26	249 / 317 / 48	205 / 405 / 40	205 / 358 / 68	180 / 447 / 56						
		2	180 / 460 / 29	146 / 569 / 23	218 / 384 / 43	175 / 472 / 34	190 / 381 / 63	157 / 475 / 52	173 / 480 / 28	139 / 588 / 22	208 / 398 / 41	168 / 493 / 33	184 / 402 / 62	160 / 495 / 50						
		3	153 / 551 / 24	122 / 668 / 20	168 / 493 / 33	135 / 601 / 26	140 / 522 / 47	115 / 640 / 38	146 / 571 / 23	119 / 704 / 19	161 / 514 / 32	131 / 635 / 26	134 / 542 / 45	119 / 675 / 37						
	10	1	271 / 397 / 34	220 / 493 / 28	322 / 299 / 62	272 / 391 / 52	243 / 339 / 92	200 / 426 / 75	258 / 411 / 32	207 / 503 / 26	314 / 317 / 60	259 / 405 / 50	236 / 358 / 89	202 / 447 / 72						
		2	228 / 460 / 29	185 / 569 / 23	276 / 384 / 53	221 / 472 / 42	219 / 381 / 83	180 / 475 / 67	220 / 480 / 28	177 / 588 / 22	263 / 398 / 50	212 / 493 / 41	212 / 402 / 80	180 / 495 / 65						
		3	194 / 551 / 24	155 / 668 / 20	212 / 493 / 41	170 / 601 / 33	161 / 522 / 61	131 / 640 / 49	185 / 571 / 23	151 / 704 / 19	204 / 514 / 39	166 / 635 / 32	154 / 542 / 58	133 / 675 / 48						
Wind Speed [mph]		120						130												
0	1	178 / 430 / 31	144 / 533 / 26	220 / 335 / 45	181 / 424 / 37	196 / 371 / 53	184 / 466 / 43	184 / 411 / 32	147 / 503 / 26	226 / 317 / 46	187 / 405 / 38	205 / 358 / 55	180 / 447 / 45							
	2	151 / 499 / 27	123 / 620 / 22	184 / 418 / 37	147 / 511 / 30	175 / 414 / 47	164 / 514 / 39	157 / 480 / 28	126 / 588 / 22	190 / 398 / 39	153 / 493 / 31	184 / 402 / 50	160 / 495 / 40							
	3	126 / 588 / 22	105 / 739 / 19	141 / 533 / 29	113 / 651 / 23	128 / 560 / 35	120 / 690 / 28	132 / 571 / 23	108 / 704 / 19	147 / 514 / 30	120 / 635 / 24	134 / 542 / 36	119 / 675 / 30							
	5	1	197 / 430 / 31	160 / 533 / 26	242 / 335 / 47	198 / 424 / 39	196 / 371 / 65	184 / 466 / 54	204 / 411 / 32	163 / 503 / 26	249 / 317 / 48	205 / 405 / 40	205 / 358 / 68	180 / 447 / 56						
		2	166 / 499 / 27	136 / 620 / 22	202 / 418 / 39	161 / 511 / 32	175 / 414 / 59	164 / 514 / 48	173 / 480 / 28	139 / 588 / 22	208 / 398 / 41	168 / 493 / 33	184 / 402 / 62	160 / 495 / 50						
		3	139 / 588 / 22	116 / 739 / 19	155 / 533 / 30	125 / 651 / 24	128 / 560 / 43	120 / 690 / 35	146 / 571 / 23	119 / 704 / 19	161 / 514 / 32	131 / 635 / 26	134 / 542 / 45	119 / 675 / 37						
	10	1	250 / 430 / 31	202 / 533 / 26	305 / 335 / 58	250 / 424 / 48	226 / 371 / 85	203 / 466 / 70	258 / 411 / 32	207 / 503 / 26	314 / 317 / 60	259 / 405 / 50	236 / 358 / 89	202 / 447 / 72						
		2	211 / 499 / 27	172 / 620 / 22	255 / 418 / 49	204 / 511 / 39	202 / 414 / 76	180 / 514 / 62	220 / 480 / 28	177 / 588 / 22	263 / 398 / 50	212 / 493 / 41	212 / 402 / 80	180 / 495 / 65						
		3	177 / 588 / 22	147 / 739 / 19	195 / 533 / 37	157 / 651 / 30	147 / 560 / 56	131 / 690 / 45	185 / 571 / 23	151 / 704 / 19	204 / 514 / 39	166 / 635 / 32	154 / 542 / 58	133 / 675 / 48						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
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3 - 10	1 = 1
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	3 = 3' / 3
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	3 = 3

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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	0	1	172 / 449 / 30	138 / 550 / 24	214 / 353 / 43	171 / 435 / 35	190 / 389 / 51	185 / 475 / 41	160 / 481 / 28	139 / 592 / 23	199 / 380 / 40	171 / 467 / 32	175 / 415 / 47	195 / 516 / 39	147 / 509 / 26	143 / 628 / 21	187 / 409 / 38	179 / 504 / 31	178 / 443 / 44	204 / 552 / 36
2		144 / 517 / 26	117 / 635 / 21	174 / 429 / 35	141 / 529 / 29	169 / 432 / 46	167 / 531 / 37	135 / 558 / 24	119 / 692 / 20	162 / 461 / 33	142 / 570 / 27	158 / 464 / 43	175 / 572 / 35	126 / 594 / 22	121 / 724 / 18	153 / 498 / 31	146 / 606 / 25	162 / 500 / 40	181 / 608 / 32	
3		123 / 618 / 22	98 / 749 / 18	135 / 549 / 27	110 / 682 / 23	125 / 589 / 34	123 / 722 / 27	114 / 659 / 20	99 / 808 / 16	126 / 590 / 26	109 / 720 / 21	116 / 630 / 31	130 / 781 / 26	108 / 711 / 19	103 / 860 / 15	120 / 641 / 24	113 / 771 / 20	117 / 664 / 29	136 / 835 / 24	
5		1	190 / 449 / 30	153 / 550 / 24	235 / 353 / 46	188 / 435 / 37	190 / 389 / 63	185 / 475 / 51	177 / 481 / 28	150 / 592 / 23	218 / 380 / 43	184 / 467 / 34	175 / 415 / 59	195 / 516 / 48	163 / 509 / 26	150 / 628 / 21	205 / 409 / 40	186 / 504 / 32	178 / 443 / 55	204 / 552 / 45
		2	160 / 517 / 26	129 / 635 / 21	192 / 429 / 37	155 / 529 / 30	169 / 432 / 57	167 / 531 / 46	150 / 558 / 24	129 / 692 / 20	178 / 461 / 35	152 / 570 / 28	158 / 464 / 53	175 / 572 / 43	139 / 594 / 22	127 / 724 / 18	168 / 498 / 33	152 / 606 / 26	162 / 500 / 50	181 / 608 / 40
		3	136 / 618 / 22	109 / 749 / 18	148 / 549 / 29	121 / 682 / 24	125 / 589 / 42	123 / 722 / 34	126 / 659 / 20	107 / 808 / 16	138 / 590 / 27	117 / 720 / 22	116 / 630 / 39	130 / 781 / 32	119 / 711 / 19	108 / 860 / 15	131 / 641 / 26	118 / 771 / 21	117 / 664 / 36	136 / 835 / 30
10		1	241 / 449 / 30	194 / 550 / 24	297 / 353 / 57	238 / 435 / 46	219 / 389 / 83	199 / 475 / 66	224 / 481 / 28	188 / 592 / 23	276 / 380 / 53	230 / 467 / 42	202 / 415 / 76	203 / 516 / 62	207 / 509 / 26	185 / 628 / 21	259 / 409 / 50	230 / 504 / 40	199 / 443 / 71	207 / 552 / 58
		2	202 / 517 / 26	164 / 635 / 21	242 / 429 / 46	195 / 529 / 37	195 / 432 / 74	180 / 531 / 59	190 / 558 / 24	161 / 692 / 20	225 / 461 / 43	190 / 570 / 35	181 / 464 / 68	182 / 572 / 56	177 / 594 / 22	157 / 724 / 18	212 / 498 / 41	187 / 606 / 33	181 / 500 / 65	184 / 608 / 52
		3	172 / 618 / 22	138 / 749 / 18	187 / 549 / 36	153 / 682 / 29	144 / 589 / 54	133 / 722 / 44	159 / 659 / 20	135 / 808 / 16	174 / 590 / 33	146 / 720 / 27	134 / 630 / 51	136 / 781 / 42	151 / 711 / 19	133 / 860 / 15	166 / 641 / 32	145 / 771 / 25	130 / 664 / 47	138 / 835 / 39
Wind Speed [mph]		170						180												
0	1	138 / 541 / 24	149 / 675 / 20	174 / 435 / 35	185 / 536 / 29	186 / 476 / 42	211 / 584 / 34	138 / 581 / 23	155 / 717 / 19	172 / 465 / 34	190 / 564 / 27	192 / 505 / 39	223 / 625 / 32							
	2	120 / 640 / 21	125 / 770 / 17	144 / 531 / 29	153 / 652 / 24	168 / 533 / 38	191 / 654 / 31	115 / 664 / 20	133 / 837 / 16	140 / 559 / 27	159 / 694 / 23	173 / 561 / 35	200 / 696 / 29							
	3	102 / 759 / 18	105 / 902 / 14	110 / 670 / 23	117 / 816 / 18	122 / 709 / 27	141 / 881 / 23	99 / 801 / 17	111 / 974 / 14	109 / 711 / 21	124 / 884 / 18	126 / 750 / 26	145 / 919 / 21							
	5	1	153 / 541 / 24	152 / 675 / 20	192 / 435 / 37	188 / 536 / 30	186 / 476 / 52	211 / 584 / 42	150 / 581 / 23	155 / 717 / 19	187 / 465 / 35	190 / 564 / 28	192 / 505 / 49	223 / 625 / 40						
		2	133 / 640 / 21	128 / 770 / 17	158 / 531 / 31	155 / 652 / 25	168 / 533 / 47	191 / 654 / 38	126 / 664 / 20	133 / 837 / 16	152 / 559 / 29	159 / 694 / 24	173 / 561 / 44	200 / 696 / 36						
		3	112 / 759 / 18	107 / 902 / 14	121 / 670 / 24	119 / 816 / 19	122 / 709 / 34	141 / 881 / 28	108 / 801 / 17	111 / 974 / 14	118 / 711 / 23	124 / 884 / 19	126 / 750 / 32	145 / 919 / 26						
	10	1	194 / 541 / 24	186 / 675 / 20	242 / 435 / 46	228 / 536 / 37	201 / 476 / 67	211 / 584 / 54	189 / 581 / 23	187 / 717 / 19	234 / 465 / 44	226 / 564 / 35	203 / 505 / 63	223 / 625 / 52						
		2	168 / 640 / 21	156 / 770 / 17	200 / 531 / 38	189 / 652 / 31	182 / 533 / 61	191 / 654 / 49	159 / 664 / 20	160 / 837 / 16	191 / 559 / 36	190 / 694 / 29	182 / 561 / 57	200 / 696 / 47						
		3	142 / 759 / 18	131 / 902 / 14	153 / 670 / 29	144 / 816 / 24	132 / 709 / 44	141 / 881 / 36	137 / 801 / 17	133 / 974 / 14	148 / 711 / 28	148 / 884 / 23	133 / 750 / 42	145 / 919 / 34						
Wind Speed [mph]		190						200												
0	1	139 / 605 / 22	160 / 755 / 18	177 / 491 / 32	199 / 601 / 26	198 / 530 / 37	227 / 646 / 30	144 / 638 / 21	164 / 788 / 17	181 / 515 / 30	206 / 636 / 24	207 / 563 / 35	242 / 698 / 29							
	2	119 / 701 / 19	136 / 871 / 15	146 / 597 / 26	165 / 732 / 21	181 / 599 / 34	208 / 734 / 27	125 / 755 / 18	138 / 898 / 14	147 / 616 / 24	169 / 765 / 20	183 / 618 / 31	215 / 766 / 26							
	3	101 / 836 / 16	117 / 1043 / 13	111 / 747 / 20	126 / 916 / 16	133 / 811 / 25	153 / 985 / 20	106 / 896 / 15	117 / 1061 / 12	117 / 804 / 20	132 / 977 / 16	136 / 841 / 23	155 / 1005 / 19							
	5	1	148 / 605 / 22	160 / 755 / 18	187 / 491 / 34	199 / 601 / 27	198 / 530 / 46	227 / 646 / 37	149 / 638 / 21	164 / 788 / 17	187 / 515 / 32	206 / 636 / 26	207 / 563 / 44	242 / 698 / 36						
		2	126 / 701 / 19	136 / 871 / 15	154 / 597 / 28	165 / 732 / 23	181 / 599 / 42	208 / 734 / 34	130 / 755 / 18	138 / 898 / 14	152 / 616 / 26	169 / 765 / 21	183 / 618 / 39	215 / 766 / 32						
		3	108 / 836 / 16	117 / 1043 / 13	118 / 747 / 21	126 / 916 / 17	133 / 811 / 31	153 / 985 / 25	110 / 896 / 15	117 / 1061 / 12	121 / 804 / 21	132 / 977 / 17	136 / 841 / 29	155 / 1005 / 23						
	10	1	185 / 605 / 22	186 / 755 / 18	232 / 491 / 41	229 / 601 / 33	203 / 530 / 59	227 / 646 / 48	184 / 638 / 21	185 / 788 / 17	229 / 515 / 39	231 / 636 / 32	207 / 563 / 57	242 / 698 / 47						
		2	157 / 701 / 19	158 / 871 / 15	191 / 597 / 34	190 / 732 / 28	186 / 599 / 54	208 / 734 / 44	160 / 755 / 18	156 / 898 / 14	186 / 616 / 32	189 / 765 / 26	184 / 618 / 51	215 / 766 / 42						
		3	134 / 836 / 16	136 / 1043 / 13	146 / 747 / 26	145 / 916 / 21	137 / 811 / 40	153 / 985 / 33	136 / 896 / 15	132 / 1061 / 12	148 / 804 / 25	148 / 977 / 21	137 / 841 / 38	155 / 1005 / 30						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	370 / 339 / 40	302 / 428 / 32	379 / 218 / 72	369 / 333 / 70	307 / 282 / 124	264 / 375 / 106	360 / 363 / 39	287 / 446 / 31	379 / 241 / 72	359 / 357 / 68	299 / 303 / 121	248 / 388 / 100	344 / 381 / 37	276 / 470 / 30	379 / 265 / 72	344 / 375 / 65	288 / 319 / 116
2		318 / 404 / 34	256 / 497 / 28	374 / 327 / 71	308 / 416 / 58	284 / 326 / 114	236 / 419 / 95	302 / 422 / 32	245 / 523 / 26	359 / 345 / 68	292 / 434 / 55	276 / 349 / 111	225 / 437 / 91	292 / 446 / 31	235 / 547 / 25	349 / 368 / 66	277 / 450 / 52	264 / 366 / 106	213 / 453 / 86
3		266 / 478 / 29	214 / 586 / 23	292 / 430 / 55	236 / 530 / 45	213 / 460 / 86	174 / 570 / 70	256 / 504 / 28	209 / 626 / 23	282 / 456 / 53	226 / 556 / 43	201 / 476 / 81	166 / 596 / 67	245 / 528 / 26	198 / 649 / 21	267 / 471 / 50	216 / 580 / 41	193 / 500 / 78	158 / 620 / 64
20	1	428 / 163 / 42	355 / 428 / 35	421 / 206 / 79	421 / 324 / 79	343 / 278 / 151	299 / 375 / 132	422 / 363 / 42	337 / 446 / 33	421 / 228 / 79	421 / 357 / 79	339 / 303 / 149	281 / 388 / 124	404 / 381 / 40	325 / 470 / 32	421 / 251 / 79	403 / 375 / 75	325 / 319 / 143	272 / 411 / 120
	2	373 / 404 / 37	300 / 497 / 30	421 / 314 / 79	361 / 416 / 67	321 / 326 / 141	267 / 419 / 118	355 / 422 / 35	288 / 523 / 29	421 / 345 / 79	343 / 434 / 64	312 / 349 / 137	254 / 437 / 112	343 / 446 / 34	276 / 547 / 27	409 / 368 / 76	325 / 450 / 61	299 / 366 / 132	241 / 453 / 106
	3	312 / 478 / 31	251 / 586 / 25	343 / 430 / 64	277 / 530 / 52	241 / 460 / 106	196 / 570 / 87	300 / 504 / 30	245 / 626 / 24	331 / 456 / 62	265 / 556 / 50	227 / 476 / 100	187 / 596 / 83	288 / 528 / 29	233 / 649 / 23	313 / 471 / 58	253 / 580 / 47	218 / 500 / 96	178 / 620 / 79
25	1	428 / 163 / 42	355 / 428 / 35	421 / 206 / 79	421 / 324 / 79	368 / 267 / 175	333 / 375 / 158	422 / 363 / 42	337 / 446 / 33	421 / 228 / 79	421 / 357 / 79	368 / 295 / 175	313 / 388 / 149	404 / 381 / 40	325 / 470 / 32	421 / 251 / 79	403 / 375 / 75	363 / 319 / 172	303 / 411 / 144
	2	373 / 404 / 37	300 / 497 / 30	421 / 314 / 79	361 / 416 / 67	358 / 326 / 170	298 / 419 / 142	355 / 422 / 35	288 / 523 / 29	421 / 345 / 79	343 / 434 / 64	348 / 349 / 165	284 / 437 / 135	343 / 446 / 34	276 / 547 / 27	409 / 368 / 76	325 / 450 / 61	333 / 366 / 158	269 / 453 / 128
	3	312 / 478 / 31	251 / 586 / 25	343 / 430 / 64	277 / 530 / 52	269 / 460 / 128	219 / 570 / 104	300 / 504 / 30	245 / 626 / 24	331 / 456 / 62	265 / 556 / 50	254 / 476 / 121	209 / 596 / 99	288 / 528 / 29	233 / 649 / 23	313 / 471 / 58	253 / 580 / 47	244 / 500 / 116	199 / 620 / 95
15	1	328 / 397 / 35	266 / 493 / 29	379 / 291 / 72	328 / 391 / 62	280 / 339 / 113	230 / 426 / 92	313 / 411 / 34	250 / 503 / 27	379 / 317 / 72	313 / 405 / 59	272 / 358 / 110	231 / 447 / 89						
	2	276 / 460 / 30	224 / 569 / 24	333 / 384 / 63	267 / 472 / 50	252 / 381 / 102	207 / 475 / 83	266 / 480 / 29	214 / 588 / 23	318 / 398 / 60	257 / 493 / 48	244 / 402 / 99	206 / 495 / 80						
	3	235 / 551 / 25	188 / 668 / 20	257 / 493 / 48	205 / 601 / 39	185 / 522 / 75	151 / 640 / 61	224 / 571 / 24	183 / 704 / 20	246 / 514 / 47	200 / 635 / 38	177 / 542 / 72	152 / 675 / 59						
20	1	386 / 397 / 38	312 / 493 / 31	421 / 275 / 79	385 / 391 / 72	316 / 339 / 139	260 / 426 / 114	367 / 411 / 36	294 / 503 / 29	421 / 300 / 79	367 / 405 / 69	307 / 358 / 135	259 / 447 / 110						
	2	325 / 460 / 32	263 / 569 / 26	391 / 384 / 73	313 / 472 / 58	285 / 381 / 126	233 / 475 / 102	312 / 480 / 31	251 / 588 / 25	373 / 398 / 70	301 / 493 / 56	276 / 402 / 122	232 / 495 / 98						
	3	276 / 551 / 27	221 / 668 / 22	301 / 493 / 56	241 / 601 / 45	210 / 522 / 92	171 / 640 / 75	263 / 571 / 26	214 / 704 / 21	289 / 514 / 54	235 / 635 / 44	201 / 542 / 89	172 / 675 / 73						
25	1	386 / 397 / 38	312 / 493 / 31	421 / 275 / 79	385 / 391 / 72	353 / 339 / 168	290 / 426 / 137	367 / 411 / 36	294 / 503 / 29	421 / 300 / 79	367 / 405 / 69	343 / 358 / 163	288 / 447 / 132						
	2	325 / 460 / 32	263 / 569 / 26	391 / 384 / 73	313 / 472 / 58	318 / 381 / 151	260 / 475 / 123	312 / 480 / 31	251 / 588 / 25	373 / 398 / 70	301 / 493 / 56	308 / 402 / 146	258 / 495 / 118						
	3	276 / 551 / 27	221 / 668 / 22	301 / 493 / 56	241 / 601 / 45	234 / 522 / 111	190 / 640 / 90	263 / 571 / 26	214 / 704 / 21	289 / 514 / 54	235 / 635 / 44	224 / 542 / 106	191 / 675 / 88						
15	1	302 / 430 / 32	245 / 533 / 26	369 / 335 / 70	303 / 424 / 57	260 / 371 / 105	230 / 466 / 86	313 / 411 / 34	250 / 503 / 27	379 / 317 / 72	313 / 405 / 59	272 / 358 / 110	231 / 447 / 89						
	2	256 / 499 / 28	209 / 620 / 23	308 / 418 / 58	246 / 511 / 47	232 / 414 / 94	205 / 514 / 76	266 / 480 / 29	214 / 588 / 23	318 / 398 / 60	257 / 493 / 48	244 / 402 / 99	206 / 495 / 80						
	3	214 / 588 / 23	177 / 739 / 19	236 / 533 / 45	190 / 651 / 36	170 / 560 / 68	150 / 690 / 56	224 / 571 / 24	183 / 704 / 20	246 / 514 / 47	200 / 635 / 38	177 / 542 / 72	152 / 675 / 59						
20	1	355 / 430 / 35	288 / 533 / 29	421 / 326 / 79	355 / 424 / 66	294 / 371 / 130	258 / 466 / 106	367 / 411 / 36	294 / 503 / 29	421 / 300 / 79	367 / 405 / 69	307 / 358 / 135	259 / 447 / 110						
	2	300 / 499 / 30	245 / 620 / 24	361 / 418 / 67	289 / 511 / 54	263 / 414 / 116	230 / 514 / 94	312 / 480 / 31	251 / 588 / 25	373 / 398 / 70	301 / 493 / 56	276 / 402 / 122	232 / 495 / 98						
	3	251 / 588 / 25	208 / 739 / 21	277 / 533 / 52	223 / 651 / 42	192 / 560 / 85	168 / 690 / 69	263 / 571 / 26	214 / 704 / 21	289 / 514 / 54	235 / 635 / 44	201 / 542 / 89	172 / 675 / 73						
25	1	355 / 430 / 35	288 / 533 / 29	421 / 326 / 79	355 / 424 / 66	328 / 371 / 156	286 / 466 / 128	367 / 411 / 36	294 / 503 / 29	421 / 300 / 79	367 / 405 / 69	343 / 358 / 163	288 / 447 / 132						
	2	300 / 499 / 30	245 / 620 / 24	361 / 418 / 67	289 / 511 / 54	293 / 414 / 139	255 / 514 / 113	312 / 480 / 31	251 / 588 / 25	373 / 398 / 70	301 / 493 / 56	308 / 402 / 146	258 / 495 / 118						
	3	251 / 588 / 25	208 / 739 / 21	277 / 533 / 52	223 / 651 / 42	214 / 560 / 102	186 / 690 / 83	263 / 571 / 26	214 / 704 / 21	289 / 514 / 54	235 / 635 / 44	224 / 542 / 106	191 / 675 / 88						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	292 / 449 / 31	235 / 550 / 25	359 / 353 / 68	287 / 435 / 54	252 / 389 / 102	226 / 475 / 81	271 / 481 / 29	226 / 592 / 24	333 / 380 / 63	276 / 467 / 50	232 / 415 / 94	228 / 516 / 76	250 / 509 / 27	221 / 628 / 22	313 / 409 / 59	273 / 504 / 48	227 / 443 / 87
2		245 / 517 / 26	198 / 635 / 21	292 / 429 / 55	236 / 529 / 45	225 / 432 / 91	204 / 531 / 73	230 / 558 / 25	194 / 692 / 20	272 / 461 / 51	228 / 570 / 42	209 / 464 / 84	205 / 572 / 68	214 / 594 / 23	187 / 724 / 19	257 / 498 / 48	223 / 606 / 39	207 / 500 / 80	204 / 608 / 64
3		209 / 618 / 23	167 / 749 / 18	226 / 549 / 43	185 / 682 / 35	166 / 589 / 67	151 / 722 / 54	193 / 659 / 21	162 / 808 / 17	210 / 590 / 40	175 / 720 / 32	154 / 630 / 62	152 / 781 / 51	183 / 711 / 20	159 / 860 / 16	200 / 641 / 38	173 / 771 / 30	149 / 664 / 57	153 / 835 / 48
1		343 / 449 / 34	276 / 550 / 27	421 / 353 / 79	337 / 435 / 63	285 / 389 / 126	252 / 475 / 100	318 / 481 / 32	265 / 592 / 26	391 / 380 / 73	322 / 467 / 58	263 / 415 / 116	253 / 516 / 94	294 / 509 / 29	256 / 628 / 24	367 / 409 / 69	316 / 504 / 55	256 / 443 / 108	253 / 552 / 89
2		288 / 517 / 29	233 / 635 / 23	343 / 429 / 64	277 / 529 / 52	254 / 432 / 112	227 / 531 / 90	270 / 558 / 27	227 / 692 / 22	319 / 461 / 60	266 / 570 / 48	236 / 464 / 104	227 / 572 / 85	251 / 594 / 25	217 / 724 / 20	301 / 498 / 56	258 / 606 / 45	233 / 500 / 98	225 / 608 / 79
3		245 / 618 / 24	196 / 749 / 20	265 / 549 / 50	217 / 682 / 41	187 / 589 / 83	168 / 722 / 67	227 / 659 / 23	189 / 808 / 18	247 / 590 / 46	204 / 720 / 37	174 / 630 / 77	169 / 781 / 63	214 / 711 / 21	184 / 860 / 17	235 / 641 / 44	200 / 771 / 35	168 / 664 / 71	169 / 835 / 59
1		343 / 449 / 34	276 / 550 / 27	421 / 353 / 79	337 / 435 / 63	318 / 389 / 151	278 / 475 / 121	318 / 481 / 32	265 / 592 / 26	391 / 380 / 73	322 / 467 / 58	293 / 415 / 139	278 / 516 / 113	294 / 509 / 29	256 / 628 / 24	367 / 409 / 69	316 / 504 / 55	284 / 443 / 130	276 / 552 / 106
2		288 / 517 / 29	233 / 635 / 23	343 / 429 / 64	277 / 529 / 52	284 / 432 / 135	251 / 531 / 109	270 / 558 / 27	227 / 692 / 22	319 / 461 / 60	266 / 570 / 48	264 / 464 / 125	249 / 572 / 102	251 / 594 / 25	217 / 724 / 20	301 / 498 / 56	258 / 606 / 45	259 / 500 / 118	246 / 608 / 95
3		245 / 618 / 24	196 / 749 / 20	265 / 549 / 50	217 / 682 / 41	209 / 589 / 99	186 / 722 / 81	227 / 659 / 23	189 / 808 / 18	247 / 590 / 46	204 / 720 / 37	194 / 630 / 92	185 / 781 / 76	214 / 711 / 21	184 / 860 / 17	235 / 641 / 44	200 / 771 / 35	186 / 664 / 85	184 / 835 / 71
Wind Speed [mph]		170						180											
15	1	235 / 541 / 25	220 / 675 / 21	292 / 435 / 55	269 / 536 / 45	228 / 476 / 83	230 / 584 / 67	228 / 581 / 24	218 / 717 / 20	282 / 465 / 52	264 / 564 / 42	228 / 505 / 78	235 / 625 / 64						
	2	203 / 640 / 22	184 / 770 / 18	241 / 531 / 46	222 / 652 / 37	206 / 533 / 75	209 / 654 / 61	191 / 664 / 20	187 / 837 / 17	230 / 559 / 43	222 / 694 / 35	205 / 561 / 70	212 / 696 / 57						
	3	172 / 759 / 19	155 / 902 / 15	185 / 670 / 35	170 / 816 / 28	149 / 709 / 54	154 / 881 / 45	165 / 801 / 18	156 / 974 / 14	178 / 711 / 33	172 / 884 / 27	149 / 750 / 51	153 / 919 / 42						
	1	276 / 541 / 27	253 / 675 / 23	343 / 435 / 64	310 / 536 / 52	255 / 476 / 102	252 / 584 / 83	268 / 581 / 26	250 / 717 / 21	330 / 465 / 61	302 / 564 / 48	253 / 505 / 96	256 / 625 / 79						
	2	239 / 640 / 24	212 / 770 / 19	283 / 531 / 53	256 / 652 / 43	231 / 533 / 92	228 / 654 / 75	224 / 664 / 22	214 / 837 / 18	269 / 559 / 50	253 / 694 / 41	228 / 561 / 87	231 / 696 / 71						
	3	202 / 759 / 20	178 / 902 / 16	217 / 670 / 41	195 / 816 / 33	167 / 709 / 67	168 / 881 / 55	193 / 801 / 19	179 / 974 / 15	208 / 711 / 38	197 / 884 / 32	166 / 750 / 63	167 / 919 / 51						
	1	276 / 541 / 27	253 / 675 / 23	343 / 435 / 64	310 / 536 / 52	282 / 476 / 123	274 / 584 / 99	268 / 581 / 26	250 / 717 / 21	330 / 465 / 61	302 / 564 / 48	279 / 505 / 116	277 / 625 / 95						
	2	239 / 640 / 24	212 / 770 / 19	283 / 531 / 53	256 / 652 / 43	255 / 533 / 111	248 / 654 / 90	224 / 664 / 22	214 / 837 / 18	269 / 559 / 50	253 / 694 / 41	250 / 561 / 104	249 / 696 / 85						
	3	202 / 759 / 20	178 / 902 / 16	217 / 670 / 41	195 / 816 / 33	184 / 709 / 81	183 / 881 / 66	193 / 801 / 19	179 / 974 / 15	208 / 711 / 38	197 / 884 / 32	182 / 750 / 76	180 / 919 / 62						
Wind Speed [mph]		190						200											
15	1	221 / 605 / 23	216 / 755 / 19	277 / 491 / 49	265 / 601 / 40	227 / 530 / 73	233 / 646 / 59	218 / 638 / 21	214 / 788 / 18	272 / 515 / 47	265 / 636 / 38	230 / 563 / 70	243 / 698 / 57						
	2	188 / 701 / 19	184 / 871 / 16	228 / 597 / 41	220 / 732 / 33	207 / 599 / 67	215 / 734 / 54	190 / 755 / 19	179 / 898 / 15	221 / 616 / 38	218 / 765 / 31	204 / 618 / 62	216 / 766 / 51						
	3	160 / 836 / 16	157 / 1043 / 14	174 / 747 / 31	168 / 916 / 25	153 / 811 / 50	158 / 985 / 40	161 / 896 / 16	152 / 1061 / 13	176 / 804 / 30	170 / 977 / 24	152 / 841 / 46	156 / 1005 / 37						
	1	257 / 605 / 24	246 / 755 / 20	322 / 491 / 57	301 / 601 / 46	251 / 530 / 90	253 / 646 / 73	253 / 638 / 23	242 / 788 / 19	314 / 515 / 54	300 / 636 / 44	253 / 563 / 87	262 / 698 / 71						
	2	219 / 701 / 21	209 / 871 / 17	266 / 597 / 47	250 / 732 / 38	229 / 599 / 83	232 / 734 / 67	220 / 755 / 20	203 / 898 / 16	255 / 616 / 44	246 / 765 / 36	224 / 618 / 77	233 / 766 / 63						
	3	187 / 836 / 18	179 / 1043 / 15	202 / 747 / 36	191 / 916 / 29	169 / 811 / 61	171 / 985 / 49	187 / 896 / 17	172 / 1061 / 14	203 / 804 / 35	192 / 977 / 28	167 / 841 / 57	167 / 1005 / 45						
	1	257 / 605 / 24	246 / 755 / 20	322 / 491 / 57	301 / 601 / 46	275 / 530 / 109	272 / 646 / 88	253 / 638 / 23	242 / 788 / 19	314 / 515 / 54	300 / 636 / 44	276 / 563 / 104	280 / 698 / 85						
	2	219 / 701 / 21	209 / 871 / 17	266 / 597 / 47	250 / 732 / 38	251 / 599 / 99	250 / 734 / 81	220 / 755 / 20	203 / 898 / 16	255 / 616 / 44	246 / 765 / 36	244 / 618 / 92	249 / 766 / 76						
	3	187 / 836 / 18	179 / 1043 / 15	202 / 747 / 36	191 / 916 / 29	185 / 811 / 73	184 / 985 / 59	187 / 896 / 17	172 / 1061 / 14	203 / 804 / 35	192 / 977 / 28	182 / 841 / 69	179 / 1005 / 55						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	449 / 158 / 43	383 / 428 / 37	447 / 203 / 83	447 / 320 / 83	395 / 260 / 199	368 / 375 / 185	449 / 176 / 43	364 / 446 / 35	447 / 225 / 83	447 / 352 / 83	395 / 287 / 199	346 / 388 / 174	436 / 381 / 42	350 / 470 / 34	447 / 248 / 83	435 / 375 / 81	395 / 315 / 199	335 / 411 / 168
2		403 / 404 / 39	324 / 497 / 31	447 / 309 / 83	389 / 416 / 72	395 / 326 / 199	329 / 419 / 166	383 / 422 / 37	311 / 523 / 30	447 / 340 / 83	370 / 434 / 69	384 / 349 / 193	313 / 437 / 157	370 / 446 / 35	298 / 547 / 29	441 / 368 / 82	350 / 450 / 65	368 / 366 / 185	297 / 453 / 149	
3		337 / 478 / 32	271 / 586 / 26	370 / 430 / 69	298 / 530 / 56	297 / 460 / 149	242 / 570 / 122	324 / 504 / 31	265 / 626 / 25	357 / 456 / 66	286 / 556 / 53	280 / 476 / 141	231 / 596 / 116	311 / 528 / 30	251 / 649 / 24	337 / 471 / 63	273 / 580 / 51	269 / 500 / 135	220 / 620 / 111	
35		1	489 / 156 / 45	423 / 428 / 39	479 / 197 / 89	479 / 310 / 89	420 / 253 / 221	402 / 375 / 212	489 / 173 / 45	401 / 446 / 37	479 / 218 / 89	479 / 342 / 89	420 / 279 / 221	378 / 388 / 199	482 / 381 / 44	387 / 470 / 36	479 / 240 / 89	479 / 375 / 89	420 / 306 / 221	366 / 411 / 193
		2	445 / 404 / 41	358 / 497 / 33	479 / 300 / 89	429 / 416 / 80	420 / 317 / 221	360 / 419 / 189	423 / 422 / 39	343 / 523 / 32	479 / 331 / 89	408 / 434 / 76	420 / 349 / 221	342 / 437 / 180	409 / 446 / 37	328 / 547 / 30	479 / 363 / 89	386 / 450 / 72	402 / 366 / 212	324 / 453 / 171
		3	372 / 478 / 34	299 / 586 / 28	408 / 430 / 76	329 / 530 / 61	324 / 460 / 171	264 / 570 / 139	358 / 504 / 33	292 / 626 / 27	394 / 456 / 73	315 / 556 / 58	306 / 476 / 161	252 / 596 / 133	343 / 528 / 32	277 / 649 / 26	372 / 471 / 69	301 / 580 / 56	294 / 500 / 155	240 / 620 / 126
40		1	524 / 151 / 100	468 / 428 / 89	511 / 192 / 141	511 / 301 / 141	450 / 249 / 251	437 / 375 / 244	524 / 168 / 100	444 / 446 / 84	511 / 212 / 141	511 / 332 / 141	450 / 275 / 251	411 / 388 / 229	524 / 185 / 100	428 / 470 / 81	511 / 233 / 141	511 / 364 / 141	450 / 301 / 251	398 / 411 / 222
		2	492 / 404 / 94	395 / 497 / 75	511 / 291 / 141	471 / 416 / 130	450 / 313 / 251	391 / 419 / 219	468 / 422 / 89	379 / 523 / 72	511 / 321 / 141	448 / 434 / 124	450 / 344 / 251	372 / 437 / 208	452 / 446 / 86	363 / 547 / 69	511 / 352 / 141	424 / 450 / 117	437 / 366 / 244	352 / 453 / 197
		3	411 / 478 / 78	331 / 586 / 63	448 / 430 / 124	361 / 530 / 100	352 / 460 / 197	287 / 570 / 160	395 / 504 / 75	323 / 626 / 62	432 / 456 / 119	346 / 556 / 96	333 / 476 / 186	274 / 596 / 153	379 / 528 / 72	307 / 649 / 58	409 / 471 / 113	330 / 580 / 91	320 / 500 / 179	261 / 620 / 146
30	Wind Speed [mph]		110						115											
	1	416 / 397 / 40	337 / 493 / 32	447 / 271 / 83	415 / 391 / 77	390 / 339 / 196	320 / 426 / 160	397 / 411 / 38	317 / 503 / 30	447 / 296 / 83	396 / 405 / 74	379 / 358 / 190	317 / 447 / 155							
	2	350 / 460 / 34	284 / 569 / 27	422 / 384 / 78	337 / 472 / 63	351 / 381 / 177	287 / 475 / 144	337 / 480 / 32	271 / 588 / 26	402 / 398 / 75	324 / 493 / 60	340 / 402 / 171	283 / 495 / 138							
	3	298 / 551 / 29	238 / 668 / 23	324 / 493 / 60	260 / 601 / 48	258 / 522 / 130	210 / 640 / 105	284 / 571 / 27	232 / 704 / 22	311 / 514 / 58	253 / 635 / 47	247 / 542 / 124	210 / 675 / 102							
	35	1	460 / 397 / 42	372 / 493 / 34	479 / 263 / 89	458 / 391 / 85	420 / 334 / 221	350 / 426 / 183	438 / 411 / 40	350 / 503 / 32	479 / 287 / 89	436 / 405 / 81	414 / 358 / 218	346 / 447 / 177						
		2	387 / 460 / 36	314 / 569 / 29	465 / 384 / 86	372 / 472 / 69	384 / 381 / 202	314 / 475 / 164	372 / 480 / 34	299 / 588 / 28	444 / 398 / 82	358 / 493 / 66	372 / 402 / 196	309 / 495 / 158						
		3	328 / 551 / 30	263 / 668 / 24	358 / 493 / 66	286 / 601 / 53	282 / 522 / 149	230 / 640 / 120	314 / 571 / 29	256 / 704 / 24	344 / 514 / 64	279 / 635 / 52	270 / 542 / 142	229 / 675 / 117						
	40	1	508 / 397 / 97	411 / 493 / 78	511 / 255 / 141	503 / 391 / 139	450 / 329 / 251	380 / 426 / 211	484 / 411 / 92	387 / 503 / 74	511 / 278 / 141	479 / 405 / 132	450 / 358 / 251	375 / 447 / 204						
		2	428 / 460 / 81	347 / 569 / 66	511 / 384 / 141	409 / 472 / 113	418 / 381 / 233	341 / 475 / 189	411 / 480 / 78	331 / 588 / 63	487 / 398 / 134	393 / 493 / 108	404 / 402 / 226	335 / 495 / 182						
3		363 / 551 / 69	291 / 668 / 55	393 / 493 / 108	314 / 601 / 87	307 / 522 / 171	249 / 640 / 139	347 / 571 / 66	283 / 704 / 54	377 / 514 / 104	307 / 635 / 85	294 / 542 / 164	248 / 675 / 135							
30	Wind Speed [mph]		120						130											
	1	383 / 430 / 37	311 / 533 / 30	447 / 321 / 83	383 / 424 / 71	362 / 371 / 182	314 / 466 / 149	397 / 411 / 38	317 / 503 / 30	447 / 296 / 83	396 / 405 / 74	379 / 358 / 190	317 / 447 / 155							
	2	324 / 499 / 31	265 / 620 / 25	389 / 418 / 72	311 / 511 / 58	324 / 414 / 163	279 / 514 / 133	337 / 480 / 32	271 / 588 / 26	402 / 398 / 75	324 / 493 / 60	340 / 402 / 171	283 / 495 / 138							
	3	271 / 588 / 26	225 / 739 / 22	298 / 533 / 56	240 / 651 / 45	236 / 560 / 119	204 / 690 / 97	284 / 571 / 27	232 / 704 / 22	311 / 514 / 58	253 / 635 / 47	247 / 542 / 124	210 / 675 / 102							
	35	1	423 / 430 / 39	343 / 533 / 32	479 / 312 / 89	422 / 424 / 78	396 / 371 / 208	342 / 466 / 171	438 / 411 / 40	350 / 503 / 32	479 / 287 / 89	436 / 405 / 81	414 / 358 / 218	346 / 447 / 177						
		2	358 / 499 / 33	292 / 620 / 27	429 / 418 / 80	344 / 511 / 64	354 / 414 / 186	304 / 514 / 152	372 / 480 / 34	299 / 588 / 28	444 / 398 / 82	358 / 493 / 66	372 / 402 / 196	309 / 495 / 158						
		3	299 / 588 / 28	248 / 739 / 23	329 / 533 / 61	265 / 651 / 49	258 / 560 / 136	222 / 690 / 111	314 / 571 / 29	256 / 704 / 24	344 / 514 / 64	279 / 635 / 52	270 / 542 / 142	229 / 675 / 117						
	40	1	468 / 430 / 89	379 / 533 / 72	511 / 302 / 141	463 / 424 / 128	431 / 371 / 240	370 / 466 / 197	484 / 411 / 92	387 / 503 / 74	511 / 278 / 141	479 / 405 / 132	450 / 358 / 251	375 / 447 / 204						
		2	395 / 499 / 75	323 / 620 / 62	471 / 418 / 130	377 / 511 / 104	385 / 414 / 215	329 / 514 / 175	411 / 480 / 78	331 / 588 / 63	487 / 398 / 134	393 / 493 / 108	404 / 402 / 226	335 / 495 / 182						
3		331 / 588 / 63	274 / 739 / 52	361 / 533 / 100	291 / 651 / 80	281 / 560 / 157	240 / 690 / 128	347 / 571 / 66	283 / 704 / 54	377 / 514 / 104	307 / 635 / 85	294 / 542 / 164	248 / 675 / 135							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	370 / 449 / 35	298 / 550 / 29	447 / 347 / 83	363 / 435 / 68	351 / 389 / 177	305 / 475 / 141	344 / 481 / 33	285 / 592 / 27	422 / 380 / 78	346 / 467 / 63	324 / 415 / 163	303 / 516 / 133	317 / 509 / 30	275 / 628 / 25	396 / 409 / 74	339 / 504 / 59	313 / 443 / 152	300 / 552 / 124
2		311 / 517 / 30	251 / 635 / 24	370 / 429 / 69	298 / 529 / 56	313 / 432 / 157	275 / 531 / 127	291 / 558 / 28	244 / 692 / 23	344 / 461 / 64	286 / 570 / 52	291 / 464 / 146	271 / 572 / 119	271 / 594 / 26	233 / 724 / 21	324 / 498 / 60	277 / 606 / 48	284 / 500 / 138	266 / 608 / 111	
3		265 / 618 / 25	212 / 749 / 20	286 / 549 / 53	234 / 682 / 44	231 / 589 / 116	203 / 722 / 94	245 / 659 / 24	204 / 808 / 19	266 / 590 / 50	220 / 720 / 40	214 / 630 / 108	202 / 781 / 89	232 / 711 / 22	198 / 860 / 18	253 / 641 / 47	215 / 771 / 38	205 / 664 / 100	200 / 835 / 83	
35		1	409 / 449 / 37	328 / 550 / 30	479 / 337 / 89	401 / 435 / 74	384 / 389 / 202	331 / 475 / 161	379 / 481 / 35	314 / 592 / 28	465 / 380 / 86	381 / 467 / 69	354 / 415 / 186	328 / 516 / 152	350 / 509 / 32	302 / 628 / 26	436 / 409 / 81	372 / 504 / 65	341 / 443 / 174	323 / 552 / 142
		2	343 / 517 / 32	277 / 635 / 26	408 / 429 / 76	329 / 529 / 61	342 / 432 / 180	299 / 531 / 145	321 / 558 / 30	269 / 692 / 24	379 / 461 / 70	315 / 570 / 57	318 / 464 / 167	293 / 572 / 136	299 / 594 / 28	255 / 724 / 22	358 / 498 / 66	304 / 606 / 53	310 / 500 / 158	287 / 608 / 126
		3	292 / 618 / 27	234 / 749 / 22	315 / 549 / 58	258 / 682 / 48	252 / 589 / 133	221 / 722 / 108	270 / 659 / 25	224 / 808 / 20	293 / 590 / 54	242 / 720 / 44	234 / 630 / 123	219 / 781 / 101	256 / 711 / 24	217 / 860 / 19	279 / 641 / 52	236 / 771 / 41	223 / 664 / 114	215 / 835 / 95
40		1	452 / 449 / 86	363 / 550 / 69	511 / 327 / 141	440 / 435 / 121	418 / 389 / 233	357 / 475 / 186	420 / 481 / 80	343 / 592 / 65	511 / 380 / 141	416 / 467 / 113	385 / 415 / 215	352 / 516 / 175	387 / 509 / 74	329 / 628 / 60	479 / 409 / 132	405 / 504 / 106	370 / 443 / 200	346 / 552 / 164
		2	379 / 517 / 72	307 / 635 / 58	448 / 429 / 124	361 / 529 / 100	372 / 432 / 208	322 / 531 / 168	355 / 558 / 68	294 / 692 / 55	416 / 461 / 115	344 / 570 / 93	346 / 464 / 193	316 / 572 / 157	331 / 594 / 63	278 / 724 / 51	393 / 498 / 108	331 / 606 / 87	336 / 500 / 182	308 / 608 / 146
		3	323 / 618 / 62	258 / 749 / 49	346 / 549 / 96	283 / 682 / 78	274 / 589 / 153	238 / 722 / 124	299 / 659 / 57	245 / 808 / 46	322 / 590 / 89	264 / 720 / 72	255 / 630 / 142	235 / 781 / 117	283 / 711 / 54	236 / 860 / 43	307 / 641 / 85	256 / 771 / 67	242 / 664 / 131	231 / 835 / 110
Wind Speed [mph]		170						180												
30	1	298 / 541 / 29	271 / 675 / 24	370 / 435 / 69	332 / 536 / 56	309 / 476 / 144	296 / 584 / 116	288 / 581 / 27	267 / 717 / 22	355 / 465 / 65	323 / 564 / 52	304 / 505 / 135	297 / 625 / 111							
	2	258 / 640 / 25	227 / 770 / 20	305 / 531 / 57	274 / 652 / 46	279 / 533 / 130	267 / 654 / 105	242 / 664 / 23	229 / 837 / 19	290 / 559 / 53	270 / 694 / 44	273 / 561 / 122	268 / 696 / 100							
	3	218 / 759 / 21	191 / 902 / 17	234 / 670 / 44	209 / 816 / 35	202 / 709 / 94	197 / 881 / 78	208 / 801 / 20	191 / 974 / 16	224 / 711 / 41	210 / 884 / 34	199 / 750 / 89	194 / 919 / 72							
	35	1	328 / 541 / 30	297 / 675 / 25	408 / 435 / 76	362 / 536 / 61	336 / 476 / 164	317 / 584 / 133	318 / 581 / 29	291 / 717 / 24	392 / 465 / 72	352 / 564 / 57	329 / 505 / 155	318 / 625 / 126						
		2	285 / 640 / 26	249 / 770 / 21	336 / 531 / 62	299 / 652 / 51	303 / 533 / 149	287 / 654 / 120	266 / 664 / 24	250 / 837 / 20	319 / 559 / 58	294 / 694 / 48	296 / 561 / 139	286 / 696 / 114						
		3	241 / 759 / 22	209 / 902 / 18	258 / 670 / 48	229 / 816 / 39	220 / 709 / 108	212 / 881 / 89	229 / 801 / 21	208 / 974 / 17	247 / 711 / 45	229 / 884 / 37	215 / 750 / 101	207 / 919 / 82						
	40	1	363 / 541 / 69	322 / 675 / 57	448 / 435 / 124	393 / 536 / 100	362 / 476 / 189	339 / 584 / 153	348 / 581 / 66	315 / 717 / 54	428 / 465 / 117	380 / 564 / 93	355 / 505 / 179	339 / 625 / 146						
		2	315 / 640 / 60	270 / 770 / 48	369 / 531 / 102	325 / 652 / 83	328 / 533 / 171	307 / 654 / 139	291 / 664 / 55	270 / 837 / 46	349 / 559 / 96	319 / 694 / 78	318 / 561 / 160	305 / 696 / 131						
		3	266 / 759 / 51	227 / 902 / 40	283 / 670 / 78	248 / 816 / 63	237 / 709 / 124	226 / 881 / 102	251 / 801 / 48	225 / 974 / 39	269 / 711 / 74	248 / 884 / 61	232 / 750 / 117	220 / 919 / 95						
Wind Speed [mph]		190						200												
30	1	277 / 605 / 25	262 / 755 / 21	347 / 491 / 62	321 / 601 / 50	298 / 530 / 127	291 / 646 / 102	271 / 638 / 24	257 / 788 / 20	337 / 515 / 58	318 / 636 / 47	298 / 563 / 122	299 / 698 / 100							
	2	235 / 701 / 22	223 / 871 / 18	285 / 597 / 51	266 / 732 / 41	272 / 599 / 116	267 / 734 / 94	236 / 755 / 21	216 / 898 / 17	274 / 616 / 47	261 / 765 / 39	265 / 618 / 108	266 / 766 / 89							
	3	201 / 836 / 19	191 / 1043 / 15	218 / 747 / 39	204 / 916 / 32	201 / 811 / 86	197 / 985 / 69	200 / 896 / 18	182 / 1061 / 14	218 / 804 / 38	204 / 977 / 30	197 / 841 / 80	191 / 1005 / 64							
	35	1	304 / 605 / 27	285 / 755 / 22	381 / 491 / 68	348 / 601 / 54	322 / 530 / 145	310 / 646 / 117	298 / 638 / 26	278 / 788 / 21	369 / 515 / 64	344 / 636 / 52	321 / 563 / 139	318 / 698 / 114						
		2	259 / 701 / 23	242 / 871 / 19	314 / 597 / 56	289 / 732 / 45	294 / 599 / 133	285 / 734 / 108	258 / 755 / 22	233 / 898 / 18	300 / 616 / 52	283 / 765 / 43	285 / 618 / 123	282 / 766 / 101						
		3	221 / 836 / 20	207 / 1043 / 16	239 / 747 / 43	221 / 916 / 35	217 / 811 / 98	210 / 985 / 79	219 / 896 / 19	198 / 1061 / 15	238 / 804 / 41	221 / 977 / 33	212 / 841 / 92	203 / 1005 / 73						
	40	1	332 / 605 / 62	308 / 755 / 51	415 / 491 / 111	376 / 601 / 89	346 / 530 / 168	329 / 646 / 135	324 / 638 / 58	299 / 788 / 48	401 / 515 / 104	370 / 636 / 85	344 / 563 / 160	336 / 698 / 131						
		2	282 / 701 / 52	261 / 871 / 43	342 / 597 / 91	312 / 732 / 74	316 / 599 / 153	302 / 734 / 124	281 / 755 / 51	251 / 898 / 40	326 / 616 / 85	304 / 765 / 70	305 / 618 / 142	299 / 766 / 117						
		3	241 / 836 / 45	224 / 1043 / 37	260 / 747 / 70	238 / 916 / 57	233 / 811 / 113	222 / 985 / 91	239 / 896 / 43	213 / 1061 / 34	259 / 804 / 67	238 / 977 / 54	227 / 841 / 106	215 / 1005 / 84						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs																																																
Wind Speed [mph]		95						100						105																																																
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																												
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																					
	45	1	566 / 147 / 104	521 / 428 / 96	560 / 189 / 152	560 / 296 / 152	472 / 242 / 269	472 / 375 / 269	566 / 163 / 104	494 / 446 / 91	560 / 209 / 152	560 / 327 / 152	472 / 267 / 269	444 / 388 / 253	566 / 180 / 104	476 / 470 / 88	560 / 230 / 152	560 / 358 / 152	472 / 293 / 269	429 / 411 / 245																																										
2		548 / 404 / 101	440 / 497 / 81	560 / 287 / 152	525 / 416 / 143	472 / 304 / 269	422 / 419 / 241	521 / 422 / 96	422 / 523 / 78	560 / 316 / 152	499 / 434 / 135	472 / 334 / 269	401 / 437 / 229	503 / 446 / 93	404 / 547 / 75	560 / 346 / 152	472 / 450 / 128	472 / 366 / 269	380 / 453 / 217																																											
3		458 / 478 / 85	368 / 586 / 68	499 / 430 / 135	402 / 530 / 109	380 / 460 / 217	310 / 570 / 177	440 / 504 / 81	359 / 626 / 67	481 / 456 / 131	385 / 556 / 105	359 / 476 / 205	296 / 596 / 169	422 / 528 / 78	342 / 649 / 63	455 / 471 / 124	367 / 580 / 100	345 / 500 / 197	282 / 620 / 161																																											
50		1	614 / 144 / 111	574 / 428 / 103	597 / 183 / 160	597 / 287 / 160	499 / 238 / 289	499 / 370 / 289	614 / 160 / 111	544 / 446 / 98	597 / 202 / 160	597 / 316 / 160	499 / 263 / 289	476 / 388 / 276	614 / 177 / 111	525 / 470 / 95	597 / 222 / 160	597 / 347 / 160	499 / 288 / 289	461 / 411 / 267																																										
		2	604 / 404 / 109	485 / 497 / 87	597 / 278 / 160	578 / 416 / 155	499 / 299 / 289	453 / 419 / 263	574 / 422 / 103	465 / 523 / 84	597 / 306 / 160	549 / 434 / 147	499 / 329 / 289	431 / 437 / 250	554 / 446 / 100	446 / 547 / 80	597 / 336 / 160	520 / 450 / 140	499 / 361 / 289	408 / 453 / 237																																										
		3	505 / 478 / 91	406 / 586 / 73	549 / 430 / 147	443 / 530 / 119	408 / 460 / 237	333 / 570 / 193	485 / 504 / 87	396 / 626 / 71	530 / 456 / 142	424 / 556 / 114	386 / 476 / 223	318 / 596 / 184	465 / 528 / 84	376 / 649 / 68	501 / 471 / 134	405 / 580 / 109	370 / 500 / 215	302 / 620 / 175																																										
60		1	669 / 133 / 116	669 / 211 / 116	662 / 171 / 174	662 / 269 / 174	561 / 228 / 324	561 / 353 / 324	669 / 147 / 116	645 / 446 / 112	662 / 189 / 174	662 / 296 / 174	561 / 251 / 324	561 / 388 / 324	669 / 163 / 116	622 / 470 / 108	662 / 208 / 174	662 / 324 / 174	561 / 275 / 324	543 / 411 / 314																																										
		2	669 / 377 / 116	575 / 497 / 100	662 / 260 / 174	662 / 402 / 174	561 / 285 / 324	535 / 419 / 309	669 / 415 / 116	551 / 523 / 96	662 / 286 / 174	651 / 434 / 171	561 / 314 / 324	508 / 437 / 293	657 / 446 / 114	528 / 547 / 92	662 / 314 / 174	617 / 450 / 162	561 / 344 / 324	481 / 453 / 278																																										
		3	598 / 478 / 104	481 / 586 / 83	651 / 430 / 171	525 / 530 / 138	481 / 460 / 278	392 / 570 / 227	575 / 504 / 100	469 / 626 / 81	628 / 456 / 165	503 / 556 / 132	454 / 476 / 263	374 / 596 / 216	551 / 528 / 96	446 / 649 / 77	594 / 471 / 156	480 / 580 / 126	437 / 500 / 252	357 / 620 / 206																																										
45	1	566 / 197 / 104	458 / 493 / 85	560 / 251 / 152	560 / 391 / 152	472 / 320 / 269	410 / 426 / 233	539 / 411 / 100	431 / 503 / 80	560 / 274 / 152	533 / 405 / 145	472 / 348 / 269	404 / 447 / 225	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3																											
	ASCE Group Zone																																																													
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2	476 / 460 / 88	386 / 569 / 71	560 / 378 / 152	455 / 472 / 124	451 / 381 / 257	368 / 475 / 209	458 / 480 / 85	368 / 588 / 68	542 / 398 / 147	437 / 493 / 119	437 / 402 / 249	361 / 495 / 201																																																		
3	404 / 551 / 75	324 / 668 / 60	437 / 493 / 119	350 / 601 / 95	331 / 522 / 189	269 / 640 / 153	386 / 571 / 71	315 / 704 / 58	420 / 514 / 114	341 / 635 / 93	317 / 542 / 181	267 / 675 / 149																																																		
50	1	614 / 194 / 111	505 / 493 / 91	597 / 244 / 160	597 / 379 / 160	499 / 315 / 289	440 / 426 / 254	594 / 411 / 107	475 / 503 / 86	597 / 266 / 160	588 / 405 / 158	499 / 343 / 289													433 / 447 / 245																																					
	2	525 / 460 / 95	426 / 569 / 77	597 / 366 / 160	501 / 472 / 134	484 / 381 / 280	395 / 475 / 228	505 / 480 / 91	406 / 588 / 73	597 / 398 / 160	482 / 493 / 129	469 / 402 / 271													387 / 495 / 219																																					
	3	446 / 551 / 80	357 / 668 / 64	482 / 493 / 129	386 / 601 / 104	355 / 522 / 206	289 / 640 / 167	426 / 571 / 77	347 / 704 / 63	463 / 514 / 124	376 / 635 / 101	340 / 542 / 197													286 / 675 / 162																																					
60	1	669 / 179 / 116	598 / 493 / 104	662 / 228 / 174	662 / 354 / 174	561 / 301 / 324	517 / 426 / 299	669 / 195 / 116	563 / 503 / 98	662 / 249 / 174	662 / 385 / 174	561 / 327 / 324													499 / 447 / 288																																					
	2	622 / 460 / 108	505 / 569 / 88	662 / 343 / 174	594 / 472 / 156	561 / 375 / 324	463 / 475 / 268	598 / 480 / 104	481 / 588 / 83	662 / 373 / 174	571 / 493 / 150	552 / 402 / 319													446 / 495 / 257																																					
	3	528 / 551 / 92	423 / 668 / 73	571 / 493 / 150	457 / 601 / 120	419 / 522 / 242	339 / 640 / 196	505 / 571 / 88	411 / 704 / 71	548 / 514 / 144	446 / 635 / 117	401 / 542 / 232													330 / 675 / 191																																					
45	1	521 / 430 / 96	422 / 533 / 78	560 / 298 / 152	516 / 424 / 140	465 / 371 / 265	398 / 466 / 217	539 / 411 / 100	431 / 503 / 80	560 / 274 / 152	533 / 405 / 145	472 / 348 / 269													404 / 447 / 225																																					
	2	440 / 499 / 81	359 / 620 / 67	525 / 418 / 143	420 / 511 / 114	415 / 414 / 237	354 / 514 / 193	458 / 480 / 85	368 / 588 / 68	542 / 398 / 147	437 / 493 / 119	437 / 402 / 249	361 / 495 / 201																																																	
	3	368 / 588 / 68	306 / 739 / 57	402 / 533 / 109	324 / 651 / 88	303 / 560 / 173	258 / 690 / 141	386 / 571 / 71	315 / 704 / 58	420 / 514 / 114	341 / 635 / 93	317 / 542 / 181	267 / 675 / 149																																																	
	50	1	574 / 430 / 103	465 / 533 / 84	597 / 289 / 160	569 / 424 / 153	499 / 371 / 289	426 / 466 / 237	594 / 411 / 107	475 / 503 / 86	597 / 266 / 160	588 / 405 / 158	499 / 343 / 289													433 / 447 / 245																																				
		2	485 / 499 / 87	396 / 620 / 71	578 / 418 / 155	463 / 511 / 124	446 / 414 / 258	379 / 514 / 210	505 / 480 / 91	406 / 588 / 73	597 / 398 / 160	482 / 493 / 129	469 / 402 / 271													387 / 495 / 219																																				
		3	406 / 588 / 73	337 / 739 / 61	443 / 533 / 119	357 / 651 / 96	325 / 560 / 188	276 / 690 / 153	426 / 571 / 77	347 / 704 / 63	463 / 514 / 124	376 / 635 / 101	340 / 542 / 197													286 / 675 / 162																																				
	60	1	669 / 212 / 116	551 / 533 / 96	662 / 270 / 174	662 / 417 / 174	561 / 355 / 324	482 / 466 / 278	669 / 195 / 116	563 / 503 / 98	662 / 249 / 174	662 / 385 / 174	561 / 327 / 324													499 / 447 / 288																																				
		2	575 / 499 / 100	469 / 620 / 81	662 / 404 / 174	548 / 511 / 144	526 / 414 / 304	428 / 514 / 247	598 / 480 / 104	481 / 588 / 83	662 / 373 / 174	571 / 493 / 150	552 / 402 / 319													446 / 495 / 257																																				
		3	481 / 588 / 83	399 / 739 / 69	525 / 533 / 138	423 / 651 / 111	383 / 560 / 221	312 / 690 / 180	505 / 571 / 88	411 / 704 / 71	548 / 514 / 144	446 / 635 / 117	401 / 542 / 232													330 / 675 / 191																																				

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
	45	1	503 / 449 / 93	404 / 550 / 75	560 / 322 / 152	490 / 435 / 133	451 / 389 / 257	384 / 475 / 205	467 / 481 / 86	377 / 592 / 70	560 / 374 / 152	455 / 467 / 124	415 / 415 / 237	377 / 516 / 193	431 / 509 / 80	355 / 628 / 65	533 / 409 / 145	438 / 504 / 117	398 / 443 / 221
2		422 / 517 / 78	342 / 635 / 63	499 / 429 / 135	402 / 529 / 109	401 / 432 / 229	346 / 531 / 185	395 / 558 / 73	324 / 692 / 60	464 / 461 / 126	376 / 570 / 102	373 / 464 / 213	338 / 572 / 173	368 / 594 / 68	301 / 724 / 55	437 / 498 / 119	357 / 606 / 95	362 / 500 / 201	328 / 608 / 161
3		359 / 618 / 67	288 / 749 / 53	385 / 549 / 105	315 / 682 / 86	296 / 589 / 169	256 / 722 / 137	333 / 659 / 62	270 / 808 / 50	359 / 590 / 98	289 / 720 / 79	275 / 630 / 157	252 / 781 / 129	315 / 711 / 58	255 / 860 / 47	341 / 641 / 93	277 / 771 / 74	261 / 664 / 145	246 / 835 / 121
50	1	554 / 449 / 100	446 / 550 / 80	597 / 312 / 160	540 / 435 / 145	484 / 389 / 280	410 / 475 / 223	515 / 481 / 93	416 / 592 / 75	597 / 362 / 160	501 / 467 / 134	446 / 415 / 258	402 / 516 / 210	475 / 509 / 86	386 / 628 / 70	588 / 409 / 158	472 / 504 / 127	426 / 443 / 241	393 / 552 / 197
	2	465 / 517 / 84	376 / 635 / 68	549 / 429 / 147	443 / 529 / 119	431 / 432 / 250	370 / 531 / 202	436 / 558 / 79	357 / 692 / 64	511 / 461 / 137	415 / 570 / 111	401 / 464 / 232	360 / 572 / 188	406 / 594 / 73	327 / 724 / 59	482 / 498 / 129	386 / 606 / 104	388 / 500 / 219	349 / 608 / 175
	3	396 / 618 / 71	317 / 749 / 57	424 / 549 / 114	347 / 682 / 93	318 / 589 / 184	274 / 722 / 149	366 / 659 / 66	297 / 808 / 54	395 / 590 / 106	318 / 720 / 86	295 / 630 / 171	268 / 781 / 140	347 / 711 / 63	277 / 860 / 50	376 / 641 / 101	299 / 771 / 80	279 / 664 / 158	262 / 835 / 132
60	1	657 / 449 / 114	528 / 550 / 92	662 / 292 / 174	639 / 435 / 168	561 / 383 / 324	463 / 475 / 263	610 / 481 / 106	493 / 592 / 85	662 / 339 / 174	594 / 467 / 156	526 / 415 / 304	452 / 516 / 247	563 / 509 / 98	458 / 628 / 79	662 / 389 / 174	560 / 504 / 147	490 / 443 / 283	439 / 552 / 232
	2	551 / 517 / 96	446 / 635 / 77	651 / 429 / 171	525 / 529 / 138	508 / 432 / 293	418 / 531 / 237	516 / 558 / 90	423 / 692 / 73	605 / 461 / 159	491 / 570 / 129	472 / 464 / 273	405 / 572 / 221	481 / 594 / 83	387 / 724 / 67	571 / 498 / 150	457 / 606 / 120	446 / 500 / 257	391 / 608 / 206
	3	469 / 618 / 81	376 / 749 / 65	503 / 549 / 132	411 / 682 / 108	374 / 589 / 216	309 / 722 / 175	434 / 659 / 75	352 / 808 / 61	468 / 590 / 123	377 / 720 / 99	348 / 630 / 201	301 / 781 / 165	411 / 711 / 71	329 / 860 / 57	446 / 641 / 117	354 / 771 / 93	321 / 664 / 185	293 / 835 / 155
Wind Speed [mph]		170						180											
45	1	404 / 541 / 75	348 / 675 / 62	499 / 435 / 135	424 / 536 / 109	389 / 476 / 209	361 / 584 / 169	386 / 581 / 71	339 / 717 / 58	472 / 465 / 128	409 / 564 / 102	380 / 505 / 197	359 / 625 / 161						
	2	350 / 640 / 65	291 / 770 / 52	411 / 531 / 112	350 / 652 / 90	352 / 533 / 189	326 / 654 / 153	324 / 664 / 60	291 / 837 / 50	385 / 559 / 105	343 / 694 / 86	341 / 561 / 177	324 / 696 / 145						
	3	297 / 759 / 55	244 / 902 / 43	315 / 670 / 86	267 / 816 / 69	255 / 709 / 137	241 / 881 / 113	279 / 801 / 52	243 / 974 / 42	298 / 711 / 81	267 / 884 / 67	248 / 750 / 129	234 / 919 / 105						
50	1	446 / 541 / 80	373 / 675 / 66	549 / 435 / 147	455 / 536 / 119	416 / 476 / 228	382 / 584 / 184	426 / 581 / 77	363 / 717 / 63	520 / 465 / 140	438 / 564 / 111	405 / 505 / 215	380 / 625 / 175						
	2	386 / 640 / 70	313 / 770 / 56	453 / 531 / 122	376 / 652 / 98	376 / 533 / 206	346 / 654 / 167	357 / 664 / 64	312 / 837 / 54	424 / 559 / 114	367 / 694 / 93	364 / 561 / 193	342 / 696 / 158						
	3	327 / 759 / 59	262 / 902 / 47	347 / 670 / 93	287 / 816 / 75	272 / 709 / 149	255 / 881 / 123	307 / 801 / 56	260 / 974 / 45	328 / 711 / 88	285 / 884 / 73	265 / 750 / 140	247 / 919 / 114						
60	1	528 / 541 / 92	434 / 675 / 75	651 / 435 / 171	525 / 536 / 138	470 / 476 / 268	426 / 584 / 216	505 / 581 / 88	412 / 717 / 71	617 / 465 / 162	495 / 564 / 129	456 / 505 / 252	422 / 625 / 206						
	2	458 / 640 / 79	364 / 770 / 63	537 / 531 / 141	434 / 652 / 114	425 / 533 / 242	385 / 654 / 196	423 / 664 / 73	353 / 837 / 61	503 / 559 / 132	415 / 694 / 108	409 / 561 / 227	379 / 696 / 185						
	3	387 / 759 / 67	305 / 902 / 53	411 / 670 / 108	331 / 816 / 87	307 / 709 / 175	284 / 881 / 144	364 / 801 / 63	294 / 974 / 51	388 / 711 / 102	323 / 884 / 84	298 / 750 / 165	274 / 919 / 134						
Wind Speed [mph]		190						200											
45	1	359 / 605 / 67	330 / 755 / 55	449 / 491 / 121	403 / 601 / 98	370 / 530 / 185	348 / 646 / 149	350 / 638 / 63	321 / 788 / 52	433 / 515 / 114	396 / 636 / 93	367 / 563 / 177	355 / 698 / 145						
	2	306 / 701 / 57	280 / 871 / 47	370 / 597 / 100	334 / 732 / 81	338 / 599 / 169	320 / 734 / 137	304 / 755 / 55	269 / 898 / 43	352 / 616 / 93	325 / 765 / 76	325 / 618 / 157	315 / 766 / 129						
	3	261 / 836 / 48	240 / 1043 / 40	282 / 747 / 76	256 / 916 / 62	249 / 811 / 125	235 / 985 / 101	258 / 896 / 47	228 / 1061 / 37	280 / 804 / 74	254 / 977 / 60	242 / 841 / 117	227 / 1005 / 93						
50	1	396 / 605 / 71	353 / 755 / 59	492 / 491 / 132	430 / 601 / 106	393 / 530 / 202	367 / 646 / 162	376 / 638 / 68	342 / 788 / 56	465 / 515 / 124	422 / 636 / 101	389 / 563 / 193	373 / 698 / 158						
	2	337 / 701 / 61	300 / 871 / 50	405 / 597 / 109	357 / 732 / 88	359 / 599 / 184	338 / 734 / 149	327 / 755 / 59	287 / 898 / 47	378 / 616 / 101	347 / 765 / 83	345 / 618 / 171	332 / 766 / 140						
	3	287 / 836 / 52	257 / 1043 / 43	309 / 747 / 83	273 / 916 / 67	265 / 811 / 136	248 / 985 / 110	277 / 896 / 50	243 / 1061 / 40	301 / 804 / 80	271 / 977 / 65	257 / 841 / 127	239 / 1005 / 101						
60	1	469 / 605 / 81	398 / 755 / 67	582 / 491 / 153	485 / 601 / 123	441 / 530 / 237	406 / 646 / 191	446 / 638 / 77	385 / 788 / 63	548 / 515 / 144	475 / 636 / 117	435 / 563 / 227	411 / 698 / 185						
	2	399 / 701 / 69	338 / 871 / 57	480 / 597 / 126	402 / 732 / 102	403 / 599 / 216	373 / 734 / 175	387 / 755 / 67	323 / 898 / 53	446 / 616 / 117	389 / 765 / 96	386 / 618 / 201	365 / 766 / 165						
	3	340 / 836 / 59	290 / 1043 / 49	366 / 747 / 96	308 / 916 / 78	297 / 811 / 160	274 / 985 / 129	329 / 896 / 57	273 / 1061 / 45	354 / 804 / 93	304 / 977 / 75	287 / 841 / 150	262 / 1005 / 119						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 70in x 41in Load: Up / Down / Side , lbs

Exposure Category : C	Enclosed Mono Slope Roof																			
	95						100						105							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																	
70	1	719 / 124 / 121	719 / 197 / 121	713 / 159 / 185	713 / 250 / 185	627 / 220 / 362	627 / 342 / 362	719 / 137 / 121	719 / 217 / 121	713 / 176 / 185	713 / 276 / 185	627 / 243 / 362	627 / 376 / 362	719 / 151 / 121	719 / 238 / 121	713 / 194 / 185	713 / 302 / 185	627 / 267 / 362	627 / 411 / 362	
	2	719 / 351 / 121	665 / 497 / 112	713 / 242 / 185	713 / 374 / 185	627 / 276 / 362	617 / 419 / 357	719 / 386 / 121	638 / 523 / 107	713 / 267 / 185	713 / 411 / 185	627 / 304 / 362	586 / 437 / 339	719 / 422 / 121	610 / 547 / 103	713 / 292 / 185	713 / 450 / 185	627 / 333 / 362	556 / 453 / 321	
	3	692 / 478 / 116	556 / 586 / 94	713 / 407 / 185	607 / 530 / 157	556 / 460 / 321	453 / 570 / 262	665 / 504 / 112	543 / 626 / 91	713 / 447 / 185	581 / 556 / 151	525 / 476 / 303	432 / 596 / 250	638 / 528 / 107	516 / 649 / 87	687 / 471 / 178	555 / 580 / 144	504 / 500 / 291	412 / 620 / 238	
	80	1	770 / 117 / 127	770 / 185 / 127	764 / 150 / 196	764 / 236 / 196	677 / 210 / 391	677 / 325 / 391	770 / 129 / 127	770 / 205 / 127	764 / 166 / 196	764 / 260 / 196	677 / 231 / 391	677 / 357 / 391	770 / 143 / 127	770 / 225 / 127	764 / 183 / 196	764 / 285 / 196	677 / 253 / 391	677 / 391 / 391
		2	770 / 331 / 127	755 / 497 / 124	764 / 229 / 196	764 / 354 / 196	677 / 263 / 391	677 / 405 / 391	770 / 364 / 127	724 / 523 / 119	764 / 252 / 196	764 / 388 / 196	677 / 289 / 391	665 / 437 / 384	770 / 398 / 127	693 / 547 / 114	764 / 276 / 196	764 / 425 / 196	677 / 317 / 391	630 / 453 / 364
		3	770 / 469 / 127	631 / 586 / 104	764 / 385 / 196	689 / 530 / 177	630 / 460 / 364	513 / 570 / 297	755 / 504 / 124	616 / 626 / 101	764 / 423 / 196	659 / 556 / 169	595 / 476 / 344	490 / 596 / 283	724 / 528 / 119	585 / 649 / 96	764 / 462 / 196	629 / 580 / 161	572 / 500 / 330	467 / 620 / 270
	90	1	810 / 110 / 131	810 / 174 / 131	805 / 142 / 204	805 / 222 / 204	717 / 199 / 414	717 / 308 / 414	810 / 122 / 131	810 / 192 / 131	805 / 157 / 204	805 / 245 / 204	717 / 219 / 414	717 / 339 / 414	810 / 134 / 131	810 / 211 / 131	805 / 172 / 204	805 / 269 / 204	717 / 240 / 414	717 / 371 / 414
		2	810 / 311 / 131	810 / 477 / 131	805 / 215 / 204	805 / 333 / 204	717 / 249 / 414	717 / 384 / 414	810 / 342 / 131	810 / 523 / 131	805 / 237 / 204	805 / 366 / 204	717 / 274 / 414	717 / 422 / 414	810 / 374 / 131	775 / 547 / 125	805 / 260 / 204	805 / 400 / 204	717 / 301 / 414	704 / 453 / 407
		3	810 / 441 / 131	707 / 586 / 114	805 / 362 / 204	771 / 530 / 196	704 / 460 / 407	574 / 570 / 332	810 / 484 / 131	689 / 626 / 111	805 / 398 / 204	738 / 556 / 187	665 / 476 / 384	548 / 596 / 317	810 / 528 / 131	655 / 649 / 106	805 / 435 / 204	704 / 580 / 179	639 / 500 / 369	522 / 620 / 302
70	Wind Speed [mph] 110 115																			
	1	719 / 166 / 121	692 / 493 / 116	713 / 212 / 185	713 / 330 / 185	627 / 291 / 362	597 / 426 / 345	719 / 181 / 121	651 / 503 / 110	713 / 231 / 185	713 / 359 / 185	627 / 317 / 362	576 / 447 / 333	ASCE Group Zone						
	2	719 / 460 / 121	583 / 569 / 98	713 / 319 / 185	687 / 472 / 178	627 / 364 / 362	535 / 475 / 309	692 / 480 / 116	556 / 588 / 94	713 / 347 / 185	660 / 493 / 171	627 / 395 / 362	514 / 495 / 297	0 - 3	1 = 1' / 1					
	3	610 / 551 / 103	488 / 668 / 82	660 / 493 / 171	528 / 601 / 137	484 / 522 / 279	391 / 640 / 226	583 / 571 / 98	475 / 704 / 80	634 / 514 / 164	515 / 635 / 134	463 / 542 / 268	381 / 675 / 220	2 = 2						
	80	1	770 / 157 / 127	770 / 246 / 127	764 / 201 / 196	764 / 311 / 196	677 / 277 / 391	677 / 426 / 391	770 / 171 / 127	739 / 503 / 121	764 / 219 / 196	764 / 339 / 196	677 / 301 / 391	653 / 447 / 377	3 = 3					
		2	770 / 434 / 127	662 / 569 / 109	764 / 301 / 196	764 / 463 / 196	677 / 346 / 391	607 / 475 / 350	770 / 471 / 127	631 / 588 / 104	764 / 328 / 196	749 / 493 / 192	677 / 376 / 391	583 / 495 / 337	1 = 1					
		3	693 / 551 / 114	554 / 668 / 91	749 / 493 / 192	599 / 601 / 154	548 / 522 / 317	443 / 640 / 256	662 / 571 / 109	539 / 704 / 89	719 / 514 / 184	585 / 635 / 150	525 / 542 / 303	432 / 675 / 250	2 = 2' / 2					
	90	1	810 / 147 / 131	810 / 231 / 131	805 / 189 / 204	805 / 293 / 204	717 / 263 / 414	717 / 404 / 414	810 / 161 / 131	810 / 252 / 131	805 / 206 / 204	805 / 319 / 204	717 / 286 / 414	717 / 439 / 414	3 = 3' / 3					
		2	810 / 408 / 131	741 / 569 / 120	805 / 284 / 204	805 / 436 / 204	717 / 328 / 414	678 / 475 / 392	810 / 443 / 131	707 / 588 / 114	805 / 308 / 204	805 / 473 / 204	717 / 356 / 414	652 / 495 / 377	1 = 1					
3		775 / 551 / 125	620 / 668 / 100	805 / 474 / 204	671 / 601 / 170	613 / 522 / 354	496 / 640 / 286	741 / 571 / 120	603 / 704 / 97	805 / 514 / 204	654 / 635 / 166	587 / 542 / 339	483 / 675 / 279	2 = 2						
70	Wind Speed [mph] 120 130																			
	1	719 / 197 / 121	638 / 533 / 107	713 / 251 / 185	713 / 388 / 185	627 / 343 / 362	556 / 466 / 321	719 / 181 / 121	651 / 503 / 110	713 / 231 / 185	713 / 359 / 185	627 / 317 / 362	576 / 447 / 333	10 - 30	1 = 1					
	2	665 / 499 / 112	543 / 620 / 91	713 / 376 / 185	634 / 511 / 164	607 / 414 / 351	494 / 514 / 285	692 / 480 / 116	556 / 588 / 94	713 / 347 / 185	660 / 493 / 171	627 / 395 / 362	514 / 495 / 297	2 = 2						
	3	556 / 588 / 94	461 / 739 / 78	607 / 533 / 157	489 / 651 / 127	442 / 560 / 256	360 / 690 / 208	583 / 571 / 98	475 / 704 / 80	634 / 514 / 164	515 / 635 / 134	463 / 542 / 268	381 / 675 / 220	3 = 3						
	80	1	770 / 186 / 127	724 / 533 / 119	764 / 237 / 196	764 / 367 / 196	677 / 327 / 391	630 / 466 / 364	770 / 171 / 127	739 / 503 / 121	764 / 219 / 196	764 / 339 / 196	677 / 301 / 391	653 / 447 / 377	1 = 1					
		2	755 / 499 / 124	616 / 620 / 101	764 / 355 / 196	719 / 511 / 184	677 / 407 / 391	560 / 514 / 324	770 / 471 / 127	631 / 588 / 104	764 / 328 / 196	749 / 493 / 192	677 / 376 / 391	583 / 495 / 337	2 = 2					
		3	631 / 588 / 104	524 / 739 / 86	689 / 533 / 177	555 / 651 / 142	502 / 560 / 290	408 / 690 / 236	662 / 571 / 109	539 / 704 / 89	719 / 514 / 184	585 / 635 / 150	525 / 542 / 303	432 / 675 / 250	3 = 3					
	90	1	810 / 175 / 131	810 / 273 / 131	805 / 223 / 204	805 / 345 / 204	717 / 310 / 414	704 / 466 / 407	810 / 161 / 131	810 / 252 / 131	805 / 206 / 204	805 / 319 / 204	717 / 286 / 414	717 / 439 / 414	1 = 1					
		2	810 / 479 / 131	689 / 620 / 111	805 / 334 / 204	805 / 511 / 204	717 / 386 / 414	626 / 514 / 362	810 / 443 / 131	707 / 588 / 114	805 / 308 / 204	805 / 473 / 204	717 / 356 / 414	652 / 495 / 377	2 = 2					
3		707 / 588 / 114	586 / 739 / 95	771 / 533 / 196	621 / 651 / 158	561 / 560 / 324	457 / 690 / 264	741 / 571 / 120	603 / 704 / 97	805 / 514 / 204	654 / 635 / 166	587 / 542 / 339	483 / 675 / 279	3 = 3						

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
	70	1	719 / 214 / 121	610 / 550 / 103	713 / 272 / 185	713 / 419 / 185	627 / 371 / 362	525 / 475 / 303	705 / 481 / 119	570 / 592 / 96	713 / 316 / 185	687 / 467 / 178	607 / 415 / 351	501 / 516 / 285	651 / 509 / 110	529 / 628 / 89	713 / 362 / 185	647 / 504 / 168	566 / 443 / 327
2		638 / 517 / 107	516 / 635 / 87	713 / 406 / 185	607 / 529 / 157	586 / 432 / 339	473 / 531 / 273	597 / 558 / 100	488 / 692 / 82	700 / 461 / 181	568 / 570 / 147	545 / 464 / 315	449 / 572 / 256	556 / 594 / 94	448 / 724 / 75	660 / 498 / 171	528 / 606 / 137	514 / 500 / 297	432 / 608 / 238
3		543 / 618 / 91	434 / 749 / 73	581 / 549 / 151	475 / 682 / 123	432 / 589 / 250	350 / 722 / 202	502 / 659 / 85	407 / 808 / 69	541 / 590 / 140	436 / 720 / 113	401 / 630 / 232	334 / 781 / 190	475 / 711 / 80	380 / 860 / 64	515 / 641 / 134	409 / 771 / 106	371 / 664 / 214	324 / 835 / 179
1		770 / 202 / 127	693 / 550 / 114	764 / 257 / 196	764 / 396 / 196	677 / 353 / 391	595 / 475 / 344	770 / 235 / 127	647 / 592 / 106	764 / 298 / 196	764 / 458 / 196	677 / 408 / 391	560 / 516 / 324	739 / 509 / 121	601 / 628 / 99	764 / 342 / 196	734 / 504 / 188	642 / 443 / 371	532 / 552 / 303
2		724 / 517 / 119	585 / 635 / 96	764 / 384 / 196	689 / 529 / 177	665 / 432 / 384	537 / 531 / 310	678 / 558 / 111	554 / 692 / 91	764 / 443 / 196	644 / 570 / 165	618 / 464 / 357	502 / 572 / 290	631 / 594 / 104	508 / 724 / 84	749 / 498 / 192	599 / 606 / 154	583 / 500 / 337	473 / 608 / 270
3		616 / 618 / 101	493 / 749 / 81	659 / 549 / 169	540 / 682 / 138	490 / 589 / 283	397 / 722 / 229	570 / 659 / 94	462 / 808 / 76	614 / 590 / 157	495 / 720 / 127	455 / 630 / 263	374 / 781 / 216	539 / 711 / 89	431 / 860 / 71	585 / 641 / 150	465 / 771 / 119	420 / 664 / 243	355 / 835 / 202
1		810 / 190 / 131	775 / 550 / 125	805 / 242 / 204	805 / 373 / 204	717 / 335 / 414	665 / 475 / 384	810 / 221 / 131	724 / 592 / 117	805 / 281 / 204	805 / 431 / 204	717 / 387 / 414	626 / 516 / 362	810 / 254 / 131	672 / 628 / 108	805 / 322 / 204	805 / 493 / 204	717 / 443 / 414	587 / 552 / 339
2		810 / 517 / 131	655 / 635 / 106	805 / 361 / 204	771 / 529 / 196	717 / 416 / 414	600 / 531 / 347	758 / 558 / 122	620 / 692 / 100	805 / 417 / 204	721 / 570 / 183	691 / 464 / 399	561 / 572 / 324	707 / 594 / 114	569 / 724 / 92	805 / 478 / 204	671 / 606 / 170	652 / 500 / 377	522 / 608 / 302
3		689 / 618 / 111	552 / 749 / 89	738 / 549 / 187	604 / 682 / 153	548 / 589 / 317	444 / 722 / 256	638 / 659 / 103	517 / 808 / 84	688 / 590 / 175	553 / 720 / 141	509 / 630 / 294	418 / 781 / 241	603 / 711 / 97	483 / 860 / 78	654 / 641 / 166	520 / 771 / 132	470 / 664 / 271	392 / 835 / 226
Wind Speed [mph]		170						180											
70	1	610 / 541 / 103	502 / 675 / 85	713 / 412 / 185	607 / 536 / 157	535 / 476 / 309	469 / 584 / 250	583 / 581 / 98	475 / 717 / 80	713 / 465 / 185	568 / 564 / 147	507 / 505 / 291	463 / 625 / 238						
	2	529 / 640 / 89	421 / 770 / 71	621 / 531 / 161	502 / 652 / 130	484 / 533 / 279	425 / 654 / 226	488 / 664 / 82	407 / 837 / 69	581 / 559 / 151	475 / 694 / 123	455 / 561 / 262	417 / 696 / 214						
	3	448 / 759 / 75	353 / 902 / 60	475 / 670 / 123	383 / 816 / 99	350 / 709 / 202	313 / 881 / 167	421 / 801 / 71	339 / 974 / 57	449 / 711 / 116	370 / 884 / 96	331 / 750 / 190	301 / 919 / 155						
	1	693 / 541 / 114	570 / 675 / 94	764 / 389 / 196	689 / 536 / 177	607 / 476 / 350	513 / 584 / 283	662 / 581 / 109	539 / 717 / 89	764 / 439 / 196	644 / 564 / 165	572 / 505 / 330	504 / 625 / 270						
	2	601 / 640 / 99	478 / 770 / 79	704 / 531 / 180	570 / 652 / 146	548 / 533 / 317	464 / 654 / 256	554 / 664 / 91	462 / 837 / 76	659 / 559 / 169	540 / 694 / 138	513 / 561 / 297	454 / 696 / 243						
	3	508 / 759 / 84	401 / 902 / 66	540 / 670 / 138	435 / 816 / 112	397 / 709 / 229	342 / 881 / 189	478 / 801 / 79	385 / 974 / 64	510 / 711 / 131	420 / 884 / 108	374 / 750 / 216	328 / 919 / 175						
	1	775 / 541 / 125	638 / 675 / 103	805 / 366 / 204	771 / 536 / 196	678 / 476 / 392	556 / 584 / 317	741 / 581 / 120	603 / 717 / 97	805 / 413 / 204	721 / 564 / 183	639 / 505 / 369	546 / 625 / 302						
	2	672 / 640 / 108	534 / 770 / 86	788 / 531 / 200	637 / 652 / 162	613 / 533 / 354	503 / 654 / 286	620 / 664 / 100	517 / 837 / 84	738 / 559 / 187	604 / 694 / 153	574 / 561 / 332	491 / 696 / 271						
	3	569 / 759 / 92	448 / 902 / 72	604 / 670 / 153	486 / 816 / 124	444 / 709 / 256	371 / 881 / 211	534 / 801 / 86	431 / 974 / 70	570 / 711 / 145	470 / 884 / 119	418 / 750 / 241	355 / 919 / 196						
Wind Speed [mph]		190						200											
70	1	543 / 605 / 91	448 / 755 / 75	673 / 491 / 174	541 / 601 / 140	489 / 530 / 273	444 / 646 / 220	516 / 638 / 87	427 / 788 / 71	634 / 515 / 164	527 / 636 / 134	480 / 563 / 262	448 / 698 / 214						
	2	461 / 701 / 78	380 / 871 / 64	555 / 597 / 144	449 / 732 / 116	446 / 599 / 250	408 / 734 / 202	448 / 755 / 75	358 / 898 / 60	515 / 616 / 134	432 / 765 / 110	426 / 618 / 232	398 / 766 / 190						
	3	394 / 836 / 66	326 / 1043 / 55	423 / 747 / 110	344 / 916 / 89	329 / 811 / 184	300 / 985 / 149	380 / 896 / 64	303 / 1061 / 50	409 / 804 / 106	338 / 977 / 86	317 / 841 / 173	286 / 1005 / 137						
	1	616 / 605 / 101	508 / 755 / 84	764 / 491 / 196	614 / 601 / 157	537 / 530 / 310	482 / 646 / 250	585 / 638 / 96	478 / 788 / 79	719 / 515 / 184	585 / 636 / 150	526 / 563 / 297	485 / 698 / 243						
	2	524 / 701 / 86	431 / 871 / 71	629 / 597 / 161	510 / 732 / 131	490 / 599 / 283	443 / 734 / 229	508 / 755 / 84	401 / 898 / 66	585 / 616 / 150	480 / 765 / 123	466 / 618 / 263	431 / 766 / 216						
	3	447 / 836 / 74	370 / 1043 / 61	480 / 747 / 123	390 / 916 / 100	362 / 811 / 209	326 / 985 / 169	431 / 896 / 71	339 / 1061 / 56	465 / 804 / 119	375 / 977 / 96	347 / 841 / 196	310 / 1005 / 155						
	1	689 / 605 / 111	569 / 755 / 92	805 / 462 / 204	688 / 601 / 175	600 / 530 / 347	520 / 646 / 279	655 / 638 / 106	534 / 788 / 86	805 / 515 / 204	654 / 636 / 166	574 / 563 / 332	522 / 698 / 271						
	2	586 / 701 / 95	483 / 871 / 78	704 / 597 / 179	570 / 732 / 145	548 / 599 / 317	478 / 734 / 256	569 / 755 / 92	448 / 898 / 72	654 / 616 / 166	537 / 765 / 136	509 / 618 / 294	464 / 766 / 241						
	3	500 / 836 / 81	414 / 1043 / 67	537 / 747 / 136	436 / 916 / 111	405 / 811 / 234	352 / 985 / 189	483 / 896 / 78	379 / 1061 / 61	520 / 804 / 132	419 / 977 / 107	379 / 841 / 219	334 / 1005 / 174						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 70in x 41in | Load: Up / Down / Side , lbs

Exposure Category : C

Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	858 / 105 / 136	858 / 167 / 136	853 / 136 / 215	853 / 213 / 215	750 / 188 / 433	750 / 291 / 433	858 / 116 / 136	858 / 184 / 136	853 / 150 / 215	853 / 235 / 215	750 / 207 / 433	750 / 320 / 433	858 / 129 / 136	858 / 202 / 136	853 / 165 / 215	853 / 257 / 215	750 / 227 / 433
2		858 / 298 / 136	858 / 457 / 136	853 / 206 / 215	853 / 319 / 215	750 / 236 / 433	750 / 363 / 433	858 / 327 / 136	858 / 501 / 136	853 / 227 / 215	853 / 350 / 215	750 / 259 / 433	750 / 399 / 433	858 / 358 / 136	858 / 547 / 136	853 / 249 / 215	853 / 383 / 215	750 / 284 / 433	750 / 436 / 433
3		858 / 422 / 136	782 / 586 / 124	853 / 347 / 215	853 / 530 / 215	750 / 443 / 433	635 / 570 / 367	858 / 463 / 136	763 / 626 / 121	853 / 381 / 215	816 / 556 / 206	736 / 476 / 425	606 / 596 / 350	858 / 506 / 136	725 / 649 / 115	853 / 417 / 215	779 / 580 / 196	707 / 500 / 408	577 / 620 / 333
Wind Speed [mph]		110						115											
100	1	858 / 141 / 136	858 / 221 / 136	853 / 181 / 215	853 / 281 / 215	750 / 248 / 433	750 / 382 / 433	858 / 154 / 136	858 / 241 / 136	853 / 197 / 215	853 / 306 / 215	750 / 270 / 433	750 / 415 / 433						
	2	858 / 390 / 136	820 / 569 / 130	853 / 272 / 215	853 / 418 / 215	750 / 310 / 433	750 / 475 / 433	858 / 424 / 136	782 / 588 / 124	853 / 296 / 215	853 / 453 / 215	750 / 337 / 433	721 / 495 / 417						
	3	858 / 551 / 136	686 / 668 / 109	853 / 454 / 215	742 / 601 / 187	678 / 522 / 392	548 / 640 / 317	820 / 571 / 130	667 / 704 / 106	853 / 493 / 215	724 / 635 / 182	649 / 542 / 375	534 / 675 / 308						
Wind Speed [mph]		120						130											
100	1	858 / 168 / 136	858 / 261 / 136	853 / 214 / 215	853 / 331 / 215	750 / 293 / 433	750 / 449 / 433	858 / 154 / 136	858 / 241 / 136	853 / 197 / 215	853 / 306 / 215	750 / 270 / 433	750 / 415 / 433						
	2	858 / 459 / 136	763 / 620 / 121	853 / 320 / 215	853 / 490 / 215	750 / 365 / 433	692 / 514 / 400	858 / 424 / 136	782 / 588 / 124	853 / 296 / 215	853 / 453 / 215	750 / 337 / 433	721 / 495 / 417						
	3	782 / 588 / 124	648 / 739 / 103	853 / 533 / 215	686 / 651 / 173	620 / 560 / 358	505 / 690 / 292	820 / 571 / 130	667 / 704 / 106	853 / 493 / 215	724 / 635 / 182	649 / 542 / 375	534 / 675 / 308						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 70in x 41in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																		
	140						150						160						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
100	1	858 / 182 / 136	858 / 282 / 136	853 / 232 / 215	853 / 357 / 215	750 / 316 / 433	736 / 475 / 425	858 / 212 / 136	801 / 592 / 127	853 / 269 / 215	853 / 413 / 215	750 / 366 / 433	692 / 516 / 400	858 / 243 / 136	744 / 628 / 118	853 / 309 / 215	853 / 473 / 215	750 / 419 / 433	649 / 552 / 375
	2	858 / 495 / 136	725 / 635 / 115	853 / 346 / 215	853 / 529 / 215	750 / 394 / 433	663 / 531 / 383	839 / 558 / 133	686 / 692 / 109	853 / 400 / 215	798 / 570 / 201	750 / 455 / 433	620 / 572 / 358	782 / 594 / 124	629 / 724 / 100	853 / 458 / 215	742 / 606 / 187	721 / 500 / 417	577 / 608 / 333
	3	763 / 618 / 121	610 / 749 / 97	816 / 549 / 206	668 / 682 / 168	606 / 589 / 350	491 / 722 / 283		705 / 659 / 112	572 / 808 / 91	761 / 590 / 192	612 / 720 / 154	563 / 630 / 325	462 / 781 / 267	667 / 711 / 106	534 / 860 / 85	724 / 641 / 182	575 / 771 / 145	519 / 664 / 300
100	1	858 / 277 / 136	705 / 675 / 112	853 / 351 / 215	853 / 536 / 215	750 / 476 / 433	606 / 584 / 350	820 / 581 / 130	667 / 717 / 106	853 / 396 / 215	798 / 564 / 201	707 / 505 / 408	587 / 625 / 333						
	2	744 / 640 / 118	591 / 770 / 94	853 / 519 / 215	705 / 652 / 178	678 / 533 / 392	548 / 654 / 317	686 / 664 / 109	572 / 837 / 91	816 / 559 / 206	668 / 694 / 168	635 / 561 / 367	528 / 696 / 300						
	3	629 / 759 / 100	496 / 902 / 79	668 / 670 / 168	538 / 816 / 136	491 / 709 / 283	404 / 881 / 233		591 / 801 / 94	477 / 974 / 76	631 / 711 / 159	520 / 884 / 131	462 / 750 / 267	382 / 919 / 217					
100	1	763 / 605 / 121	629 / 755 / 100	853 / 443 / 215	761 / 601 / 192	663 / 530 / 383	559 / 646 / 308	725 / 638 / 115	591 / 788 / 94	853 / 493 / 215	724 / 636 / 182	635 / 563 / 367	559 / 698 / 300						
	2	648 / 701 / 103	534 / 871 / 85	779 / 597 / 196	631 / 732 / 159	606 / 599 / 350	513 / 734 / 283	629 / 755 / 100	496 / 898 / 79	724 / 616 / 182	594 / 765 / 150	563 / 618 / 325	497 / 766 / 267						
	3	553 / 836 / 88	458 / 1043 / 73	594 / 747 / 150	483 / 916 / 122	447 / 811 / 258	378 / 985 / 209		534 / 896 / 85	420 / 1061 / 67	575 / 804 / 145	464 / 977 / 117	418 / 841 / 242	358 / 1005 / 192					

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	0	1	206 / 372 / 36	166 / 462 / 29	242 / 272 / 49	208 / 366 / 42	220 / 311 / 59	184 / 403 / 50	196 / 391 / 35	157 / 479 / 28	235 / 293 / 48	199 / 385 / 40	214 / 333 / 58	175 / 421 / 47	187 / 408 / 33	151 / 503 / 27	226 / 310 / 46	190 / 402 / 39	208 / 355 / 56	177 / 437 / 45
2		175 / 437 / 31	141 / 539 / 25	211 / 359 / 43	168 / 442 / 34	205 / 363 / 55	164 / 444 / 44	166 / 455 / 29	135 / 565 / 24	202 / 378 / 41	162 / 467 / 33	193 / 376 / 52	158 / 470 / 43	160 / 479 / 28	129 / 589 / 23	193 / 396 / 39	156 / 491 / 32	187 / 399 / 50	158 / 484 / 40	
3		147 / 520 / 26	120 / 643 / 21	162 / 463 / 33	132 / 572 / 27	149 / 492 / 40	122 / 613 / 33	141 / 547 / 25	114 / 668 / 20	156 / 489 / 32	126 / 598 / 26	143 / 518 / 39	116 / 639 / 31	135 / 571 / 24	108 / 689 / 19	150 / 513 / 31	120 / 621 / 24	137 / 542 / 37	117 / 661 / 30	
5		1	227 / 372 / 36	183 / 462 / 29	265 / 272 / 52	228 / 366 / 45	220 / 311 / 71	184 / 403 / 59	217 / 391 / 35	173 / 479 / 28	259 / 293 / 50	218 / 385 / 43	214 / 333 / 69	175 / 421 / 57	207 / 408 / 33	166 / 503 / 27	249 / 310 / 48	208 / 402 / 41	208 / 355 / 67	177 / 437 / 54
		2	194 / 437 / 31	156 / 539 / 25	232 / 359 / 45	185 / 442 / 36	205 / 363 / 66	164 / 444 / 53	183 / 455 / 29	150 / 565 / 24	222 / 378 / 43	178 / 467 / 35	193 / 376 / 62	158 / 470 / 51	177 / 479 / 28	143 / 589 / 23	212 / 396 / 41	171 / 491 / 34	187 / 399 / 60	158 / 484 / 48
		3	163 / 520 / 26	133 / 643 / 21	178 / 463 / 35	145 / 572 / 28	149 / 492 / 48	122 / 613 / 39	156 / 547 / 25	126 / 668 / 20	171 / 489 / 34	138 / 598 / 27	143 / 518 / 46	116 / 639 / 38	150 / 571 / 24	119 / 689 / 19	165 / 513 / 32	131 / 621 / 26	137 / 542 / 44	117 / 661 / 36
10		1	288 / 372 / 36	232 / 462 / 29	327 / 266 / 62	289 / 366 / 55	245 / 311 / 91	205 / 403 / 76	275 / 391 / 35	220 / 479 / 28	327 / 293 / 62	276 / 385 / 53	238 / 333 / 88	195 / 421 / 72	263 / 408 / 33	211 / 503 / 27	314 / 310 / 60	263 / 402 / 50	232 / 355 / 86	193 / 437 / 69
		2	245 / 437 / 31	198 / 539 / 25	293 / 359 / 56	233 / 442 / 45	228 / 363 / 84	182 / 444 / 67	232 / 455 / 29	190 / 565 / 24	280 / 378 / 54	225 / 467 / 43	215 / 376 / 80	175 / 470 / 65	224 / 479 / 28	181 / 589 / 23	267 / 396 / 51	217 / 491 / 41	208 / 399 / 77	172 / 484 / 61
		3	207 / 520 / 26	168 / 643 / 21	225 / 463 / 43	183 / 572 / 35	166 / 492 / 61	136 / 613 / 50	198 / 547 / 25	159 / 668 / 20	217 / 489 / 41	174 / 598 / 33	159 / 518 / 59	129 / 639 / 48	190 / 571 / 24	151 / 689 / 19	208 / 513 / 40	166 / 621 / 32	152 / 542 / 56	128 / 661 / 46
0	1	178 / 423 / 31	144 / 525 / 26	220 / 330 / 45	181 / 418 / 37	199 / 371 / 54	182 / 459 / 43	172 / 444 / 30	138 / 545 / 24	214 / 349 / 43	174 / 438 / 35	190 / 385 / 51	187 / 479 / 42							
	2	154 / 502 / 27	123 / 610 / 22	184 / 411 / 37	147 / 504 / 30	178 / 414 / 48	162 / 506 / 39	147 / 522 / 26	117 / 629 / 21	177 / 432 / 36	144 / 535 / 29	169 / 427 / 46	165 / 526 / 37							
	3	129 / 593 / 23	105 / 728 / 19	141 / 524 / 29	116 / 658 / 24	131 / 564 / 35	118 / 679 / 28	123 / 613 / 22	98 / 742 / 18	138 / 556 / 28	110 / 675 / 23	125 / 584 / 34	122 / 715 / 27							
	5	1	197 / 423 / 31	160 / 525 / 26	242 / 330 / 47	198 / 418 / 39	199 / 371 / 64	182 / 459 / 52	190 / 444 / 30	153 / 545 / 24	235 / 349 / 46	192 / 438 / 37	190 / 385 / 61	187 / 479 / 50						
		2	170 / 502 / 27	136 / 610 / 22	202 / 411 / 39	161 / 504 / 32	178 / 414 / 58	162 / 506 / 46	163 / 522 / 26	129 / 629 / 21	195 / 432 / 38	158 / 535 / 31	169 / 427 / 55	165 / 526 / 44						
		3	143 / 593 / 23	116 / 728 / 19	155 / 524 / 30	128 / 658 / 25	131 / 564 / 42	118 / 679 / 34	136 / 613 / 22	109 / 742 / 18	151 / 556 / 30	121 / 675 / 24	125 / 584 / 40	122 / 715 / 33						
	10	1	250 / 423 / 31	202 / 525 / 26	305 / 330 / 58	250 / 418 / 48	222 / 371 / 82	195 / 459 / 66	241 / 444 / 30	194 / 545 / 24	297 / 349 / 57	242 / 438 / 46	212 / 385 / 78	196 / 479 / 64						
		2	215 / 502 / 27	172 / 610 / 22	255 / 411 / 49	204 / 504 / 39	199 / 414 / 73	173 / 506 / 59	207 / 522 / 26	164 / 629 / 21	246 / 432 / 47	200 / 535 / 38	189 / 427 / 70	174 / 526 / 56						
		3	181 / 593 / 23	147 / 728 / 19	195 / 524 / 37	161 / 658 / 31	146 / 564 / 54	126 / 679 / 43	172 / 613 / 22	138 / 742 / 18	191 / 556 / 37	153 / 675 / 29	139 / 584 / 52	128 / 715 / 42						
0	1	166 / 464 / 29	134 / 563 / 23	208 / 368 / 42	168 / 450 / 34	184 / 404 / 50	191 / 499 / 40	172 / 444 / 30	138 / 545 / 24	214 / 349 / 43	174 / 438 / 35	190 / 385 / 51	187 / 479 / 42							
	2	141 / 541 / 25	116 / 661 / 20	168 / 444 / 34	140 / 554 / 28	164 / 446 / 44	172 / 556 / 36	147 / 522 / 26	117 / 629 / 21	177 / 432 / 36	144 / 535 / 29	169 / 427 / 46	165 / 526 / 37							
	3	117 / 629 / 21	97 / 776 / 17	132 / 575 / 27	109 / 709 / 22	119 / 601 / 32	126 / 749 / 27	123 / 613 / 22	98 / 742 / 18	138 / 556 / 28	110 / 675 / 23	125 / 584 / 34	122 / 715 / 27							
	5	1	183 / 464 / 29	148 / 563 / 23	228 / 368 / 45	184 / 450 / 35	184 / 404 / 59	191 / 499 / 48	190 / 444 / 30	153 / 545 / 24	235 / 349 / 46	192 / 438 / 37	190 / 385 / 61	187 / 479 / 50						
		2	156 / 541 / 25	127 / 661 / 20	185 / 444 / 36	153 / 554 / 30	164 / 446 / 53	172 / 556 / 43	163 / 522 / 26	129 / 629 / 21	195 / 432 / 38	158 / 535 / 31	169 / 427 / 55	165 / 526 / 44						
		3	129 / 629 / 21	107 / 776 / 17	145 / 575 / 28	119 / 709 / 23	119 / 601 / 39	126 / 749 / 32	136 / 613 / 22	109 / 742 / 18	151 / 556 / 30	121 / 675 / 24	125 / 584 / 40	122 / 715 / 33						
	10	1	232 / 464 / 29	187 / 563 / 23	289 / 368 / 55	231 / 450 / 44	205 / 404 / 76	197 / 499 / 61	241 / 444 / 30	194 / 545 / 24	297 / 349 / 57	242 / 438 / 46	212 / 385 / 78	196 / 479 / 64						
		2	198 / 541 / 25	161 / 661 / 20	233 / 444 / 45	193 / 554 / 37	182 / 446 / 67	178 / 556 / 55	207 / 522 / 26	164 / 629 / 21	246 / 432 / 47	200 / 535 / 38	189 / 427 / 70	174 / 526 / 56						
		3	164 / 629 / 21	135 / 776 / 17	183 / 575 / 35	150 / 709 / 29	133 / 601 / 49	130 / 749 / 41	172 / 613 / 22	138 / 742 / 18	191 / 556 / 37	153 / 675 / 29	139 / 584 / 52	128 / 715 / 42						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	160 / 482 / 28	139 / 593 / 23	199 / 380 / 40	171 / 467 / 32	175 / 416 / 47	195 / 516 / 39	147 / 514 / 26	144 / 635 / 21	184 / 407 / 37	180 / 509 / 31	179 / 448 / 44	206 / 558 / 36	138 / 551 / 24	147 / 669 / 20	171 / 435 / 35	188 / 546 / 29	185 / 475 / 41
2		135 / 558 / 24	119 / 693 / 20	162 / 461 / 33	142 / 571 / 27	158 / 464 / 43	175 / 573 / 35	126 / 600 / 22	122 / 732 / 18	153 / 503 / 31	147 / 612 / 25	160 / 495 / 39	183 / 614 / 32	117 / 635 / 21	127 / 784 / 17	141 / 529 / 29	151 / 646 / 23	167 / 531 / 37	189 / 648 / 30
3		114 / 660 / 20	99 / 809 / 16	126 / 591 / 26	109 / 720 / 21	116 / 631 / 31	130 / 782 / 26	108 / 719 / 19	103 / 868 / 15	116 / 631 / 24	114 / 779 / 20	118 / 670 / 29	133 / 815 / 23	98 / 749 / 18	107 / 919 / 14	110 / 682 / 23	119 / 831 / 18	123 / 722 / 27	143 / 897 / 23
5	1	177 / 482 / 28	150 / 593 / 23	218 / 380 / 43	184 / 467 / 34	175 / 416 / 57	195 / 516 / 46	163 / 514 / 26	151 / 635 / 21	202 / 407 / 39	187 / 509 / 32	179 / 448 / 53	206 / 558 / 43	153 / 551 / 24	150 / 669 / 20	188 / 435 / 37	190 / 546 / 30	185 / 475 / 49	215 / 595 / 40
	2	150 / 558 / 24	129 / 693 / 20	178 / 461 / 35	152 / 571 / 28	158 / 464 / 51	175 / 573 / 41	139 / 600 / 22	127 / 732 / 18	168 / 503 / 33	153 / 612 / 26	160 / 495 / 47	183 / 614 / 39	129 / 635 / 21	129 / 784 / 17	155 / 529 / 30	153 / 646 / 24	167 / 531 / 44	189 / 648 / 36
	3	126 / 660 / 20	107 / 809 / 16	138 / 591 / 27	117 / 720 / 22	116 / 631 / 38	130 / 782 / 31	119 / 719 / 19	108 / 868 / 15	128 / 631 / 25	119 / 779 / 21	118 / 670 / 35	133 / 815 / 28	109 / 749 / 18	108 / 919 / 14	121 / 682 / 24	120 / 831 / 19	123 / 722 / 33	143 / 897 / 27
10	1	224 / 482 / 28	188 / 593 / 23	276 / 380 / 53	230 / 467 / 42	195 / 416 / 72	198 / 516 / 59	207 / 514 / 26	186 / 635 / 21	255 / 407 / 49	231 / 509 / 40	194 / 448 / 67	206 / 558 / 55	194 / 551 / 24	183 / 669 / 20	238 / 435 / 46	231 / 546 / 37	194 / 475 / 63	215 / 595 / 52
	2	190 / 558 / 24	161 / 693 / 20	225 / 461 / 43	190 / 571 / 35	175 / 464 / 65	178 / 573 / 53	177 / 600 / 22	157 / 732 / 18	212 / 503 / 41	188 / 612 / 33	173 / 495 / 60	183 / 614 / 49	164 / 635 / 21	157 / 784 / 17	195 / 529 / 37	186 / 646 / 30	175 / 531 / 56	189 / 648 / 46
	3	159 / 660 / 20	135 / 809 / 16	174 / 591 / 33	146 / 720 / 27	129 / 631 / 48	132 / 782 / 39	151 / 719 / 19	134 / 868 / 15	161 / 631 / 31	146 / 779 / 25	127 / 670 / 44	133 / 815 / 36	138 / 749 / 18	132 / 919 / 14	153 / 682 / 29	146 / 831 / 24	129 / 722 / 42	143 / 897 / 35
Wind Speed [mph]		170						180											
0	1	137 / 583 / 23	154 / 715 / 19	172 / 468 / 33	194 / 579 / 27	192 / 507 / 39	222 / 625 / 31	143 / 624 / 22	160 / 756 / 18	178 / 498 / 31	199 / 606 / 25	203 / 547 / 37	233 / 667 / 30						
	2	118 / 681 / 20	131 / 829 / 16	140 / 561 / 27	158 / 692 / 22	172 / 563 / 35	199 / 694 / 28	121 / 723 / 19	135 / 867 / 15	146 / 601 / 26	164 / 733 / 21	181 / 603 / 33	208 / 735 / 27						
	3	98 / 795 / 16	113 / 999 / 14	111 / 729 / 21	122 / 874 / 17	128 / 769 / 26	148 / 942 / 21	104 / 863 / 16	115 / 1031 / 13	114 / 771 / 20	129 / 945 / 16	133 / 809 / 24	151 / 976 / 20						
5	1	149 / 583 / 23	154 / 715 / 19	186 / 468 / 35	194 / 579 / 28	192 / 507 / 46	222 / 625 / 38	151 / 624 / 22	160 / 756 / 18	187 / 498 / 33	199 / 606 / 26	203 / 547 / 44	233 / 667 / 36						
	2	128 / 681 / 20	131 / 829 / 16	151 / 561 / 28	158 / 692 / 23	172 / 563 / 41	199 / 694 / 34	128 / 723 / 19	135 / 867 / 15	153 / 601 / 27	164 / 733 / 22	181 / 603 / 39	208 / 735 / 32						
	3	106 / 795 / 16	113 / 999 / 14	119 / 729 / 23	122 / 874 / 18	128 / 769 / 31	148 / 942 / 25	109 / 863 / 16	115 / 1031 / 13	120 / 771 / 21	129 / 945 / 17	133 / 809 / 29	151 / 976 / 23						
10	1	187 / 583 / 23	184 / 715 / 19	233 / 468 / 43	229 / 579 / 35	196 / 507 / 59	222 / 625 / 48	187 / 624 / 22	184 / 756 / 18	231 / 498 / 41	227 / 606 / 33	203 / 547 / 56	233 / 667 / 46						
	2	160 / 681 / 20	157 / 829 / 16	189 / 561 / 35	187 / 692 / 29	176 / 563 / 53	199 / 694 / 43	159 / 723 / 19	155 / 867 / 15	189 / 601 / 33	188 / 733 / 27	181 / 603 / 50	208 / 735 / 41						
	3	134 / 795 / 16	135 / 999 / 14	149 / 729 / 28	144 / 874 / 22	131 / 769 / 39	148 / 942 / 32	136 / 863 / 16	132 / 1031 / 13	148 / 771 / 26	148 / 945 / 21	133 / 809 / 37	151 / 976 / 30						
Wind Speed [mph]		190						200											
0	1	144 / 645 / 20	164 / 791 / 16	182 / 523 / 29	207 / 643 / 24	208 / 571 / 35	243 / 704 / 28	152 / 697 / 20	174 / 849 / 16	190 / 557 / 28	215 / 676 / 23	217 / 605 / 33	252 / 737 / 27						
	2	125 / 760 / 18	142 / 931 / 14	151 / 639 / 24	169 / 769 / 20	189 / 641 / 31	215 / 770 / 25	127 / 791 / 16	150 / 994 / 14	156 / 674 / 23	179 / 826 / 19	196 / 676 / 30	229 / 827 / 24						
	3	105 / 896 / 15	121 / 1100 / 12	117 / 807 / 19	131 / 973 / 15	136 / 843 / 23	160 / 1043 / 19	110 / 958 / 14	126 / 1165 / 12	123 / 866 / 18	137 / 1035 / 15	143 / 902 / 22	168 / 1106 / 18						
5	1	149 / 645 / 20	164 / 791 / 16	187 / 523 / 31	207 / 643 / 25	208 / 571 / 41	243 / 704 / 34	154 / 697 / 20	174 / 849 / 16	190 / 557 / 30	215 / 676 / 24	217 / 605 / 39	252 / 737 / 32						
	2	129 / 760 / 18	142 / 931 / 14	155 / 639 / 26	169 / 769 / 21	189 / 641 / 38	215 / 770 / 30	128 / 791 / 16	150 / 994 / 14	157 / 674 / 24	179 / 826 / 20	196 / 676 / 36	229 / 827 / 29						
	3	109 / 896 / 15	121 / 1100 / 12	119 / 807 / 20	131 / 973 / 16	136 / 843 / 27	160 / 1043 / 22	111 / 958 / 14	126 / 1165 / 12	123 / 866 / 19	137 / 1035 / 15	143 / 902 / 26	168 / 1106 / 21						
10	1	182 / 645 / 20	183 / 791 / 16	228 / 523 / 38	230 / 643 / 31	208 / 571 / 53	243 / 704 / 43	186 / 697 / 20	188 / 849 / 16	230 / 557 / 37	231 / 676 / 29	217 / 605 / 50	252 / 737 / 41						
	2	158 / 760 / 18	159 / 931 / 14	190 / 639 / 32	187 / 769 / 25	189 / 641 / 48	215 / 770 / 38	155 / 791 / 16	162 / 994 / 14	189 / 674 / 30	193 / 826 / 25	196 / 676 / 46	229 / 827 / 37						
	3	133 / 896 / 15	135 / 1100 / 12	146 / 807 / 25	145 / 973 / 20	136 / 843 / 35	160 / 1043 / 28	135 / 958 / 14	136 / 1165 / 12	149 / 866 / 24	148 / 1035 / 19	143 / 902 / 33	168 / 1106 / 27						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	349 / 372 / 37	282 / 462 / 30	379 / 255 / 72	349 / 366 / 66	279 / 311 / 110	234 / 403 / 92	334 / 391 / 36	266 / 479 / 29	379 / 282 / 72	333 / 385 / 63	271 / 333 / 107	222 / 421 / 88	318 / 408 / 34	256 / 503 / 28	379 / 310 / 72	318 / 402 / 60	264 / 355 / 104	219 / 437 / 83
2		297 / 437 / 32	240 / 539 / 26	354 / 359 / 67	282 / 442 / 53	260 / 363 / 103	207 / 444 / 82	282 / 455 / 30	230 / 565 / 25	338 / 378 / 64	272 / 467 / 51	245 / 376 / 97	200 / 470 / 79	271 / 479 / 29	219 / 589 / 24	323 / 396 / 61	262 / 491 / 49	237 / 399 / 94	195 / 484 / 75	
3		250 / 520 / 27	203 / 643 / 22	272 / 463 / 51	221 / 572 / 42	188 / 492 / 75	155 / 613 / 61	240 / 547 / 26	193 / 668 / 21	262 / 489 / 49	210 / 598 / 40	181 / 518 / 72	147 / 639 / 58	230 / 571 / 25	183 / 689 / 20	251 / 513 / 48	200 / 621 / 38	173 / 542 / 69	145 / 661 / 55	
20		1	410 / 372 / 41	331 / 462 / 33	421 / 241 / 79	409 / 366 / 76	313 / 311 / 132	262 / 403 / 111	392 / 391 / 39	312 / 479 / 31	421 / 267 / 79	391 / 385 / 73	304 / 333 / 129	249 / 421 / 105	373 / 408 / 37	300 / 503 / 30	421 / 293 / 79	373 / 402 / 70	296 / 355 / 125	244 / 437 / 100
		2	349 / 437 / 35	282 / 539 / 28	415 / 359 / 77	331 / 442 / 62	292 / 363 / 123	233 / 444 / 98	331 / 455 / 33	270 / 565 / 27	397 / 378 / 74	319 / 467 / 60	275 / 376 / 116	224 / 470 / 95	318 / 479 / 32	257 / 589 / 26	379 / 396 / 71	307 / 491 / 57	266 / 399 / 113	218 / 484 / 89
		3	294 / 520 / 29	239 / 643 / 24	319 / 463 / 60	259 / 572 / 48	211 / 492 / 89	173 / 613 / 73	282 / 547 / 28	227 / 668 / 23	307 / 489 / 57	247 / 598 / 46	203 / 518 / 86	165 / 639 / 70	270 / 571 / 27	214 / 689 / 21	295 / 513 / 55	235 / 621 / 44	195 / 542 / 82	162 / 661 / 66
25		1	410 / 372 / 41	331 / 462 / 33	421 / 241 / 79	409 / 366 / 76	347 / 311 / 158	291 / 403 / 133	392 / 391 / 39	312 / 479 / 31	421 / 267 / 79	391 / 385 / 73	337 / 333 / 154	277 / 421 / 126	373 / 408 / 37	300 / 503 / 30	421 / 293 / 79	373 / 402 / 70	328 / 355 / 150	270 / 437 / 120
		2	349 / 437 / 35	282 / 539 / 28	415 / 359 / 77	331 / 442 / 62	323 / 363 / 148	258 / 444 / 118	331 / 455 / 33	270 / 565 / 27	397 / 378 / 74	319 / 467 / 60	305 / 376 / 139	248 / 470 / 114	318 / 479 / 32	257 / 589 / 26	379 / 396 / 71	307 / 491 / 57	295 / 399 / 135	241 / 484 / 107
		3	294 / 520 / 29	239 / 643 / 24	319 / 463 / 60	259 / 572 / 48	234 / 492 / 107	192 / 613 / 88	282 / 547 / 28	227 / 668 / 23	307 / 489 / 57	247 / 598 / 46	225 / 518 / 103	183 / 639 / 84	270 / 571 / 27	214 / 689 / 21	295 / 513 / 55	235 / 621 / 44	216 / 542 / 99	179 / 661 / 79
15	1	302 / 423 / 32	245 / 525 / 26	369 / 330 / 70	303 / 418 / 57	252 / 371 / 100	220 / 459 / 80	292 / 444 / 31	235 / 545 / 25	359 / 349 / 68	292 / 438 / 55	241 / 385 / 95	220 / 479 / 78							
	2	261 / 502 / 28	209 / 610 / 23	308 / 411 / 58	246 / 504 / 47	226 / 414 / 89	195 / 506 / 72	250 / 522 / 27	198 / 629 / 21	297 / 432 / 56	241 / 535 / 46	215 / 427 / 85	195 / 526 / 69							
	3	219 / 593 / 24	177 / 728 / 19	236 / 524 / 45	195 / 658 / 37	166 / 564 / 66	142 / 679 / 52	209 / 613 / 23	167 / 742 / 18	231 / 556 / 44	185 / 675 / 35	158 / 584 / 63	144 / 715 / 51							
	20	1	355 / 423 / 35	288 / 525 / 29	421 / 320 / 79	355 / 418 / 66	283 / 371 / 120	244 / 459 / 97	343 / 444 / 34	276 / 545 / 27	421 / 349 / 79	343 / 438 / 64	271 / 385 / 114	244 / 479 / 93						
		2	306 / 502 / 30	245 / 610 / 24	361 / 411 / 67	289 / 504 / 54	254 / 414 / 107	217 / 506 / 86	294 / 522 / 29	233 / 629 / 23	349 / 432 / 65	283 / 535 / 53	241 / 427 / 102	216 / 526 / 82						
		3	257 / 593 / 26	208 / 728 / 21	277 / 524 / 52	229 / 658 / 43	186 / 564 / 79	159 / 679 / 63	245 / 613 / 24	196 / 742 / 20	271 / 556 / 51	217 / 675 / 41	178 / 584 / 75	160 / 715 / 61						
	25	1	355 / 423 / 35	288 / 525 / 29	421 / 320 / 79	355 / 418 / 66	314 / 371 / 143	269 / 459 / 116	343 / 444 / 34	276 / 545 / 27	421 / 349 / 79	343 / 438 / 64	300 / 385 / 137	268 / 479 / 111						
		2	306 / 502 / 30	245 / 610 / 24	361 / 411 / 67	289 / 504 / 54	281 / 414 / 128	239 / 506 / 103	294 / 522 / 29	233 / 629 / 23	349 / 432 / 65	283 / 535 / 53	267 / 427 / 122	237 / 526 / 99						
		3	257 / 593 / 26	208 / 728 / 21	277 / 524 / 52	229 / 658 / 43	206 / 564 / 94	175 / 679 / 75	245 / 613 / 24	196 / 742 / 20	271 / 556 / 51	217 / 675 / 41	197 / 584 / 90	175 / 715 / 73						
15	1	282 / 464 / 30	226 / 563 / 24	349 / 368 / 66	279 / 450 / 52	234 / 404 / 92	220 / 499 / 75	292 / 444 / 31	235 / 545 / 25	359 / 349 / 68	292 / 438 / 55	241 / 385 / 95	220 / 479 / 78							
	2	240 / 541 / 26	195 / 661 / 21	282 / 444 / 53	233 / 554 / 44	207 / 446 / 82	198 / 556 / 67	250 / 522 / 27	198 / 629 / 21	297 / 432 / 56	241 / 535 / 46	215 / 427 / 85	195 / 526 / 69							
	3	198 / 629 / 21	163 / 776 / 18	221 / 575 / 42	181 / 709 / 34	151 / 601 / 60	146 / 749 / 49	209 / 613 / 23	167 / 742 / 18	231 / 556 / 44	185 / 675 / 35	158 / 584 / 63	144 / 715 / 51							
	20	1	331 / 464 / 33	265 / 563 / 26	409 / 368 / 76	327 / 450 / 61	262 / 404 / 111	243 / 499 / 89	343 / 444 / 34	276 / 545 / 27	421 / 349 / 79	343 / 438 / 64	271 / 385 / 114	244 / 479 / 93						
		2	282 / 541 / 28	228 / 661 / 23	331 / 444 / 62	272 / 554 / 51	233 / 446 / 98	219 / 556 / 81	294 / 522 / 29	233 / 629 / 23	349 / 432 / 65	283 / 535 / 53	241 / 427 / 102	216 / 526 / 82						
		3	233 / 629 / 23	191 / 776 / 19	259 / 575 / 48	212 / 709 / 40	169 / 601 / 72	161 / 749 / 59	245 / 613 / 24	196 / 742 / 20	271 / 556 / 51	217 / 675 / 41	178 / 584 / 75	160 / 715 / 61						
	25	1	331 / 464 / 33	265 / 563 / 26	409 / 368 / 76	327 / 450 / 61	291 / 404 / 133	266 / 499 / 107	343 / 444 / 34	276 / 545 / 27	421 / 349 / 79	343 / 438 / 64	300 / 385 / 137	268 / 479 / 111						
		2	282 / 541 / 28	228 / 661 / 23	331 / 444 / 62	272 / 554 / 51	258 / 446 / 118	240 / 556 / 96	294 / 522 / 29	233 / 629 / 23	349 / 432 / 65	283 / 535 / 53	267 / 427 / 122	237 / 526 / 99						
		3	233 / 629 / 23	191 / 776 / 19	259 / 575 / 48	212 / 709 / 40	188 / 601 / 86	176 / 749 / 71	245 / 613 / 24	196 / 742 / 20	271 / 556 / 51	217 / 675 / 41	197 / 584 / 90	175 / 715 / 73						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	271 / 482 / 29	226 / 593 / 24	333 / 380 / 63	276 / 467 / 50	222 / 416 / 88	220 / 516 / 72	250 / 514 / 27	221 / 635 / 22	308 / 407 / 58	274 / 509 / 48	219 / 448 / 82	224 / 558 / 67	235 / 551 / 25	215 / 669 / 20	287 / 435 / 54	271 / 546 / 45	217 / 475 / 76
2		230 / 558 / 25	194 / 693 / 20	272 / 461 / 51	228 / 571 / 42	200 / 464 / 79	197 / 573 / 64	214 / 600 / 23	187 / 732 / 19	257 / 503 / 48	224 / 612 / 39	195 / 495 / 73	199 / 614 / 60	198 / 635 / 21	186 / 784 / 18	236 / 529 / 45	218 / 646 / 36	196 / 531 / 69	199 / 648 / 55
3		193 / 660 / 21	162 / 809 / 17	210 / 591 / 40	175 / 720 / 32	147 / 631 / 58	147 / 782 / 48	183 / 719 / 20	159 / 868 / 16	195 / 631 / 37	173 / 779 / 30	144 / 670 / 54	144 / 815 / 43	167 / 749 / 18	156 / 919 / 15	185 / 682 / 35	171 / 831 / 28	145 / 722 / 51	151 / 897 / 42
20	1	318 / 482 / 32	265 / 593 / 26	391 / 380 / 73	322 / 467 / 58	249 / 416 / 105	242 / 516 / 86	294 / 514 / 29	257 / 635 / 24	361 / 407 / 67	317 / 509 / 55	244 / 448 / 98	244 / 558 / 81	276 / 551 / 27	248 / 669 / 22	337 / 435 / 63	312 / 546 / 52	240 / 475 / 91	245 / 595 / 75
	2	270 / 558 / 27	227 / 693 / 22	319 / 461 / 60	266 / 571 / 48	224 / 464 / 95	217 / 573 / 77	251 / 600 / 25	217 / 732 / 20	301 / 503 / 56	259 / 612 / 45	218 / 495 / 88	217 / 614 / 72	233 / 635 / 23	214 / 784 / 19	277 / 529 / 52	251 / 646 / 42	217 / 531 / 82	216 / 648 / 66
	3	227 / 660 / 23	189 / 809 / 18	247 / 591 / 46	204 / 720 / 37	165 / 631 / 70	162 / 782 / 57	214 / 719 / 21	185 / 868 / 17	229 / 631 / 43	201 / 779 / 35	160 / 670 / 65	158 / 815 / 52	196 / 749 / 20	179 / 919 / 16	217 / 682 / 41	197 / 831 / 33	160 / 722 / 61	163 / 897 / 50
25	1	318 / 482 / 32	265 / 593 / 26	391 / 380 / 73	322 / 467 / 58	277 / 416 / 126	264 / 516 / 103	294 / 514 / 29	257 / 635 / 24	361 / 407 / 67	317 / 509 / 55	270 / 448 / 118	265 / 558 / 96	276 / 551 / 27	248 / 669 / 22	337 / 435 / 63	312 / 546 / 52	264 / 475 / 109	264 / 595 / 90
	2	270 / 558 / 27	227 / 693 / 22	319 / 461 / 60	266 / 571 / 48	248 / 464 / 114	237 / 573 / 92	251 / 600 / 25	217 / 732 / 20	301 / 503 / 56	259 / 612 / 45	240 / 495 / 105	235 / 614 / 86	233 / 635 / 23	214 / 784 / 19	277 / 529 / 52	251 / 646 / 42	238 / 531 / 99	233 / 648 / 79
	3	227 / 660 / 23	189 / 809 / 18	247 / 591 / 46	204 / 720 / 37	183 / 631 / 84	176 / 782 / 69	214 / 719 / 21	185 / 868 / 17	229 / 631 / 43	201 / 779 / 35	177 / 670 / 77	171 / 815 / 62	196 / 749 / 20	179 / 919 / 16	217 / 682 / 41	197 / 831 / 33	176 / 722 / 73	176 / 897 / 60
Wind Speed [mph]		170						180											
15	1	225 / 583 / 24	214 / 715 / 19	279 / 468 / 51	267 / 579 / 42	218 / 507 / 72	226 / 625 / 58	224 / 624 / 23	213 / 756 / 18	275 / 498 / 48	263 / 606 / 39	223 / 547 / 69	233 / 667 / 55						
	2	193 / 681 / 20	183 / 829 / 16	227 / 561 / 42	218 / 692 / 34	195 / 563 / 64	203 / 694 / 52	190 / 723 / 19	180 / 867 / 15	226 / 601 / 40	217 / 733 / 32	199 / 603 / 61	208 / 735 / 49						
	3	161 / 795 / 17	158 / 999 / 14	179 / 729 / 33	168 / 874 / 26	146 / 769 / 48	151 / 942 / 39	162 / 863 / 16	153 / 1031 / 13	176 / 771 / 31	171 / 945 / 25	146 / 809 / 45	151 / 976 / 36						
20	1	263 / 583 / 26	245 / 715 / 21	326 / 468 / 60	305 / 579 / 48	240 / 507 / 86	244 / 625 / 70	260 / 624 / 24	242 / 756 / 20	319 / 498 / 56	298 / 606 / 45	244 / 547 / 82	249 / 667 / 66						
	2	226 / 681 / 22	209 / 829 / 18	265 / 561 / 48	249 / 692 / 40	215 / 563 / 77	219 / 694 / 63	221 / 723 / 21	204 / 867 / 17	262 / 601 / 46	246 / 733 / 37	218 / 603 / 73	222 / 735 / 59						
	3	188 / 795 / 18	181 / 999 / 15	209 / 729 / 38	192 / 874 / 31	160 / 769 / 57	163 / 942 / 47	189 / 863 / 18	174 / 1031 / 14	205 / 771 / 36	194 / 945 / 29	159 / 809 / 54	162 / 976 / 43						
25	1	263 / 583 / 26	245 / 715 / 21	326 / 468 / 60	305 / 579 / 48	262 / 507 / 103	262 / 625 / 84	260 / 624 / 24	242 / 756 / 20	319 / 498 / 56	298 / 606 / 45	265 / 547 / 99	266 / 667 / 79						
	2	226 / 681 / 22	209 / 829 / 18	265 / 561 / 48	249 / 692 / 40	235 / 563 / 92	235 / 694 / 75	221 / 723 / 21	204 / 867 / 17	262 / 601 / 46	246 / 733 / 37	237 / 603 / 88	237 / 735 / 71						
	3	188 / 795 / 18	181 / 999 / 15	209 / 729 / 38	192 / 874 / 31	175 / 769 / 69	175 / 942 / 56	189 / 863 / 18	174 / 1031 / 14	205 / 771 / 36	194 / 945 / 29	173 / 809 / 64	173 / 976 / 52						
Wind Speed [mph]		190						200											
15	1	216 / 645 / 21	211 / 791 / 17	270 / 523 / 46	263 / 643 / 37	222 / 571 / 64	243 / 704 / 52	219 / 697 / 20	215 / 849 / 16	270 / 557 / 44	263 / 676 / 35	226 / 605 / 61	252 / 737 / 49						
	2	187 / 760 / 18	183 / 931 / 15	224 / 639 / 38	215 / 769 / 30	202 / 641 / 58	215 / 770 / 46	183 / 791 / 17	185 / 994 / 14	222 / 674 / 36	219 / 826 / 29	204 / 676 / 55	229 / 827 / 45						
	3	158 / 896 / 15	155 / 1100 / 13	173 / 807 / 29	166 / 973 / 24	145 / 843 / 42	160 / 1043 / 35	158 / 958 / 15	156 / 1165 / 12	174 / 866 / 28	168 / 1035 / 23	149 / 902 / 40	168 / 1106 / 33						
20	1	249 / 645 / 23	238 / 791 / 18	312 / 523 / 53	297 / 643 / 43	242 / 571 / 77	252 / 704 / 63	252 / 697 / 22	241 / 849 / 18	310 / 557 / 51	295 / 676 / 41	245 / 605 / 73	255 / 737 / 59						
	2	216 / 760 / 20	206 / 931 / 16	259 / 639 / 44	242 / 769 / 35	220 / 641 / 70	224 / 770 / 56	210 / 791 / 18	208 / 994 / 15	255 / 674 / 42	246 / 826 / 34	221 / 676 / 66	232 / 827 / 54						
	3	182 / 896 / 17	175 / 1100 / 14	199 / 807 / 34	188 / 973 / 27	158 / 843 / 50	166 / 1043 / 41	182 / 958 / 16	175 / 1165 / 13	200 / 866 / 33	189 / 1035 / 26	161 / 902 / 49	170 / 1106 / 40						
25	1	249 / 645 / 23	238 / 791 / 18	312 / 523 / 53	297 / 643 / 43	262 / 571 / 92	268 / 704 / 75	252 / 697 / 22	241 / 849 / 18	310 / 557 / 51	295 / 676 / 41	264 / 605 / 88	270 / 737 / 71						
	2	216 / 760 / 20	206 / 931 / 16	259 / 639 / 44	242 / 769 / 35	238 / 641 / 84	238 / 770 / 67	210 / 791 / 18	208 / 994 / 15	255 / 674 / 42	246 / 826 / 34	238 / 676 / 79	245 / 827 / 64						
	3	182 / 896 / 17	175 / 1100 / 14	199 / 807 / 34	188 / 973 / 27	171 / 843 / 60	177 / 1043 / 50	182 / 958 / 16	175 / 1165 / 13	200 / 866 / 33	189 / 1035 / 26	174 / 902 / 58	180 / 1106 / 47						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	412 / 372 / 41	332 / 462 / 33	423 / 241 / 79	411 / 366 / 77	381 / 311 / 184	319 / 403 / 155	394 / 391 / 39	314 / 479 / 31	423 / 267 / 79	393 / 385 / 73	370 / 333 / 180	304 / 421 / 147	375 / 408 / 37	302 / 503 / 30	423 / 293 / 79	375 / 402 / 70	360 / 355 / 175	296 / 437 / 140
2		351 / 437 / 35	283 / 539 / 28	417 / 359 / 78	332 / 442 / 62	355 / 363 / 172	283 / 444 / 137	332 / 455 / 33	271 / 565 / 27	399 / 378 / 74	320 / 467 / 60	334 / 376 / 162	273 / 470 / 132	320 / 479 / 32	259 / 589 / 26	381 / 396 / 71	308 / 491 / 58	324 / 399 / 157	264 / 484 / 125	
3		295 / 520 / 29	240 / 643 / 24	320 / 463 / 60	260 / 572 / 49	257 / 492 / 125	211 / 613 / 102	283 / 547 / 28	228 / 668 / 23	308 / 489 / 58	248 / 598 / 46	247 / 518 / 120	201 / 639 / 97	271 / 571 / 27	216 / 689 / 22	296 / 513 / 55	236 / 621 / 44	237 / 542 / 115	196 / 661 / 92	
35		1	453 / 372 / 43	365 / 462 / 35	451 / 235 / 84	451 / 366 / 84	403 / 303 / 205	348 / 403 / 177	433 / 391 / 41	345 / 479 / 33	451 / 259 / 84	431 / 385 / 80	403 / 333 / 205	331 / 421 / 168	412 / 408 / 39	331 / 503 / 31	451 / 285 / 84	411 / 402 / 76	392 / 355 / 199	322 / 437 / 160
		2	385 / 437 / 37	311 / 539 / 30	451 / 354 / 84	365 / 442 / 68	387 / 363 / 196	308 / 444 / 157	365 / 455 / 35	298 / 565 / 28	438 / 378 / 81	352 / 467 / 65	364 / 376 / 185	297 / 470 / 151	352 / 479 / 33	284 / 589 / 27	418 / 396 / 78	338 / 491 / 63	353 / 399 / 179	287 / 484 / 142
		3	325 / 520 / 31	264 / 643 / 25	352 / 463 / 65	285 / 572 / 53	280 / 492 / 142	230 / 613 / 117	311 / 547 / 30	250 / 668 / 24	338 / 489 / 63	272 / 598 / 51	269 / 518 / 137	219 / 639 / 111	298 / 571 / 28	237 / 689 / 23	325 / 513 / 61	259 / 621 / 48	258 / 542 / 131	213 / 661 / 106
40		1	487 / 181 / 44	398 / 462 / 36	484 / 231 / 90	484 / 361 / 90	424 / 294 / 224	376 / 403 / 199	472 / 391 / 43	376 / 479 / 34	484 / 255 / 90	470 / 385 / 87	424 / 324 / 224	358 / 421 / 189	450 / 408 / 41	361 / 503 / 33	484 / 280 / 90	448 / 402 / 83	424 / 355 / 224	347 / 437 / 179
		2	420 / 437 / 38	339 / 539 / 31	484 / 349 / 90	398 / 442 / 74	418 / 363 / 221	334 / 444 / 176	398 / 455 / 36	325 / 565 / 30	477 / 378 / 88	383 / 467 / 71	394 / 376 / 208	321 / 470 / 170	383 / 479 / 35	310 / 589 / 28	455 / 396 / 84	369 / 491 / 68	382 / 399 / 202	310 / 484 / 160
		3	354 / 520 / 32	288 / 643 / 26	383 / 463 / 71	311 / 572 / 58	303 / 492 / 160	249 / 613 / 131	339 / 547 / 31	273 / 668 / 25	369 / 489 / 68	297 / 598 / 55	291 / 518 / 154	237 / 639 / 125	325 / 571 / 30	258 / 689 / 24	354 / 513 / 66	282 / 621 / 52	279 / 542 / 147	230 / 661 / 119
Wind Speed [mph]		110						115												
30	1	357 / 423 / 35	289 / 525 / 29	423 / 320 / 79	356 / 418 / 67	345 / 371 / 167	294 / 459 / 135	345 / 444 / 34	277 / 545 / 28	423 / 349 / 79	344 / 438 / 64	329 / 385 / 160	292 / 479 / 130							
	2	308 / 502 / 31	246 / 610 / 25	362 / 411 / 68	290 / 504 / 54	309 / 414 / 150	261 / 506 / 120	295 / 522 / 29	234 / 629 / 23	350 / 432 / 65	284 / 535 / 53	293 / 427 / 142	258 / 526 / 115							
	3	259 / 593 / 26	209 / 728 / 21	278 / 524 / 52	230 / 658 / 43	227 / 564 / 110	191 / 679 / 88	246 / 613 / 25	197 / 742 / 20	272 / 556 / 51	218 / 675 / 41	216 / 584 / 105	191 / 715 / 85							
	35	1	392 / 423 / 37	318 / 525 / 30	451 / 311 / 84	391 / 418 / 73	376 / 371 / 191	319 / 459 / 154	379 / 444 / 36	304 / 545 / 29	451 / 339 / 84	378 / 438 / 70	359 / 385 / 182	316 / 479 / 148						
		2	338 / 502 / 32	271 / 610 / 26	398 / 411 / 74	319 / 504 / 59	336 / 414 / 171	283 / 506 / 137	325 / 522 / 31	257 / 629 / 25	385 / 432 / 72	312 / 535 / 58	320 / 427 / 162	279 / 526 / 131						
		3	284 / 593 / 27	230 / 728 / 22	305 / 524 / 57	252 / 658 / 47	247 / 564 / 125	207 / 679 / 100	271 / 613 / 26	217 / 742 / 21	299 / 556 / 56	239 / 675 / 45	236 / 584 / 120	207 / 715 / 97						
	40	1	428 / 423 / 39	347 / 525 / 32	484 / 307 / 90	426 / 418 / 79	406 / 371 / 214	344 / 459 / 173	413 / 444 / 38	332 / 545 / 30	484 / 334 / 90	412 / 438 / 76	388 / 385 / 205	340 / 479 / 167						
		2	369 / 502 / 34	295 / 610 / 27	434 / 411 / 80	347 / 504 / 64	364 / 414 / 192	305 / 506 / 154	354 / 522 / 32	280 / 629 / 26	419 / 432 / 78	340 / 535 / 63	346 / 427 / 183	300 / 526 / 147						
		3	310 / 593 / 28	251 / 728 / 23	333 / 524 / 62	275 / 658 / 51	267 / 564 / 141	223 / 679 / 112	295 / 613 / 27	236 / 742 / 22	325 / 556 / 60	260 / 675 / 48	255 / 584 / 135	222 / 715 / 109						
Wind Speed [mph]		120						130												
30	1	332 / 464 / 33	266 / 563 / 26	411 / 368 / 77	328 / 450 / 61	319 / 404 / 155	289 / 499 / 125	345 / 444 / 34	277 / 545 / 28	423 / 349 / 79	344 / 438 / 64	329 / 385 / 160	292 / 479 / 130							
	2	283 / 541 / 28	229 / 661 / 23	332 / 444 / 62	274 / 554 / 51	283 / 446 / 137	260 / 556 / 112	295 / 522 / 29	234 / 629 / 23	350 / 432 / 65	284 / 535 / 53	293 / 427 / 142	258 / 526 / 115							
	3	234 / 629 / 23	192 / 776 / 19	260 / 575 / 49	213 / 709 / 40	206 / 601 / 100	191 / 749 / 83	246 / 613 / 25	197 / 742 / 20	272 / 556 / 51	218 / 675 / 41	216 / 584 / 105	191 / 715 / 85							
	35	1	365 / 464 / 35	293 / 563 / 28	451 / 368 / 84	360 / 450 / 67	348 / 404 / 177	312 / 499 / 142	379 / 444 / 36	304 / 545 / 29	451 / 339 / 84	378 / 438 / 70	359 / 385 / 182	316 / 479 / 148						
		2	311 / 541 / 30	252 / 661 / 24	365 / 444 / 68	300 / 554 / 56	308 / 446 / 157	281 / 556 / 128	325 / 522 / 31	257 / 629 / 25	385 / 432 / 72	312 / 535 / 58	320 / 427 / 162	279 / 526 / 131						
		3	257 / 629 / 25	211 / 776 / 20	285 / 575 / 53	234 / 709 / 43	224 / 601 / 114	206 / 749 / 94	271 / 613 / 26	217 / 742 / 21	299 / 556 / 56	239 / 675 / 45	236 / 584 / 120	207 / 715 / 97						
	40	1	398 / 464 / 36	319 / 563 / 29	484 / 362 / 90	393 / 450 / 72	376 / 404 / 199	335 / 499 / 160	413 / 444 / 38	332 / 545 / 30	484 / 334 / 90	412 / 438 / 76	388 / 385 / 205	340 / 479 / 167						
		2	339 / 541 / 31	274 / 661 / 25	398 / 444 / 74	327 / 554 / 60	334 / 446 / 176	302 / 556 / 144	354 / 522 / 32	280 / 629 / 26	419 / 432 / 78	340 / 535 / 63	346 / 427 / 183	300 / 526 / 147						
		3	280 / 629 / 26	230 / 776 / 21	311 / 575 / 58	255 / 709 / 47	243 / 601 / 128	221 / 749 / 106	295 / 613 / 27	236 / 742 / 22	325 / 556 / 60	260 / 675 / 48	255 / 584 / 135	222 / 715 / 109						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	320 / 482 / 32	266 / 593 / 26	393 / 380 / 73	323 / 467 / 59	304 / 416 / 147	286 / 516 / 120	295 / 514 / 29	258 / 635 / 24	362 / 407 / 68	319 / 509 / 55	295 / 448 / 137	286 / 558 / 112	277 / 551 / 28	249 / 669 / 22	338 / 435 / 63	313 / 546 / 52	287 / 475 / 127	284 / 595 / 105
2		271 / 558 / 27	228 / 693 / 22	320 / 461 / 60	267 / 571 / 49	273 / 464 / 132	257 / 573 / 107	252 / 600 / 25	218 / 732 / 20	302 / 503 / 57	260 / 612 / 45	263 / 495 / 122	254 / 614 / 100	234 / 635 / 23	215 / 784 / 19	278 / 529 / 52	252 / 646 / 42	259 / 531 / 115	250 / 648 / 92	
3		228 / 660 / 23	190 / 809 / 19	248 / 591 / 46	205 / 720 / 37	201 / 631 / 97	191 / 782 / 80	216 / 719 / 22	185 / 868 / 17	230 / 631 / 43	202 / 779 / 35	193 / 670 / 90	184 / 815 / 73	197 / 749 / 20	180 / 919 / 16	218 / 682 / 41	198 / 831 / 33	192 / 722 / 85	189 / 897 / 70	
35		1	352 / 482 / 33	292 / 593 / 27	431 / 380 / 80	354 / 467 / 64	331 / 416 / 168	308 / 516 / 137	325 / 514 / 31	282 / 635 / 25	398 / 407 / 74	348 / 509 / 61	320 / 448 / 157	306 / 558 / 128	304 / 551 / 29	271 / 669 / 23	372 / 435 / 69	340 / 546 / 57	311 / 475 / 145	303 / 595 / 120
		2	298 / 558 / 28	250 / 693 / 23	352 / 461 / 65	293 / 571 / 53	297 / 464 / 151	276 / 573 / 123	277 / 600 / 26	239 / 732 / 21	332 / 503 / 62	284 / 612 / 50	285 / 495 / 140	272 / 614 / 114	257 / 635 / 25	234 / 784 / 20	305 / 529 / 57	274 / 646 / 46	280 / 531 / 131	267 / 648 / 106
		3	250 / 660 / 24	208 / 809 / 19	272 / 591 / 51	225 / 720 / 41	219 / 631 / 111	206 / 782 / 91	237 / 719 / 23	202 / 868 / 18	252 / 631 / 47	220 / 779 / 38	210 / 670 / 103	198 / 815 / 83	217 / 749 / 21	196 / 919 / 17	239 / 682 / 45	215 / 831 / 36	207 / 722 / 97	202 / 897 / 80
40		1	383 / 482 / 35	317 / 593 / 28	470 / 380 / 87	385 / 467 / 70	358 / 416 / 189	330 / 516 / 154	354 / 514 / 32	306 / 635 / 26	434 / 407 / 80	377 / 509 / 66	345 / 448 / 176	327 / 558 / 144	332 / 551 / 30	293 / 669 / 24	405 / 435 / 75	368 / 546 / 62	334 / 475 / 163	322 / 595 / 135
		2	325 / 558 / 30	272 / 693 / 24	383 / 461 / 71	318 / 571 / 58	321 / 464 / 170	296 / 573 / 138	302 / 600 / 28	259 / 732 / 22	362 / 503 / 67	308 / 612 / 54	308 / 495 / 157	291 / 614 / 128	280 / 635 / 26	252 / 784 / 21	333 / 529 / 62	296 / 646 / 50	301 / 531 / 147	284 / 648 / 119
		3	273 / 660 / 25	227 / 809 / 20	297 / 591 / 55	245 / 720 / 44	237 / 631 / 125	220 / 782 / 103	258 / 719 / 24	220 / 868 / 19	275 / 631 / 51	239 / 779 / 42	226 / 670 / 115	211 / 815 / 93	236 / 749 / 22	212 / 919 / 18	260 / 682 / 48	232 / 831 / 39	223 / 722 / 109	215 / 897 / 90
Wind Speed [mph]		170						180												
30	1	264 / 583 / 26	246 / 715 / 21	328 / 468 / 60	307 / 579 / 49	284 / 507 / 120	280 / 625 / 97	261 / 624 / 25	243 / 756 / 20	321 / 498 / 57	299 / 606 / 45	286 / 547 / 115	283 / 667 / 92							
	2	227 / 681 / 22	210 / 829 / 18	266 / 561 / 49	250 / 692 / 40	255 / 563 / 107	252 / 694 / 88	222 / 723 / 21	205 / 867 / 17	263 / 601 / 46	247 / 733 / 37	255 / 603 / 102	252 / 735 / 83							
	3	189 / 795 / 19	181 / 999 / 16	210 / 729 / 39	193 / 874 / 31	190 / 769 / 80	187 / 942 / 65	189 / 863 / 18	175 / 1031 / 14	205 / 771 / 36	195 / 945 / 30	187 / 809 / 75	184 / 976 / 60							
	35	1	290 / 583 / 27	267 / 715 / 22	359 / 468 / 65	332 / 579 / 53	306 / 507 / 137	298 / 625 / 111	286 / 624 / 26	262 / 756 / 21	350 / 498 / 62	323 / 606 / 50	308 / 547 / 131	300 / 667 / 106						
		2	249 / 681 / 23	228 / 829 / 19	292 / 561 / 53	271 / 692 / 43	274 / 563 / 123	268 / 694 / 100	243 / 723 / 22	222 / 867 / 18	287 / 601 / 51	266 / 733 / 41	274 / 603 / 117	267 / 735 / 94						
		3	207 / 795 / 19	197 / 999 / 16	231 / 729 / 42	209 / 874 / 34	204 / 769 / 91	199 / 942 / 74	207 / 863 / 19	189 / 1031 / 15	224 / 771 / 40	210 / 945 / 32	201 / 809 / 86	195 / 976 / 69						
	40	1	316 / 583 / 28	288 / 715 / 23	391 / 468 / 71	358 / 579 / 58	328 / 507 / 154	316 / 625 / 125	310 / 624 / 27	282 / 756 / 22	380 / 498 / 67	347 / 606 / 54	329 / 547 / 147	317 / 667 / 119						
		2	271 / 681 / 24	246 / 829 / 20	317 / 561 / 58	291 / 692 / 47	294 / 563 / 138	284 / 694 / 112	264 / 723 / 23	238 / 867 / 18	312 / 601 / 55	286 / 733 / 44	293 / 603 / 131	283 / 735 / 106						
		3	226 / 795 / 20	212 / 999 / 17	251 / 729 / 46	225 / 874 / 36	219 / 769 / 103	211 / 942 / 84	225 / 863 / 20	203 / 1031 / 16	243 / 771 / 43	225 / 945 / 35	215 / 809 / 96	206 / 976 / 77						
Wind Speed [mph]		190						200												
30	1	250 / 645 / 23	239 / 791 / 19	313 / 523 / 53	298 / 643 / 43	282 / 571 / 107	285 / 704 / 88	253 / 697 / 22	242 / 849 / 18	311 / 557 / 51	296 / 676 / 41	283 / 605 / 102	285 / 737 / 83							
	2	217 / 760 / 20	207 / 931 / 16	260 / 639 / 44	243 / 769 / 35	256 / 641 / 97	252 / 770 / 78	211 / 791 / 19	209 / 994 / 16	256 / 674 / 42	247 / 826 / 34	255 / 676 / 92	259 / 827 / 75							
	3	183 / 896 / 17	175 / 1100 / 14	200 / 807 / 34	188 / 973 / 27	184 / 843 / 70	187 / 1043 / 58	183 / 958 / 16	175 / 1165 / 13	201 / 866 / 33	189 / 1035 / 26	186 / 902 / 68	190 / 1106 / 55							
	35	1	273 / 645 / 24	257 / 791 / 19	341 / 523 / 58	321 / 643 / 47	301 / 571 / 123	301 / 704 / 100	275 / 697 / 23	260 / 849 / 19	338 / 557 / 56	317 / 676 / 45	301 / 605 / 117	300 / 737 / 94						
		2	236 / 760 / 21	223 / 931 / 17	283 / 639 / 48	262 / 769 / 38	273 / 641 / 111	266 / 770 / 89	229 / 791 / 19	224 / 994 / 16	278 / 674 / 46	265 / 826 / 37	272 / 676 / 106	273 / 827 / 86						
		3	199 / 896 / 18	189 / 1100 / 14	218 / 807 / 37	203 / 973 / 30	196 / 843 / 80	198 / 1043 / 66	199 / 958 / 17	188 / 1165 / 14	218 / 866 / 36	203 / 1035 / 29	199 / 902 / 77	200 / 1106 / 63						
	40	1	296 / 645 / 25	275 / 791 / 20	369 / 523 / 63	343 / 643 / 51	321 / 571 / 138	317 / 704 / 112	297 / 697 / 24	277 / 849 / 20	365 / 557 / 60	339 / 676 / 48	320 / 605 / 131	315 / 737 / 106						
		2	256 / 760 / 22	239 / 931 / 18	306 / 639 / 52	280 / 769 / 42	291 / 641 / 125	281 / 770 / 100	248 / 791 / 20	239 / 994 / 17	300 / 674 / 50	282 / 826 / 40	289 / 676 / 119	287 / 827 / 96						
		3	216 / 896 / 18	202 / 1100 / 15	236 / 807 / 40	217 / 973 / 32	209 / 843 / 90	208 / 1043 / 74	215 / 958 / 18	201 / 1165 / 14	235 / 866 / 39	217 / 1035 / 31	211 / 902 / 87	210 / 1106 / 71						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	45	1	524 / 178 / 100	436 / 462 / 83	511 / 224 / 141	511 / 350 / 141	450 / 290 / 251	404 / 403 / 226	516 / 391 / 98	411 / 479 / 78	511 / 248 / 141	511 / 385 / 141	450 / 320 / 251	385 / 421 / 215	492 / 408 / 94	395 / 503 / 75	511 / 272 / 141	487 / 402 / 134	450 / 350 / 251	373 / 437 / 204
2		460 / 437 / 87	371 / 539 / 71	511 / 339 / 141	432 / 442 / 119	450 / 363 / 251	359 / 444 / 200	436 / 455 / 83	355 / 565 / 68	511 / 373 / 141	416 / 467 / 115	424 / 376 / 237	346 / 470 / 193	420 / 479 / 80	339 / 589 / 65	495 / 396 / 137	401 / 491 / 111	411 / 399 / 229	333 / 484 / 182	
3		387 / 520 / 74	315 / 643 / 60	416 / 463 / 115	338 / 572 / 93	326 / 492 / 182	268 / 613 / 149	371 / 547 / 71	299 / 668 / 57	401 / 489 / 111	322 / 598 / 89	313 / 518 / 175	255 / 639 / 142	355 / 571 / 68	283 / 689 / 54	385 / 513 / 106	307 / 621 / 85	300 / 542 / 168	247 / 661 / 135	
50		1	559 / 173 / 104	480 / 462 / 89	553 / 221 / 151	553 / 345 / 151	468 / 282 / 266	433 / 403 / 246	559 / 191 / 104	453 / 479 / 84	553 / 244 / 151	553 / 379 / 151	468 / 310 / 266	412 / 421 / 234	542 / 408 / 100	435 / 503 / 81	553 / 268 / 151	536 / 402 / 146	468 / 340 / 266	399 / 437 / 222
		2	506 / 437 / 94	409 / 539 / 76	553 / 333 / 151	476 / 442 / 129	468 / 353 / 266	384 / 444 / 218	480 / 455 / 89	391 / 565 / 73	553 / 367 / 151	458 / 467 / 125	454 / 376 / 258	370 / 470 / 210	462 / 479 / 86	373 / 589 / 69	545 / 396 / 148	441 / 491 / 120	440 / 399 / 250	356 / 484 / 199
		3	426 / 520 / 79	347 / 643 / 64	458 / 463 / 125	372 / 572 / 101	349 / 492 / 199	286 / 613 / 163	409 / 547 / 76	329 / 668 / 61	441 / 489 / 120	355 / 598 / 97	335 / 518 / 191	273 / 639 / 155	391 / 571 / 73	311 / 689 / 58	424 / 513 / 115	337 / 621 / 92	321 / 542 / 183	264 / 661 / 147
60		1	631 / 164 / 112	568 / 462 / 101	624 / 210 / 166	624 / 329 / 166	519 / 273 / 301	495 / 403 / 287	631 / 182 / 112	536 / 479 / 95	624 / 232 / 166	624 / 362 / 166	519 / 301 / 301	471 / 421 / 273	631 / 201 / 112	515 / 503 / 92	624 / 255 / 166	624 / 396 / 166	519 / 330 / 301	450 / 437 / 259
		2	599 / 437 / 106	484 / 539 / 86	624 / 318 / 166	563 / 442 / 150	519 / 342 / 301	439 / 444 / 254	568 / 455 / 101	463 / 565 / 82	624 / 350 / 166	542 / 467 / 144	519 / 376 / 301	424 / 470 / 245	547 / 479 / 97	442 / 589 / 79	624 / 383 / 166	522 / 491 / 139	503 / 399 / 291	402 / 484 / 231
		3	505 / 520 / 90	410 / 643 / 73	542 / 463 / 144	440 / 572 / 117	400 / 492 / 231	328 / 613 / 190	484 / 547 / 86	389 / 668 / 69	522 / 489 / 139	420 / 598 / 112	384 / 518 / 222	312 / 639 / 181	463 / 571 / 82	368 / 689 / 66	501 / 513 / 134	399 / 621 / 106	368 / 542 / 213	298 / 661 / 171
Wind Speed [mph]		110						115												
45	1	468 / 423 / 89	379 / 525 / 72	511 / 298 / 141	463 / 418 / 128	437 / 371 / 244	368 / 459 / 197	452 / 444 / 86	363 / 545 / 69	511 / 324 / 141	448 / 438 / 124	418 / 385 / 233	363 / 479 / 189							
	2	403 / 502 / 77	323 / 610 / 62	471 / 411 / 130	377 / 504 / 104	391 / 414 / 219	327 / 506 / 175	387 / 522 / 74	307 / 629 / 58	456 / 432 / 126	369 / 535 / 102	372 / 427 / 208	322 / 526 / 168							
	3	339 / 593 / 65	274 / 728 / 52	361 / 524 / 100	299 / 658 / 83	287 / 564 / 160	239 / 679 / 128	323 / 613 / 62	258 / 742 / 49	354 / 556 / 98	283 / 675 / 78	274 / 584 / 153	238 / 715 / 124							
	50	1	515 / 423 / 95	418 / 525 / 77	553 / 293 / 151	510 / 418 / 139	468 / 371 / 266	393 / 459 / 214	497 / 444 / 92	400 / 545 / 74	553 / 319 / 151	493 / 438 / 134	447 / 385 / 254	387 / 479 / 206						
		2	444 / 502 / 82	355 / 610 / 66	519 / 411 / 141	415 / 504 / 113	419 / 414 / 238	350 / 506 / 191	426 / 522 / 79	338 / 629 / 63	502 / 432 / 137	407 / 535 / 111	398 / 427 / 226	343 / 526 / 183						
		3	373 / 593 / 69	302 / 728 / 56	398 / 524 / 108	329 / 658 / 90	307 / 564 / 175	255 / 679 / 139	355 / 613 / 66	284 / 742 / 53	389 / 556 / 106	311 / 675 / 85	293 / 584 / 167	253 / 715 / 135						
	60	1	610 / 423 / 108	494 / 525 / 88	624 / 279 / 166	604 / 418 / 161	519 / 360 / 301	443 / 459 / 250	589 / 444 / 105	473 / 545 / 84	624 / 304 / 166	583 / 438 / 155	511 / 385 / 296	435 / 479 / 241						
		2	526 / 502 / 93	421 / 610 / 75	614 / 411 / 163	491 / 504 / 131	479 / 414 / 277	394 / 506 / 222	505 / 522 / 90	400 / 629 / 71	593 / 432 / 158	481 / 535 / 128	455 / 427 / 264	385 / 526 / 213						
		3	442 / 593 / 79	358 / 728 / 64	471 / 524 / 125	389 / 658 / 104	352 / 564 / 204	287 / 679 / 162	421 / 613 / 75	337 / 742 / 60	461 / 556 / 123	369 / 675 / 98	336 / 584 / 194	285 / 715 / 157						
Wind Speed [mph]		120						130												
45	1	436 / 464 / 83	347 / 563 / 66	511 / 352 / 141	425 / 450 / 117	404 / 404 / 226	358 / 499 / 182	452 / 444 / 86	363 / 545 / 69	511 / 324 / 141	448 / 438 / 124	418 / 385 / 233	363 / 479 / 189							
	2	371 / 541 / 71	299 / 661 / 57	432 / 444 / 119	354 / 554 / 98	359 / 446 / 200	322 / 556 / 164	387 / 522 / 74	307 / 629 / 58	456 / 432 / 126	369 / 535 / 102	372 / 427 / 208	322 / 526 / 168							
	3	307 / 629 / 58	250 / 776 / 48	338 / 575 / 93	275 / 709 / 76	261 / 601 / 146	237 / 749 / 120	323 / 613 / 62	258 / 742 / 49	354 / 556 / 98	283 / 675 / 78	274 / 584 / 153	238 / 715 / 124							
	50	1	480 / 464 / 89	382 / 563 / 71	553 / 346 / 151	467 / 450 / 127	433 / 404 / 246	381 / 499 / 199	497 / 444 / 92	400 / 545 / 74	553 / 319 / 151	493 / 438 / 134	447 / 385 / 254	387 / 479 / 206						
		2	409 / 541 / 76	329 / 661 / 61	476 / 444 / 129	389 / 554 / 106	384 / 446 / 218	343 / 556 / 179	426 / 522 / 79	338 / 629 / 63	502 / 432 / 137	407 / 535 / 111	398 / 427 / 226	343 / 526 / 183						
		3	338 / 629 / 63	276 / 776 / 51	372 / 575 / 101	303 / 709 / 83	280 / 601 / 159	252 / 749 / 131	355 / 613 / 66	284 / 742 / 53	389 / 556 / 106	311 / 675 / 85	293 / 584 / 167	253 / 715 / 135						
	60	1	568 / 464 / 101	452 / 563 / 80	624 / 330 / 166	553 / 450 / 147	495 / 404 / 287	427 / 499 / 231	589 / 444 / 105	473 / 545 / 84	624 / 304 / 166	583 / 438 / 155	511 / 385 / 296	435 / 479 / 241						
		2	484 / 541 / 86	389 / 661 / 69	563 / 444 / 150	461 / 554 / 123	439 / 446 / 254	384 / 556 / 208	505 / 522 / 90	400 / 629 / 71	593 / 432 / 158	481 / 535 / 128	455 / 427 / 264	385 / 526 / 213						
		3	400 / 629 / 71	326 / 776 / 58	440 / 575 / 117	358 / 709 / 96	320 / 601 / 185	282 / 749 / 153	421 / 613 / 75	337 / 742 / 60	461 / 556 / 123	369 / 675 / 98	336 / 584 / 194	285 / 715 / 157						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	420 / 482 / 80	343 / 593 / 65	511 / 380 / 141	416 / 467 / 113	385 / 416 / 215	352 / 516 / 175	387 / 514 / 74	329 / 635 / 60	471 / 407 / 130	406 / 509 / 106	371 / 448 / 200	348 / 558 / 164	363 / 551 / 69	315 / 669 / 55	440 / 435 / 121	395 / 546 / 100	358 / 475 / 186
2		355 / 558 / 68	294 / 693 / 55	416 / 461 / 115	344 / 571 / 93	346 / 464 / 193	316 / 573 / 157	331 / 600 / 63	279 / 732 / 51	393 / 503 / 108	331 / 612 / 87	330 / 495 / 179	309 / 614 / 146	307 / 635 / 58	271 / 784 / 48	361 / 529 / 100	318 / 646 / 80	323 / 531 / 168	301 / 648 / 135
3		299 / 660 / 57	245 / 809 / 46	322 / 591 / 89	264 / 720 / 72	255 / 631 / 142	235 / 782 / 117	283 / 719 / 54	237 / 868 / 43	299 / 631 / 83	257 / 779 / 67	243 / 670 / 131	224 / 815 / 106	258 / 749 / 49	228 / 919 / 40	283 / 682 / 78	249 / 831 / 63	239 / 722 / 124	228 / 897 / 102
50	1	462 / 482 / 86	373 / 593 / 69	553 / 374 / 151	450 / 467 / 122	412 / 416 / 234	375 / 516 / 191	426 / 514 / 79	353 / 635 / 64	519 / 407 / 141	435 / 509 / 115	396 / 448 / 218	368 / 558 / 179	400 / 551 / 74	337 / 669 / 59	484 / 435 / 132	422 / 546 / 108	381 / 475 / 203	361 / 595 / 167
	2	391 / 558 / 73	320 / 693 / 59	458 / 461 / 125	372 / 571 / 101	370 / 464 / 210	336 / 573 / 171	364 / 600 / 68	299 / 732 / 55	432 / 503 / 118	355 / 612 / 94	353 / 495 / 195	327 / 614 / 159	338 / 635 / 63	290 / 784 / 51	398 / 529 / 108	340 / 646 / 87	344 / 531 / 183	318 / 648 / 147
	3	329 / 660 / 61	267 / 809 / 50	355 / 591 / 97	286 / 720 / 78	273 / 631 / 155	250 / 782 / 127	311 / 719 / 58	254 / 868 / 46	329 / 631 / 90	275 / 779 / 73	259 / 670 / 143	237 / 815 / 115	284 / 749 / 53	244 / 919 / 43	311 / 682 / 85	267 / 831 / 69	254 / 722 / 135	241 / 897 / 111
60	1	547 / 482 / 97	442 / 593 / 79	624 / 357 / 166	532 / 467 / 142	471 / 416 / 273	419 / 516 / 222	505 / 514 / 90	410 / 635 / 73	614 / 407 / 163	501 / 509 / 134	446 / 448 / 254	410 / 558 / 208	473 / 551 / 84	381 / 669 / 67	573 / 435 / 153	477 / 546 / 125	428 / 475 / 236	399 / 595 / 194
	2	463 / 558 / 82	379 / 693 / 67	542 / 461 / 144	440 / 571 / 117	424 / 464 / 245	375 / 573 / 199	431 / 600 / 77	347 / 732 / 62	512 / 503 / 136	409 / 612 / 109	398 / 495 / 227	364 / 614 / 185	400 / 635 / 71	328 / 784 / 58	471 / 529 / 125	384 / 646 / 101	386 / 531 / 213	352 / 648 / 171
	3	389 / 660 / 69	316 / 809 / 56	420 / 591 / 112	338 / 720 / 90	312 / 631 / 181	279 / 782 / 148	368 / 719 / 66	295 / 868 / 53	389 / 631 / 104	317 / 779 / 85	292 / 670 / 167	264 / 815 / 134	337 / 749 / 60	275 / 919 / 49	369 / 682 / 98	301 / 831 / 79	285 / 722 / 157	266 / 897 / 130
Wind Speed [mph]		170						180											
45	1	341 / 583 / 65	309 / 715 / 52	422 / 468 / 115	383 / 579 / 93	350 / 507 / 175	334 / 625 / 142	334 / 624 / 62	302 / 756 / 49	410 / 498 / 108	370 / 606 / 87	350 / 547 / 168	334 / 667 / 135						
	2	293 / 681 / 55	263 / 829 / 45	343 / 561 / 93	312 / 692 / 76	314 / 563 / 157	300 / 694 / 128	284 / 723 / 52	255 / 867 / 42	336 / 601 / 89	306 / 733 / 72	312 / 603 / 149	298 / 735 / 120						
	3	244 / 795 / 46	227 / 999 / 39	271 / 729 / 74	241 / 874 / 59	234 / 769 / 117	223 / 942 / 95	243 / 863 / 45	217 / 1031 / 36	262 / 771 / 70	241 / 945 / 57	228 / 809 / 110	217 / 976 / 88						
50	1	373 / 583 / 69	329 / 715 / 56	458 / 468 / 125	409 / 579 / 101	372 / 507 / 191	352 / 625 / 155	359 / 624 / 66	321 / 756 / 53	439 / 498 / 118	394 / 606 / 94	371 / 547 / 183	351 / 667 / 147						
	2	320 / 681 / 59	281 / 829 / 48	372 / 561 / 101	333 / 692 / 83	334 / 563 / 171	316 / 694 / 139	305 / 723 / 56	271 / 867 / 45	360 / 601 / 97	325 / 733 / 78	331 / 603 / 163	313 / 735 / 131						
	3	267 / 795 / 50	242 / 999 / 41	294 / 729 / 80	257 / 874 / 64	248 / 769 / 127	235 / 942 / 103	260 / 863 / 48	231 / 1031 / 38	281 / 771 / 76	256 / 945 / 61	242 / 809 / 119	228 / 976 / 96						
60	1	442 / 583 / 79	371 / 715 / 64	542 / 468 / 144	460 / 579 / 117	417 / 507 / 222	388 / 625 / 181	421 / 624 / 75	360 / 756 / 60	512 / 498 / 136	442 / 606 / 109	413 / 547 / 213	385 / 667 / 171						
	2	379 / 681 / 67	316 / 829 / 54	440 / 561 / 117	374 / 692 / 96	373 / 563 / 199	348 / 694 / 162	358 / 723 / 64	304 / 867 / 51	420 / 601 / 112	364 / 733 / 90	368 / 603 / 190	343 / 735 / 153						
	3	316 / 795 / 56	273 / 999 / 47	348 / 729 / 93	289 / 874 / 74	278 / 769 / 148	259 / 942 / 121	305 / 863 / 54	259 / 1031 / 43	328 / 771 / 87	287 / 945 / 71	270 / 809 / 139	250 / 976 / 111						
Wind Speed [mph]		190						200											
45	1	318 / 645 / 57	294 / 791 / 46	397 / 523 / 102	366 / 643 / 83	341 / 571 / 157	333 / 704 / 128	319 / 697 / 55	295 / 849 / 45	391 / 557 / 98	360 / 676 / 78	339 / 605 / 149	331 / 737 / 120						
	2	275 / 760 / 49	255 / 931 / 40	329 / 639 / 85	298 / 769 / 67	309 / 641 / 142	295 / 770 / 113	266 / 791 / 46	254 / 994 / 39	322 / 674 / 80	300 / 826 / 65	306 / 676 / 135	301 / 827 / 110						
	3	232 / 896 / 42	215 / 1100 / 34	253 / 807 / 65	231 / 973 / 52	222 / 843 / 102	219 / 1043 / 84	230 / 958 / 40	214 / 1165 / 33	252 / 866 / 63	230 / 1035 / 50	223 / 902 / 99	221 / 1106 / 80						
50	1	341 / 645 / 61	312 / 791 / 50	425 / 523 / 111	388 / 643 / 90	361 / 571 / 171	349 / 704 / 139	341 / 697 / 59	313 / 849 / 48	418 / 557 / 106	382 / 676 / 85	358 / 605 / 163	346 / 737 / 131						
	2	295 / 760 / 53	270 / 931 / 43	352 / 639 / 92	317 / 769 / 73	327 / 641 / 155	309 / 770 / 123	284 / 791 / 50	270 / 994 / 41	344 / 674 / 87	318 / 826 / 71	323 / 676 / 147	314 / 827 / 119						
	3	249 / 896 / 45	229 / 1100 / 37	271 / 807 / 71	245 / 973 / 57	235 / 843 / 111	229 / 1043 / 92	246 / 958 / 43	227 / 1165 / 35	270 / 866 / 69	244 / 1035 / 54	236 / 902 / 107	231 / 1106 / 88						
60	1	389 / 645 / 69	349 / 791 / 56	481 / 523 / 128	433 / 643 / 104	400 / 571 / 199	381 / 704 / 162	385 / 697 / 67	348 / 849 / 54	471 / 557 / 123	424 / 676 / 98	396 / 605 / 190	376 / 737 / 153						
	2	337 / 760 / 60	302 / 931 / 49	399 / 639 / 106	354 / 769 / 85	363 / 641 / 181	338 / 770 / 144	321 / 791 / 56	300 / 994 / 47	388 / 674 / 101	354 / 826 / 82	357 / 676 / 171	342 / 827 / 139						
	3	284 / 896 / 51	256 / 1100 / 41	307 / 807 / 82	274 / 973 / 66	261 / 843 / 130	251 / 1043 / 107	278 / 958 / 49	252 / 1165 / 40	304 / 866 / 79	271 / 1035 / 63	261 / 902 / 125	251 / 1106 / 102						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
	70	1	680 / 153 / 117	656 / 462 / 113	673 / 197 / 176	673 / 307 / 176	581 / 265 / 335	571 / 403 / 330	680 / 170 / 117	619 / 479 / 107	673 / 217 / 176	673 / 338 / 176	581 / 292 / 335	544 / 421 / 314	680 / 187 / 117	595 / 503 / 102	673 / 239 / 176	673 / 370 / 176	581 / 320 / 335
2		680 / 430 / 117	558 / 539 / 96	673 / 297 / 176	650 / 442 / 170	581 / 332 / 335	507 / 444 / 293	656 / 455 / 113	534 / 565 / 92	673 / 327 / 176	626 / 467 / 164	581 / 365 / 335	488 / 470 / 282	631 / 479 / 109	510 / 589 / 88	673 / 358 / 176	603 / 491 / 158	581 / 399 / 335	461 / 484 / 266
3		583 / 520 / 100	474 / 643 / 82	626 / 463 / 164	508 / 572 / 133	461 / 492 / 266	378 / 613 / 218	558 / 547 / 96	449 / 668 / 77	603 / 489 / 158	485 / 598 / 127	442 / 518 / 256	360 / 639 / 208	534 / 571 / 92	425 / 689 / 73	579 / 513 / 152	461 / 621 / 121	424 / 542 / 245	341 / 661 / 197
1		730 / 145 / 122	730 / 229 / 122	724 / 186 / 187	724 / 291 / 187	637 / 257 / 368	637 / 396 / 368	730 / 161 / 122	702 / 479 / 118	724 / 206 / 187	724 / 320 / 187	637 / 283 / 368	616 / 421 / 356	730 / 177 / 122	675 / 503 / 113	724 / 226 / 187	724 / 351 / 187	637 / 310 / 368	585 / 437 / 338
2		730 / 407 / 122	633 / 539 / 106	724 / 281 / 187	724 / 434 / 187	637 / 321 / 368	574 / 444 / 332	730 / 446 / 122	606 / 565 / 102	724 / 310 / 187	710 / 467 / 184	637 / 353 / 368	553 / 470 / 320	716 / 479 / 120	578 / 589 / 97	724 / 339 / 187	683 / 491 / 177	637 / 386 / 368	522 / 484 / 302
3		661 / 520 / 111	537 / 643 / 90	710 / 463 / 184	576 / 572 / 149	522 / 492 / 302	428 / 613 / 247	633 / 547 / 106	510 / 668 / 86	683 / 489 / 177	550 / 598 / 142	501 / 518 / 290	407 / 639 / 235	606 / 571 / 102	482 / 689 / 81	657 / 513 / 170	523 / 621 / 135	480 / 542 / 278	386 / 661 / 223
80	1	770 / 137 / 127	770 / 216 / 127	764 / 176 / 196	764 / 275 / 196	677 / 244 / 391	677 / 377 / 391	770 / 152 / 127	770 / 238 / 127	764 / 194 / 196	764 / 302 / 196	677 / 269 / 391	677 / 414 / 391	770 / 167 / 127	755 / 503 / 124	764 / 214 / 196	764 / 331 / 196	677 / 294 / 391	653 / 437 / 377
	2	770 / 384 / 127	708 / 539 / 116	764 / 266 / 196	764 / 410 / 196	677 / 305 / 391	642 / 444 / 371	770 / 421 / 127	678 / 565 / 111	764 / 293 / 196	764 / 450 / 196	677 / 336 / 391	618 / 470 / 357	770 / 461 / 127	647 / 589 / 106	764 / 320 / 196	764 / 491 / 196	677 / 367 / 391	583 / 484 / 337
	3	739 / 520 / 121	601 / 643 / 99	764 / 445 / 196	644 / 572 / 165	583 / 492 / 337	478 / 613 / 276	708 / 547 / 116	570 / 668 / 94	764 / 489 / 196	614 / 598 / 157	560 / 518 / 324	455 / 639 / 263	678 / 571 / 111	539 / 689 / 89	734 / 513 / 188	585 / 621 / 150	537 / 542 / 310	432 / 661 / 250
	1	730 / 194 / 122	647 / 525 / 109	724 / 247 / 187	724 / 382 / 187	637 / 338 / 368	564 / 459 / 326	730 / 212 / 122	620 / 545 / 104	724 / 269 / 187	724 / 415 / 187	637 / 367 / 368	543 / 479 / 314	730 / 200 / 127	693 / 545 / 114	764 / 254 / 196	764 / 392 / 196	677 / 349 / 391	607 / 479 / 350
	2	688 / 502 / 115	551 / 610 / 92	724 / 370 / 187	643 / 504 / 166	626 / 414 / 362	501 / 506 / 290	661 / 522 / 111	523 / 629 / 88	724 / 402 / 187	630 / 535 / 163	595 / 427 / 344	480 / 526 / 278	770 / 502 / 127	616 / 610 / 101	764 / 350 / 196	719 / 504 / 184	677 / 400 / 391	560 / 506 / 324
	3	578 / 593 / 97	468 / 728 / 79	616 / 524 / 160	509 / 658 / 132	459 / 564 / 265	366 / 679 / 211	551 / 613 / 92	441 / 742 / 74	603 / 556 / 156	483 / 675 / 125	439 / 584 / 253	355 / 715 / 205	770 / 183 / 127	724 / 525 / 119	764 / 234 / 196	764 / 361 / 196	677 / 321 / 391	630 / 459 / 364
90	1	770 / 183 / 127	724 / 525 / 119	764 / 234 / 196	764 / 361 / 196	677 / 321 / 391	630 / 459 / 364	770 / 200 / 127	693 / 545 / 114	764 / 254 / 196	764 / 392 / 196	677 / 349 / 391	607 / 479 / 350	770 / 502 / 127	616 / 610 / 101	764 / 350 / 196	719 / 504 / 184	677 / 400 / 391	560 / 506 / 324
	2	770 / 502 / 127	616 / 610 / 101	764 / 350 / 196	719 / 504 / 184	677 / 400 / 391	560 / 506 / 324	739 / 522 / 121	585 / 629 / 96	764 / 380 / 196	704 / 535 / 180	665 / 427 / 384	537 / 526 / 310	647 / 593 / 106	524 / 728 / 86	689 / 524 / 177	570 / 658 / 146	513 / 564 / 297	408 / 679 / 236
	3	647 / 593 / 106	524 / 728 / 86	689 / 524 / 177	570 / 658 / 146	513 / 564 / 297	408 / 679 / 236	616 / 613 / 101	493 / 742 / 81	674 / 556 / 173	540 / 675 / 138	490 / 584 / 283	397 / 715 / 229	770 / 183 / 127	724 / 525 / 119	764 / 234 / 196	764 / 361 / 196	677 / 321 / 391	630 / 459 / 364
	1	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302	730 / 212 / 122	620 / 545 / 104	724 / 269 / 187	724 / 415 / 187	637 / 367 / 368	543 / 479 / 314	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
	2	633 / 541 / 106	510 / 661 / 86	724 / 435 / 187	603 / 554 / 156	574 / 446 / 332	470 / 556 / 272	661 / 522 / 111	523 / 629 / 88	724 / 402 / 187	630 / 535 / 163	595 / 427 / 344	480 / 526 / 278	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
	3	523 / 629 / 88	427 / 776 / 72	576 / 575 / 149	469 / 709 / 121	418 / 601 / 241	345 / 749 / 199	551 / 613 / 92	441 / 742 / 74	603 / 556 / 156	483 / 675 / 125	439 / 584 / 253	355 / 715 / 205	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
70	1	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337	770 / 200 / 127	693 / 545 / 114	764 / 254 / 196	764 / 392 / 196	677 / 349 / 391	607 / 479 / 350	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337
	2	708 / 541 / 116	570 / 661 / 94	764 / 411 / 196	674 / 554 / 173	642 / 446 / 371	525 / 556 / 303	739 / 522 / 121	585 / 629 / 96	764 / 380 / 196	704 / 535 / 180	665 / 427 / 384	537 / 526 / 310	708 / 541 / 116	570 / 661 / 94	764 / 411 / 196	674 / 554 / 173	642 / 446 / 371	525 / 556 / 303
	3	585 / 629 / 96	478 / 776 / 79	644 / 575 / 165	525 / 709 / 134	467 / 601 / 270	385 / 749 / 223	616 / 613 / 101	493 / 742 / 81	674 / 556 / 173	540 / 675 / 138	490 / 584 / 283	397 / 715 / 229	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337
	1	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302	730 / 212 / 122	620 / 545 / 104	724 / 269 / 187	724 / 415 / 187	637 / 367 / 368	543 / 479 / 314	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
	2	633 / 541 / 106	510 / 661 / 86	724 / 435 / 187	603 / 554 / 156	574 / 446 / 332	470 / 556 / 272	661 / 522 / 111	523 / 629 / 88	724 / 402 / 187	630 / 535 / 163	595 / 427 / 344	480 / 526 / 278	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
	3	523 / 629 / 88	427 / 776 / 72	576 / 575 / 149	469 / 709 / 121	418 / 601 / 241	345 / 749 / 199	551 / 613 / 92	441 / 742 / 74	603 / 556 / 156	483 / 675 / 125	439 / 584 / 253	355 / 715 / 205	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
80	1	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337	770 / 200 / 127	693 / 545 / 114	764 / 254 / 196	764 / 392 / 196	677 / 349 / 391	607 / 479 / 350	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337
	2	708 / 541 / 116	570 / 661 / 94	764 / 411 / 196	674 / 554 / 173	642 / 446 / 371	525 / 556 / 303	739 / 522 / 121	585 / 629 / 96	764 / 380 / 196	704 / 535 / 180	665 / 427 / 384	537 / 526 / 310	708 / 541 / 116	570 / 661 / 94	764 / 411 / 196	674 / 554 / 173	642 / 446 / 371	525 / 556 / 303
	3	585 / 629 / 96	478 / 776 / 79	644 / 575 / 165	525 / 709 / 134	467 / 601 / 270	385 / 749 / 223	616 / 613 / 101	493 / 742 / 81	674 / 556 / 173	540 / 675 / 138	490 / 584 / 283	397 / 715 / 229	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337
	1	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302	730 / 212 / 122	620 / 545 / 104	724 / 269 / 187	724 / 415 / 187	637 / 367 / 368	543 / 479 / 314	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
	2	633 / 541 / 106	510 / 661 / 86	724 / 435 / 187	603 / 554 / 156	574 / 446 / 332	470 / 556 / 272	661 / 522 / 111	523 / 629 / 88	724 / 402 / 187	630 / 535 / 163	595 / 427 / 344	480 / 526 / 278	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
	3	523 / 629 / 88	427 / 776 / 72	576 / 575 / 149	469 / 709 / 121	418 / 601 / 241	345 / 749 / 199	551 / 613 / 92	441 / 742 / 74	603 / 556 / 156	483 / 675 / 125	439 / 584 / 253	355 / 715 / 205	730 / 230 / 122	592 / 563 / 99	724 / 292 / 187	724 / 450 / 187	637 / 398 / 368	522 / 499 / 302
90	1	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337	770 / 200 / 127	693 / 545 / 114	764 / 254 / 196	764 / 392 / 196	677 / 349 / 391	607 / 479 / 350	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337
	2	708 / 541 / 116	570 / 661 / 94	764 / 411 / 196	674 / 554 / 173	642 / 446 / 371	525 / 556 / 303	739 / 522 / 121	585 / 629 / 96	764 / 380 / 196	704 / 535 / 180	665 / 427 / 384	537 / 526 / 310	708 / 541 / 116	570 / 661 / 94	764 / 411 / 196	674 / 554 / 173	642 / 446 / 371	525 / 556 / 303
	3	585 / 629 / 96	478 / 776 / 79	644 / 575 / 165	525 / 709 / 134	467 / 601 / 270	385 / 749 / 223	616 / 613 / 101	493 / 742 / 81	674 / 556 / 173	540 / 675 / 138	490 / 584 / 283	397 / 715 / 229	770 / 217 / 127	662 / 563 / 109	764 / 276 / 196	764 / 425 / 196	677 / 378 / 391	583 / 499 / 337
	1	730 / 230 / 122	592 / 563 / 99	7															

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						70in x 41in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	70	1	631 / 482 / 109	510 / 593 / 88	673 / 334 / 176	614 / 467 / 161	544 / 416 / 314	463 / 516 / 256	583 / 514 / 100	474 / 635 / 82	673 / 386 / 176	579 / 509 / 152	507 / 448 / 293	451 / 558 / 240	546 / 551 / 94	437 / 669 / 75	662 / 435 / 173	544 / 546 / 142	475 / 475 / 272	438 / 595 / 224
2		534 / 558 / 92	437 / 693 / 75	626 / 461 / 164	508 / 571 / 133	488 / 464 / 282	415 / 573 / 229	498 / 600 / 86	401 / 732 / 69	591 / 503 / 155	473 / 612 / 124	452 / 495 / 261	401 / 614 / 213	461 / 635 / 79	377 / 784 / 65	544 / 529 / 142	437 / 646 / 115	428 / 531 / 245	386 / 648 / 197	
3		449 / 660 / 77	364 / 809 / 63	485 / 591 / 127	390 / 720 / 102	360 / 631 / 208	309 / 782 / 171	425 / 719 / 73	340 / 868 / 59	449 / 631 / 118	367 / 779 / 96	332 / 670 / 192	291 / 815 / 155	389 / 749 / 67	316 / 919 / 55	426 / 682 / 112	343 / 831 / 90	317 / 722 / 181	292 / 897 / 149	
80		1	716 / 482 / 120	578 / 593 / 97	724 / 316 / 187	697 / 467 / 180	616 / 416 / 356	507 / 516 / 290	661 / 514 / 111	537 / 635 / 90	724 / 366 / 187	657 / 509 / 170	574 / 448 / 332	492 / 558 / 272	620 / 551 / 104	496 / 669 / 83	724 / 420 / 187	616 / 546 / 160	533 / 475 / 308	477 / 595 / 253
		2	606 / 558 / 102	496 / 693 / 83	710 / 461 / 184	576 / 571 / 149	553 / 464 / 320	454 / 573 / 259	565 / 600 / 95	455 / 732 / 76	670 / 503 / 173	536 / 612 / 139	512 / 495 / 296	438 / 614 / 241	523 / 635 / 88	427 / 784 / 72	616 / 529 / 160	496 / 646 / 128	480 / 531 / 278	420 / 648 / 223
		3	510 / 660 / 86	413 / 809 / 69	550 / 591 / 142	442 / 720 / 115	407 / 631 / 235	338 / 782 / 193	482 / 719 / 81	386 / 868 / 65	509 / 631 / 132	416 / 779 / 108	376 / 670 / 217	317 / 815 / 175	441 / 749 / 74	358 / 919 / 60	483 / 682 / 125	389 / 831 / 101	355 / 722 / 205	318 / 897 / 169
90		1	770 / 235 / 127	647 / 593 / 106	764 / 298 / 196	764 / 458 / 196	677 / 409 / 391	560 / 516 / 324	739 / 514 / 121	601 / 635 / 99	764 / 346 / 196	734 / 509 / 188	642 / 448 / 371	534 / 558 / 303	693 / 551 / 114	554 / 669 / 91	764 / 396 / 196	689 / 546 / 177	595 / 475 / 344	515 / 595 / 283
		2	678 / 558 / 111	554 / 693 / 91	764 / 444 / 196	644 / 571 / 165	618 / 464 / 357	502 / 573 / 290	631 / 600 / 104	508 / 732 / 84	749 / 503 / 192	599 / 612 / 154	572 / 495 / 330	474 / 614 / 270	585 / 635 / 96	478 / 784 / 79	689 / 529 / 177	555 / 646 / 142	537 / 531 / 310	454 / 648 / 250
		3	570 / 660 / 94	462 / 809 / 76	614 / 591 / 157	495 / 720 / 127	455 / 631 / 263	374 / 782 / 216	539 / 719 / 89	431 / 868 / 71	570 / 631 / 146	465 / 779 / 119	420 / 670 / 243	344 / 815 / 196	493 / 749 / 81	401 / 919 / 66	540 / 682 / 138	435 / 831 / 112	397 / 722 / 229	344 / 897 / 189
Wind Speed [mph]		170						180												
70	1	510 / 583 / 88	413 / 715 / 71	626 / 468 / 164	511 / 579 / 133	461 / 507 / 256	424 / 625 / 208	486 / 624 / 84	399 / 756 / 67	591 / 498 / 155	489 / 606 / 124	455 / 547 / 245	419 / 667 / 197							
	2	437 / 681 / 75	352 / 829 / 61	508 / 561 / 133	416 / 692 / 109	413 / 563 / 229	380 / 694 / 187	413 / 723 / 71	337 / 867 / 57	485 / 601 / 127	404 / 733 / 102	406 / 603 / 218	374 / 735 / 176							
	3	364 / 795 / 63	304 / 999 / 52	402 / 729 / 105	321 / 874 / 84	307 / 769 / 171	283 / 942 / 139	352 / 863 / 61	287 / 1031 / 48	378 / 771 / 99	318 / 945 / 81	297 / 809 / 160	272 / 976 / 128							
	80	1	578 / 583 / 97	468 / 715 / 79	710 / 468 / 184	576 / 579 / 149	505 / 507 / 290	459 / 625 / 235	551 / 624 / 92	441 / 756 / 74	670 / 498 / 173	537 / 606 / 139	498 / 547 / 278	453 / 667 / 223						
		2	496 / 681 / 83	400 / 829 / 67	576 / 561 / 149	469 / 692 / 121	452 / 563 / 259	412 / 694 / 211	468 / 723 / 79	372 / 867 / 63	550 / 601 / 142	443 / 733 / 115	444 / 603 / 247	404 / 735 / 199						
		3	413 / 795 / 69	344 / 999 / 58	456 / 729 / 118	362 / 874 / 94	337 / 769 / 193	306 / 942 / 157	400 / 863 / 67	317 / 1031 / 53	429 / 771 / 111	349 / 945 / 90	325 / 809 / 181	294 / 976 / 145						
	90	1	647 / 583 / 106	524 / 715 / 86	764 / 450 / 196	644 / 579 / 165	560 / 507 / 324	495 / 625 / 263	616 / 624 / 101	493 / 756 / 81	749 / 498 / 192	599 / 606 / 154	540 / 547 / 310	487 / 667 / 250						
		2	554 / 681 / 91	447 / 829 / 74	644 / 561 / 165	525 / 692 / 134	502 / 563 / 290	444 / 694 / 236	524 / 723 / 86	416 / 867 / 69	614 / 601 / 157	495 / 733 / 127	481 / 603 / 276	434 / 735 / 223						
		3	462 / 795 / 76	385 / 999 / 64	510 / 729 / 131	405 / 874 / 104	374 / 769 / 216	330 / 942 / 175	447 / 863 / 74	354 / 1031 / 58	480 / 771 / 123	390 / 945 / 100	352 / 809 / 202	316 / 976 / 162						
Wind Speed [mph]		190						200												
70	1	449 / 645 / 77	385 / 791 / 63	555 / 523 / 146	479 / 643 / 118	440 / 571 / 229	413 / 704 / 187	437 / 697 / 75	384 / 849 / 61	532 / 557 / 139	467 / 676 / 112	433 / 605 / 218	406 / 737 / 176							
	2	389 / 760 / 67	334 / 931 / 55	461 / 639 / 121	390 / 769 / 96	399 / 641 / 208	366 / 770 / 165	364 / 791 / 63	331 / 994 / 52	437 / 674 / 115	389 / 826 / 93	391 / 676 / 197	370 / 827 / 160							
	3	328 / 896 / 57	283 / 1100 / 46	355 / 807 / 93	302 / 973 / 75	286 / 843 / 149	272 / 1043 / 123	316 / 958 / 55	278 / 1165 / 44	343 / 866 / 90	299 / 1035 / 71	285 / 902 / 144	271 / 1106 / 117							
	80	1	510 / 645 / 86	422 / 791 / 69	630 / 523 / 163	524 / 643 / 132	479 / 571 / 259	445 / 704 / 211	496 / 697 / 83	419 / 849 / 67	603 / 557 / 156	510 / 676 / 125	471 / 605 / 247	437 / 737 / 199						
		2	441 / 760 / 74	366 / 931 / 60	523 / 639 / 135	427 / 769 / 108	435 / 641 / 235	394 / 770 / 187	413 / 791 / 69	361 / 994 / 58	496 / 674 / 128	425 / 826 / 104	425 / 676 / 223	397 / 827 / 181						
		3	372 / 896 / 63	310 / 1100 / 51	402 / 807 / 104	331 / 973 / 83	312 / 843 / 169	293 / 1043 / 139	358 / 958 / 60	304 / 1165 / 49	389 / 866 / 101	326 / 1035 / 80	310 / 902 / 163	291 / 1106 / 133						
	90	1	570 / 645 / 94	462 / 791 / 76	704 / 523 / 180	570 / 643 / 146	519 / 571 / 290	477 / 704 / 236	554 / 697 / 91	454 / 849 / 74	674 / 557 / 173	553 / 676 / 138	509 / 605 / 276	467 / 737 / 223						
		2	493 / 760 / 81	401 / 931 / 66	585 / 639 / 150	465 / 769 / 119	471 / 641 / 263	423 / 770 / 209	462 / 791 / 76	392 / 994 / 64	555 / 674 / 142	461 / 826 / 115	459 / 676 / 250	425 / 827 / 202						
		3	416 / 896 / 69	339 / 1100 / 56	450 / 807 / 115	360 / 973 / 92	338 / 843 / 189	314 / 1043 / 155	401 / 958 / 66	329 / 1165 / 53	435 / 866 / 112	353 / 1035 / 89	335 / 902 / 182	312 / 1106 / 149						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	263 / 163 / 46	234 / 332 / 41	262 / 163 / 53	262 / 229 / 53	258 / 180 / 70	248 / 275 / 67	263 / 163 / 46	227 / 356 / 40	262 / 163 / 53	262 / 254 / 53	258 / 199 / 70	242 / 296 / 65	256 / 282 / 45	217 / 374 / 39	262 / 175 / 53	255 / 273 / 52	258 / 220 / 70
2		243 / 309 / 43	201 / 397 / 36	262 / 221 / 53	239 / 320 / 49	258 / 229 / 70	229 / 320 / 62	234 / 327 / 41	191 / 416 / 34	262 / 245 / 53	230 / 339 / 47	258 / 253 / 70	223 / 342 / 60	227 / 349 / 40	185 / 440 / 33	259 / 267 / 53	223 / 361 / 46	251 / 271 / 68	217 / 365 / 59
3		211 / 384 / 37	169 / 473 / 30	230 / 335 / 47	188 / 424 / 38	214 / 365 / 58	173 / 454 / 47	201 / 403 / 36	162 / 499 / 29	223 / 359 / 46	178 / 442 / 36	204 / 384 / 55	163 / 471 / 44	191 / 420 / 34	156 / 524 / 28	213 / 377 / 44	171 / 466 / 35	195 / 401 / 53	157 / 495 / 43
5	1	291 / 163 / 46	258 / 332 / 41	288 / 163 / 56	288 / 229 / 56	258 / 180 / 86	248 / 275 / 83	291 / 163 / 46	251 / 356 / 40	288 / 163 / 56	288 / 254 / 56	258 / 199 / 86	242 / 296 / 81	283 / 282 / 45	240 / 374 / 39	288 / 175 / 56	280 / 273 / 55	258 / 220 / 86	232 / 312 / 78
	2	269 / 309 / 43	223 / 397 / 36	288 / 221 / 56	263 / 320 / 51	258 / 229 / 86	229 / 320 / 77	258 / 327 / 41	212 / 416 / 34	288 / 245 / 56	252 / 339 / 49	258 / 253 / 86	223 / 342 / 75	251 / 349 / 40	205 / 440 / 33	284 / 267 / 56	245 / 361 / 48	251 / 271 / 84	217 / 365 / 73
	3	233 / 384 / 37	187 / 473 / 30	252 / 335 / 49	206 / 424 / 40	214 / 365 / 71	173 / 454 / 58	223 / 403 / 36	180 / 499 / 29	245 / 359 / 48	195 / 442 / 38	204 / 384 / 68	163 / 471 / 55	212 / 420 / 34	172 / 524 / 28	234 / 377 / 46	188 / 466 / 37	195 / 401 / 65	157 / 495 / 53
10	1	346 / 153 / 44	327 / 332 / 41	341 / 153 / 65	341 / 215 / 65	293 / 177 / 111	286 / 275 / 108	346 / 153 / 44	318 / 356 / 40	341 / 153 / 65	341 / 238 / 65	293 / 197 / 111	278 / 296 / 105	346 / 153 / 44	305 / 374 / 39	341 / 164 / 65	341 / 263 / 65	293 / 217 / 111	268 / 312 / 101
	2	341 / 309 / 43	282 / 397 / 36	341 / 208 / 65	332 / 320 / 64	293 / 226 / 111	264 / 320 / 100	327 / 327 / 41	268 / 416 / 34	341 / 230 / 65	318 / 339 / 61	293 / 250 / 111	257 / 342 / 97	318 / 349 / 40	259 / 440 / 33	341 / 254 / 65	309 / 361 / 59	289 / 271 / 109	250 / 365 / 94
	3	296 / 384 / 37	237 / 473 / 30	318 / 335 / 61	260 / 424 / 50	246 / 365 / 93	199 / 454 / 75	282 / 403 / 36	228 / 499 / 29	309 / 359 / 59	247 / 442 / 47	235 / 384 / 89	188 / 471 / 71	268 / 420 / 34	218 / 524 / 28	296 / 377 / 57	238 / 466 / 46	224 / 401 / 85	181 / 495 / 68
0	1	246 / 297 / 44	208 / 390 / 37	262 / 192 / 53	249 / 292 / 51	258 / 241 / 70	226 / 332 / 61	240 / 316 / 42	198 / 404 / 35	262 / 211 / 53	242 / 310 / 50	254 / 261 / 69	220 / 352 / 59						
	2	217 / 365 / 39	175 / 454 / 31	252 / 286 / 51	213 / 377 / 44	242 / 286 / 65	207 / 381 / 56	211 / 386 / 37	169 / 475 / 30	246 / 304 / 50	204 / 392 / 42	236 / 304 / 64	198 / 395 / 54						
	3	182 / 435 / 32	149 / 546 / 27	204 / 393 / 42	165 / 488 / 34	185 / 416 / 50	151 / 518 / 41	175 / 456 / 31	143 / 567 / 25	194 / 407 / 40	159 / 509 / 33	179 / 437 / 49	145 / 538 / 39						
5	1	273 / 297 / 44	230 / 390 / 37	288 / 192 / 56	273 / 292 / 53	258 / 241 / 86	226 / 332 / 76	265 / 316 / 42	219 / 404 / 35	288 / 211 / 56	266 / 310 / 52	254 / 261 / 85	220 / 352 / 74						
	2	240 / 365 / 39	194 / 454 / 31	277 / 286 / 54	234 / 377 / 46	242 / 286 / 81	207 / 381 / 69	233 / 386 / 37	187 / 475 / 30	270 / 304 / 53	224 / 392 / 44	236 / 304 / 79	198 / 395 / 66						
	3	201 / 435 / 32	165 / 546 / 27	224 / 393 / 44	181 / 488 / 36	185 / 416 / 62	151 / 518 / 51	194 / 456 / 31	158 / 567 / 25	213 / 407 / 42	174 / 509 / 34	179 / 437 / 60	145 / 538 / 49						
10	1	346 / 153 / 44	291 / 390 / 37	341 / 181 / 65	341 / 288 / 65	293 / 239 / 111	260 / 332 / 98	337 / 316 / 42	278 / 404 / 35	341 / 198 / 65	336 / 310 / 64	293 / 261 / 111	253 / 352 / 96						
	2	305 / 365 / 39	246 / 454 / 31	341 / 278 / 65	296 / 377 / 57	278 / 286 / 105	239 / 381 / 90	296 / 386 / 37	237 / 475 / 30	341 / 304 / 65	283 / 392 / 54	271 / 304 / 102	228 / 395 / 86						
	3	255 / 435 / 32	209 / 546 / 27	283 / 393 / 54	229 / 488 / 44	214 / 416 / 81	174 / 518 / 66	246 / 456 / 31	200 / 567 / 25	269 / 407 / 52	220 / 509 / 42	206 / 437 / 78	167 / 538 / 63						
0	1	234 / 334 / 41	191 / 424 / 34	262 / 231 / 53	236 / 328 / 48	248 / 277 / 67	210 / 365 / 57	240 / 316 / 42	198 / 404 / 35	262 / 211 / 53	242 / 310 / 50	254 / 261 / 69	220 / 352 / 59						
	2	201 / 399 / 36	162 / 494 / 29	239 / 321 / 49	197 / 411 / 40	229 / 321 / 62	189 / 408 / 51	211 / 386 / 37	169 / 475 / 30	246 / 304 / 50	204 / 392 / 42	236 / 304 / 64	198 / 395 / 54						
	3	169 / 475 / 30	136 / 585 / 24	188 / 426 / 38	152 / 528 / 31	173 / 456 / 47	138 / 556 / 38	175 / 456 / 31	143 / 567 / 25	194 / 407 / 40	159 / 509 / 33	179 / 437 / 49	145 / 538 / 39						
5	1	258 / 334 / 41	212 / 424 / 34	288 / 231 / 56	259 / 328 / 51	248 / 277 / 83	210 / 365 / 70	265 / 316 / 42	219 / 404 / 35	288 / 211 / 56	266 / 310 / 52	254 / 261 / 85	220 / 352 / 74						
	2	223 / 399 / 36	180 / 494 / 29	263 / 321 / 51	217 / 411 / 42	229 / 321 / 77	189 / 408 / 63	233 / 386 / 37	187 / 475 / 30	270 / 304 / 53	224 / 392 / 44	236 / 304 / 79	198 / 395 / 66						
	3	187 / 475 / 30	151 / 585 / 24	206 / 426 / 40	167 / 528 / 33	173 / 456 / 58	138 / 556 / 46	194 / 456 / 31	158 / 567 / 25	213 / 407 / 42	174 / 509 / 34	179 / 437 / 60	145 / 538 / 49						
10	1	327 / 334 / 41	268 / 424 / 34	341 / 216 / 65	327 / 328 / 63	286 / 277 / 108	242 / 365 / 92	337 / 316 / 42	278 / 404 / 35	341 / 198 / 65	336 / 310 / 64	293 / 261 / 111	253 / 352 / 96						
	2	282 / 399 / 36	228 / 494 / 29	332 / 321 / 64	274 / 411 / 53	264 / 321 / 100	217 / 408 / 82	296 / 386 / 37	237 / 475 / 30	341 / 304 / 65	283 / 392 / 54	271 / 304 / 102	228 / 395 / 86						
	3	237 / 475 / 30	191 / 585 / 24	260 / 426 / 50	211 / 528 / 41	199 / 456 / 75	159 / 556 / 60	246 / 456 / 31	200 / 567 / 25	269 / 407 / 52	220 / 509 / 42	206 / 437 / 78	167 / 538 / 63						
0	1	234 / 334 / 41	191 / 424 / 34	262 / 231 / 53	236 / 328 / 48	248 / 277 / 67	210 / 365 / 57	240 / 316 / 42	198 / 404 / 35	262 / 211 / 53	242 / 310 / 50	254 / 261 / 69	220 / 352 / 59						
	2	201 / 399 / 36	162 / 494 / 29	239 / 321 / 49	197 / 411 / 40	229 / 321 / 62	189 / 408 / 51	211 / 386 / 37	169 / 475 / 30	246 / 304 / 50	204 / 392 / 42	236 / 304 / 64	198 / 395 / 54						
	3	169 / 475 / 30	136 / 585 / 24	188 / 426 / 38	152 / 528 / 31	173 / 456 / 47	138 / 556 / 38	175 / 456 / 31	143 / 567 / 25	194 / 407 / 40	159 / 509 / 33	179 / 437 / 49	145 / 538 / 39						
5	1	258 / 334 / 41	212 / 424 / 34	288 / 231 / 56	259 / 328 / 51	248 / 277 / 83	210 / 365 / 70	265 / 316 / 42	219 / 404 / 35	288 / 211 / 56	266 / 310 / 52	254 / 261 / 85	220 / 352 / 74						
	2	223 / 399 / 36	180 / 494 / 29	263 / 321 / 51	217 / 411 / 42	229 / 321 / 77	189 / 408 / 63	233 / 386 / 37	187 / 475 / 30	270 / 304 / 53	224 / 392 / 44	236 / 304 / 79	198 / 395 / 66						
	3	187 / 475 / 30	151 / 585 / 24	206 / 426 / 40	167 / 528 / 33	173 / 456 / 58	138 / 556 / 46	194 / 456 / 31	158 / 567 / 25	213 / 407 / 42	174 / 509 / 34	179 / 437 / 60	145 / 538 / 49						
10	1	327 / 334 / 41	268 / 424 / 34	341 / 216 / 65	327 / 328 / 63	286 / 277 / 108	242 / 365 / 92	337 / 316 / 42	278 / 404 / 35	341 / 198 / 65	336 / 310 / 64	293 / 261 / 111	253 / 352 / 96						
	2	282 / 399 / 36	228 / 494 / 29	332 / 321 / 64	274 / 411 / 53	264 / 321 / 100	217 / 408 / 82	296 / 386 / 37	237 / 475 / 30	341 / 304 / 65	283 / 392 / 54	271 / 304 / 102	228 / 395 / 86						
	3	237 / 475 / 30	191 / 585 / 24	260 / 426 / 50	211 / 528 / 41	199 / 456 / 75	159 / 556 / 60	246 / 456 / 31	200 / 567 / 25	269 / 407 / 52	220 / 509 / 42	206 / 437 / 78	167 / 538 / 63						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	227 / 352 / 40	182 / 435 / 32	262 / 251 / 53	230 / 346 / 47	242 / 292 / 65	204 / 383 / 55	211 / 379 / 37	169 / 467 / 30	252 / 282 / 51	213 / 373 / 44	229 / 322 / 62	189 / 409 / 51	198 / 409 / 35	159 / 504 / 28	239 / 309 / 49	200 / 403 / 41	220 / 355 / 59	179 / 438 / 48	
	2	195 / 417 / 35	156 / 512 / 28	233 / 339 / 48	188 / 423 / 38	223 / 338 / 60	182 / 426 / 49	179 / 443 / 32	146 / 554 / 26	217 / 366 / 44	175 / 455 / 36	210 / 370 / 57	170 / 458 / 46	169 / 480 / 30	136 / 591 / 24	204 / 396 / 42	165 / 492 / 34	198 / 399 / 54	160 / 485 / 43	
	3	162 / 493 / 29	130 / 601 / 23	181 / 444 / 37	146 / 545 / 30	167 / 474 / 45	132 / 572 / 36	153 / 535 / 27	123 / 658 / 22	168 / 477 / 34	136 / 587 / 28	154 / 506 / 42	126 / 628 / 34	140 / 560 / 25	114 / 691 / 20	155 / 504 / 32	126 / 623 / 26	145 / 543 / 39	119 / 663 / 32	
	5	1	251 / 352 / 40	201 / 435 / 32	288 / 251 / 56	252 / 346 / 49	242 / 292 / 81	204 / 383 / 68	233 / 379 / 37	187 / 467 / 30	277 / 282 / 54	234 / 373 / 46	229 / 322 / 77	189 / 409 / 63	219 / 409 / 35	176 / 504 / 28	263 / 309 / 51	220 / 403 / 43	220 / 355 / 74	179 / 438 / 59
	2	215 / 417 / 35	172 / 512 / 28	256 / 339 / 50	206 / 423 / 40	223 / 338 / 75	182 / 426 / 61	197 / 443 / 32	162 / 554 / 26	238 / 366 / 47	192 / 455 / 38	210 / 370 / 70	170 / 458 / 57	187 / 480 / 30	151 / 591 / 24	224 / 396 / 44	181 / 492 / 36	198 / 399 / 66	160 / 485 / 53	
	3	180 / 493 / 29	144 / 601 / 23	199 / 444 / 39	160 / 545 / 31	167 / 474 / 56	132 / 572 / 44	169 / 535 / 27	137 / 658 / 22	185 / 477 / 36	149 / 587 / 29	154 / 506 / 52	126 / 628 / 42	154 / 560 / 25	126 / 691 / 20	171 / 504 / 34	139 / 623 / 27	145 / 543 / 49	119 / 663 / 39	
	10	1	318 / 352 / 40	255 / 435 / 32	341 / 235 / 65	318 / 346 / 61	278 / 292 / 105	235 / 383 / 89	296 / 379 / 37	237 / 467 / 30	341 / 275 / 65	296 / 373 / 57	264 / 322 / 100	217 / 409 / 82	278 / 409 / 35	223 / 504 / 28	332 / 309 / 64	278 / 403 / 53	253 / 355 / 96	205 / 438 / 77
	2	273 / 417 / 35	218 / 512 / 28	323 / 339 / 62	260 / 423 / 50	257 / 338 / 97	210 / 426 / 79	250 / 443 / 32	205 / 554 / 26	301 / 366 / 58	242 / 455 / 47	242 / 370 / 92	195 / 458 / 74	237 / 480 / 30	191 / 591 / 24	283 / 396 / 54	229 / 492 / 44	228 / 399 / 86	183 / 485 / 68	
	3	228 / 493 / 29	182 / 601 / 23	251 / 444 / 48	202 / 545 / 39	192 / 474 / 73	152 / 572 / 58	214 / 535 / 27	173 / 658 / 22	233 / 477 / 45	189 / 587 / 36	177 / 506 / 67	145 / 628 / 55	196 / 560 / 25	159 / 691 / 20	215 / 504 / 41	175 / 623 / 34	167 / 543 / 63	136 / 663 / 51	
5	1	185 / 435 / 33	149 / 536 / 27	230 / 339 / 47	188 / 429 / 38	204 / 376 / 55	187 / 470 / 45	175 / 464 / 31	140 / 565 / 25	220 / 368 / 45	175 / 450 / 36	195 / 405 / 53	194 / 500 / 43	ASCE Group Zone						
	2	159 / 513 / 28	127 / 622 / 23	191 / 422 / 39	152 / 515 / 31	185 / 425 / 50	166 / 518 / 40	149 / 543 / 27	120 / 663 / 21	178 / 444 / 36	146 / 555 / 30	173 / 447 / 47	174 / 558 / 38	Mono Slope						
	3	133 / 605 / 24	107 / 738 / 19	146 / 536 / 30	120 / 669 / 25	135 / 576 / 37	124 / 710 / 30	123 / 631 / 22	101 / 779 / 18	139 / 576 / 29	113 / 712 / 23	126 / 602 / 34	128 / 752 / 28	1 = 1' / 1						
	1	205 / 435 / 33	165 / 536 / 27	252 / 339 / 49	206 / 429 / 40	204 / 376 / 68	187 / 470 / 56	194 / 464 / 31	154 / 565 / 25	241 / 368 / 47	192 / 450 / 38	195 / 405 / 65	194 / 500 / 53	2 = 2						
	2	176 / 513 / 28	140 / 622 / 23	210 / 422 / 41	167 / 515 / 33	185 / 425 / 62	166 / 518 / 50	165 / 543 / 27	133 / 663 / 21	195 / 444 / 38	160 / 555 / 31	173 / 447 / 58	174 / 558 / 47	3 = 3						
	3	147 / 605 / 24	119 / 738 / 19	160 / 536 / 31	132 / 669 / 26	135 / 576 / 45	124 / 710 / 37	137 / 631 / 22	112 / 779 / 18	153 / 576 / 30	125 / 712 / 25	126 / 602 / 42	128 / 752 / 35	1 = 1						
	1	259 / 435 / 33	209 / 536 / 27	318 / 339 / 61	260 / 429 / 50	235 / 376 / 89	207 / 470 / 73	246 / 464 / 31	196 / 565 / 25	305 / 368 / 59	242 / 450 / 47	224 / 405 / 85	208 / 500 / 68	2 = 2' / 2						
	2	223 / 513 / 28	178 / 622 / 23	265 / 422 / 51	211 / 515 / 41	214 / 425 / 81	184 / 518 / 64	209 / 543 / 27	169 / 663 / 21	247 / 444 / 47	202 / 555 / 39	199 / 447 / 75	188 / 558 / 62	3 = 3' / 3						
	3	187 / 605 / 24	150 / 738 / 19	202 / 536 / 39	166 / 669 / 32	156 / 576 / 59	137 / 710 / 48	173 / 631 / 22	141 / 779 / 18	193 / 576 / 37	157 / 712 / 30	145 / 602 / 55	138 / 752 / 45	1 = 1						
10	1	166 / 491 / 29	142 / 602 / 24	207 / 389 / 42	175 / 477 / 34	182 / 425 / 49	199 / 526 / 40	156 / 515 / 28	146 / 636 / 23	194 / 407 / 40	183 / 510 / 33	182 / 449 / 47	203 / 547 / 38	2 = 2						
	2	140 / 568 / 25	121 / 701 / 20	168 / 471 / 34	145 / 580 / 28	163 / 473 / 44	178 / 582 / 36	133 / 602 / 24	124 / 734 / 19	159 / 494 / 33	149 / 613 / 27	162 / 496 / 42	185 / 616 / 34	3 = 3						
	3	117 / 667 / 21	100 / 813 / 17	130 / 599 / 27	114 / 749 / 22	120 / 639 / 33	132 / 788 / 27	111 / 700 / 20	105 / 871 / 16	123 / 633 / 25	116 / 781 / 21	119 / 673 / 31	134 / 818 / 25	1 = 1						
	1	183 / 491 / 29	154 / 602 / 24	227 / 389 / 45	189 / 477 / 36	182 / 425 / 61	199 / 526 / 50	172 / 515 / 28	155 / 636 / 23	213 / 407 / 42	192 / 510 / 34	182 / 449 / 58	203 / 547 / 46	2 = 2						
	2	154 / 568 / 25	131 / 701 / 20	185 / 471 / 36	156 / 580 / 29	163 / 473 / 55	178 / 582 / 44	147 / 602 / 24	131 / 734 / 19	174 / 494 / 34	157 / 613 / 28	162 / 496 / 52	185 / 616 / 42	3 = 3						
	3	129 / 667 / 21	109 / 813 / 17	142 / 599 / 28	122 / 749 / 23	120 / 639 / 40	132 / 788 / 33	122 / 700 / 20	111 / 871 / 16	135 / 633 / 27	122 / 781 / 22	119 / 673 / 38	134 / 818 / 31	1 = 1						
	1	232 / 491 / 29	193 / 602 / 24	287 / 389 / 55	237 / 477 / 44	210 / 425 / 79	209 / 526 / 64	218 / 515 / 28	192 / 636 / 23	269 / 407 / 52	238 / 510 / 42	206 / 449 / 75	208 / 547 / 60	2 = 2						
	2	196 / 568 / 25	165 / 701 / 20	233 / 471 / 45	195 / 580 / 36	188 / 473 / 71	187 / 582 / 58	187 / 602 / 24	163 / 734 / 19	220 / 494 / 42	194 / 613 / 35	183 / 496 / 67	189 / 616 / 55	3 = 3						
	3	164 / 667 / 21	137 / 813 / 17	180 / 599 / 35	153 / 749 / 29	138 / 639 / 52	138 / 788 / 43	155 / 700 / 20	138 / 871 / 16	171 / 633 / 33	151 / 781 / 27	135 / 673 / 49	137 / 818 / 40	1 = 1						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	397 / 145 / 43	397 / 161 / 43	390 / 145 / 74	390 / 204 / 74	325 / 171 / 131	325 / 272 / 131	397 / 145 / 43	386 / 356 / 42	390 / 145 / 74	390 / 226 / 74	325 / 190 / 131	321 / 296 / 129	397 / 145 / 43	369 / 374 / 40	390 / 155 / 74	390 / 249 / 74	325 / 209 / 131	308 / 312 / 124
15	2	397 / 297 / 43	342 / 397 / 37	390 / 197 / 74	390 / 311 / 74	325 / 217 / 131	304 / 320 / 123	397 / 327 / 43	325 / 416 / 35	390 / 218 / 74	385 / 339 / 73	325 / 241 / 131	296 / 342 / 119	386 / 349 / 42	314 / 440 / 34	390 / 240 / 74	374 / 361 / 71	325 / 265 / 131	287 / 365 / 116
	3	358 / 384 / 39	287 / 473 / 31	385 / 335 / 73	314 / 424 / 60	283 / 365 / 114	229 / 454 / 93	342 / 403 / 37	276 / 499 / 30	374 / 359 / 71	298 / 442 / 56	271 / 384 / 109	217 / 471 / 88	325 / 420 / 35	265 / 524 / 29	358 / 377 / 68	287 / 466 / 54	258 / 401 / 104	208 / 495 / 84
	1	446 / 139 / 44	446 / 154 / 44	438 / 139 / 82	438 / 196 / 82	353 / 164 / 156	353 / 261 / 156	446 / 139 / 44	446 / 171 / 44	438 / 139 / 82	438 / 217 / 82	353 / 182 / 156	353 / 288 / 156	446 / 139 / 44	434 / 374 / 43	438 / 149 / 82	438 / 239 / 82	353 / 201 / 156	349 / 312 / 154
20	2	446 / 284 / 44	401 / 397 / 40	438 / 189 / 82	438 / 298 / 82	353 / 209 / 156	344 / 320 / 151	446 / 314 / 44	382 / 416 / 38	438 / 209 / 82	438 / 329 / 82	353 / 231 / 156	334 / 342 / 147	446 / 344 / 44	369 / 440 / 37	438 / 230 / 82	438 / 361 / 82	353 / 255 / 156	325 / 365 / 143
	3	421 / 384 / 42	337 / 473 / 34	438 / 326 / 82	369 / 424 / 69	320 / 365 / 141	259 / 454 / 114	401 / 403 / 40	324 / 499 / 32	438 / 359 / 82	350 / 442 / 66	306 / 384 / 135	245 / 471 / 108	382 / 420 / 38	311 / 524 / 31	419 / 377 / 79	337 / 466 / 63	292 / 401 / 129	236 / 495 / 104
	1	446 / 139 / 44	446 / 154 / 44	438 / 139 / 82	438 / 196 / 82	384 / 160 / 182	384 / 254 / 182	446 / 139 / 44	446 / 171 / 44	438 / 139 / 82	438 / 217 / 82	384 / 178 / 182	384 / 281 / 182	446 / 139 / 44	434 / 374 / 43	438 / 149 / 82	438 / 239 / 82	384 / 196 / 182	384 / 308 / 182
25	2	446 / 284 / 44	401 / 397 / 40	438 / 189 / 82	438 / 298 / 82	384 / 204 / 182	384 / 320 / 182	446 / 314 / 44	382 / 416 / 38	438 / 209 / 82	438 / 329 / 82	384 / 225 / 182	373 / 342 / 177	446 / 344 / 44	369 / 440 / 37	438 / 230 / 82	438 / 361 / 82	384 / 248 / 182	363 / 365 / 172
	3	421 / 384 / 42	337 / 473 / 34	438 / 326 / 82	369 / 424 / 69	357 / 365 / 170	289 / 454 / 137	401 / 403 / 40	324 / 499 / 32	438 / 359 / 82	350 / 442 / 66	342 / 384 / 162	273 / 471 / 130	382 / 420 / 38	311 / 524 / 31	419 / 377 / 79	337 / 466 / 63	326 / 401 / 155	263 / 495 / 125
	Wind Speed [mph]		110				115												
15	1	397 / 145 / 43	353 / 390 / 38	390 / 171 / 74	390 / 273 / 74	325 / 230 / 131	300 / 332 / 121	397 / 147 / 43	336 / 404 / 36	390 / 188 / 74	390 / 298 / 74	325 / 251 / 131	291 / 352 / 118						
	2	369 / 365 / 40	298 / 454 / 32	390 / 264 / 74	358 / 377 / 68	321 / 286 / 129	275 / 381 / 111	358 / 386 / 39	287 / 475 / 31	390 / 288 / 74	341 / 392 / 65	312 / 304 / 126	262 / 395 / 106						
	3	309 / 435 / 33	254 / 546 / 27	341 / 393 / 65	277 / 488 / 52	246 / 416 / 99	200 / 518 / 81	298 / 456 / 32	243 / 567 / 26	325 / 407 / 62	266 / 509 / 50	237 / 437 / 96	192 / 538 / 78						
20	1	446 / 139 / 44	414 / 390 / 41	438 / 164 / 82	438 / 261 / 82	353 / 221 / 156	339 / 332 / 149	446 / 141 / 44	395 / 404 / 39	438 / 180 / 82	438 / 285 / 82	353 / 241 / 156	330 / 352 / 145						
	2	434 / 365 / 43	350 / 454 / 35	438 / 253 / 82	419 / 377 / 79	353 / 279 / 156	311 / 381 / 137	421 / 386 / 42	337 / 475 / 34	438 / 276 / 82	400 / 392 / 75	353 / 304 / 156	297 / 395 / 131						
	3	362 / 435 / 36	298 / 546 / 30	400 / 393 / 75	324 / 488 / 61	278 / 416 / 122	226 / 518 / 100	350 / 456 / 35	285 / 567 / 29	381 / 407 / 71	312 / 509 / 58	269 / 437 / 118	217 / 538 / 96						
25	1	446 / 139 / 44	414 / 390 / 41	438 / 164 / 82	438 / 261 / 82	384 / 215 / 182	378 / 332 / 180	446 / 141 / 44	395 / 404 / 39	438 / 180 / 82	438 / 285 / 82	384 / 235 / 182	368 / 352 / 175						
	2	434 / 365 / 43	350 / 454 / 35	438 / 253 / 82	419 / 377 / 79	384 / 271 / 182	347 / 381 / 165	421 / 386 / 42	337 / 475 / 34	438 / 276 / 82	400 / 392 / 75	384 / 296 / 182	331 / 395 / 157						
	3	362 / 435 / 36	298 / 546 / 30	400 / 393 / 75	324 / 488 / 61	310 / 416 / 147	252 / 518 / 120	350 / 456 / 35	285 / 567 / 29	381 / 407 / 71	312 / 509 / 58	300 / 437 / 142	242 / 538 / 115						
Wind Speed [mph]		120				130													
15	1	397 / 161 / 43	325 / 424 / 35	390 / 205 / 74	390 / 324 / 74	325 / 273 / 131	279 / 365 / 113	397 / 147 / 43	336 / 404 / 36	390 / 188 / 74	390 / 298 / 74	325 / 251 / 131	291 / 352 / 118						
	2	342 / 399 / 37	276 / 494 / 30	390 / 313 / 74	331 / 411 / 63	304 / 321 / 123	250 / 408 / 101	358 / 386 / 39	287 / 475 / 31	390 / 288 / 74	341 / 392 / 65	312 / 304 / 126	262 / 395 / 106						
	3	287 / 475 / 31	232 / 585 / 25	314 / 426 / 60	255 / 528 / 48	229 / 456 / 93	183 / 556 / 74	298 / 456 / 32	243 / 567 / 26	325 / 407 / 62	266 / 509 / 50	237 / 437 / 96	192 / 538 / 78						
20	1	446 / 155 / 44	382 / 424 / 38	438 / 196 / 82	438 / 310 / 82	353 / 263 / 156	316 / 365 / 139	446 / 141 / 44	395 / 404 / 39	438 / 180 / 82	438 / 285 / 82	353 / 241 / 156	330 / 352 / 145						
	2	401 / 399 / 40	324 / 494 / 32	438 / 300 / 82	388 / 411 / 73	344 / 321 / 151	283 / 408 / 125	421 / 386 / 42	337 / 475 / 34	438 / 276 / 82	400 / 392 / 75	353 / 304 / 156	297 / 395 / 131						
	3	337 / 475 / 34	272 / 585 / 27	369 / 426 / 69	299 / 528 / 56	259 / 456 / 114	207 / 556 / 91	350 / 456 / 35	285 / 567 / 29	381 / 407 / 71	312 / 509 / 58	269 / 437 / 118	217 / 538 / 96						
25	1	446 / 155 / 44	382 / 424 / 38	438 / 196 / 82	438 / 310 / 82	384 / 256 / 182	352 / 365 / 167	446 / 141 / 44	395 / 404 / 39	438 / 180 / 82	438 / 285 / 82	384 / 235 / 182	368 / 352 / 175						
	2	401 / 399 / 40	324 / 494 / 32	438 / 300 / 82	388 / 411 / 73	384 / 321 / 182	315 / 408 / 150	421 / 386 / 42	337 / 475 / 34	438 / 276 / 82	400 / 392 / 75	384 / 296 / 182	331 / 395 / 157						
	3	337 / 475 / 34	272 / 585 / 27	369 / 426 / 69	299 / 528 / 56	289 / 456 / 137	231 / 556 / 110	350 / 456 / 35	285 / 567 / 29	381 / 407 / 71	312 / 509 / 58	300 / 437 / 142	242 / 538 / 115						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	386 / 352 / 42	309 / 435 / 33	390 / 223 / 74	385 / 346 / 73	321 / 292 / 129	271 / 383 / 109	358 / 379 / 39	287 / 467 / 31	390 / 261 / 74	358 / 373 / 68	304 / 322 / 123	250 / 409 / 101	336 / 409 / 36	270 / 504 / 29	390 / 301 / 74	336 / 403 / 64	291 / 355 / 118	236 / 438 / 94
2		331 / 417 / 36	265 / 512 / 29	390 / 339 / 74	314 / 423 / 60	296 / 338 / 119	242 / 426 / 98	303 / 443 / 33	248 / 554 / 27	363 / 366 / 69	293 / 455 / 55	279 / 370 / 113	225 / 458 / 91	287 / 480 / 31	232 / 591 / 25	341 / 396 / 65	277 / 492 / 52	262 / 399 / 106	211 / 485 / 84	
3		276 / 493 / 30	221 / 601 / 24	304 / 444 / 57	244 / 545 / 46	221 / 474 / 89	175 / 572 / 71	259 / 535 / 28	210 / 658 / 23	282 / 477 / 53	228 / 587 / 43	204 / 506 / 83	167 / 628 / 67	237 / 560 / 26	193 / 691 / 21	260 / 504 / 49	212 / 623 / 40	192 / 543 / 78	156 / 663 / 62	
20		1	446 / 169 / 44	362 / 435 / 36	438 / 214 / 82	438 / 336 / 82	353 / 285 / 156	306 / 383 / 135	421 / 379 / 42	337 / 467 / 34	438 / 250 / 82	419 / 373 / 79	344 / 322 / 151	283 / 409 / 125	395 / 409 / 39	317 / 504 / 32	438 / 288 / 82	394 / 403 / 74	330 / 355 / 145	266 / 438 / 116
		2	388 / 417 / 39	311 / 512 / 31	438 / 325 / 82	369 / 423 / 69	334 / 338 / 147	273 / 426 / 120	356 / 443 / 36	291 / 554 / 29	426 / 366 / 80	343 / 455 / 64	316 / 370 / 139	254 / 458 / 112	337 / 480 / 34	272 / 591 / 27	400 / 396 / 75	324 / 492 / 61	297 / 399 / 131	238 / 485 / 104
		3	324 / 493 / 32	259 / 601 / 26	356 / 444 / 67	286 / 545 / 54	250 / 474 / 110	198 / 572 / 87	304 / 535 / 30	246 / 658 / 25	331 / 477 / 62	267 / 587 / 50	231 / 506 / 102	189 / 628 / 83	278 / 560 / 28	227 / 691 / 23	305 / 504 / 57	248 / 623 / 47	217 / 543 / 96	176 / 663 / 77
25		1	446 / 169 / 44	362 / 435 / 36	438 / 214 / 82	438 / 336 / 82	384 / 277 / 182	342 / 383 / 162	421 / 379 / 42	337 / 467 / 34	438 / 250 / 82	419 / 373 / 79	384 / 322 / 182	315 / 409 / 150	395 / 409 / 39	317 / 504 / 32	438 / 288 / 82	394 / 403 / 74	368 / 355 / 175	297 / 438 / 140
		2	388 / 417 / 39	311 / 512 / 31	438 / 325 / 82	369 / 423 / 69	373 / 338 / 177	305 / 426 / 145	356 / 443 / 36	291 / 554 / 29	426 / 366 / 80	343 / 455 / 64	352 / 370 / 167	284 / 458 / 135	337 / 480 / 34	272 / 591 / 27	400 / 396 / 75	324 / 492 / 61	331 / 399 / 157	265 / 485 / 125
		3	324 / 493 / 32	259 / 601 / 26	356 / 444 / 67	286 / 545 / 54	279 / 474 / 132	221 / 572 / 105	304 / 535 / 30	246 / 658 / 25	331 / 477 / 62	267 / 587 / 50	258 / 506 / 122	210 / 628 / 100	278 / 560 / 28	227 / 691 / 23	305 / 504 / 57	248 / 623 / 47	242 / 543 / 115	196 / 663 / 93
15	Wind Speed [mph]		170						180											
	1	314 / 435 / 34	254 / 536 / 27	385 / 339 / 73	314 / 429 / 60	271 / 376 / 109	236 / 470 / 89	298 / 464 / 32	237 / 565 / 26	369 / 368 / 70	293 / 450 / 55	258 / 405 / 104	236 / 500 / 84							
	2	270 / 513 / 29	215 / 622 / 23	320 / 422 / 61	255 / 515 / 48	246 / 425 / 99	209 / 518 / 79	254 / 543 / 27	204 / 663 / 22	298 / 444 / 56	244 / 555 / 46	229 / 447 / 93	212 / 558 / 76							
	3	226 / 605 / 25	182 / 738 / 20	244 / 536 / 46	201 / 669 / 38	179 / 576 / 72	156 / 710 / 59	210 / 631 / 23	171 / 779 / 19	233 / 576 / 44	190 / 712 / 36	167 / 602 / 67	156 / 752 / 56							
	20	1	369 / 435 / 37	298 / 536 / 30	438 / 330 / 82	369 / 429 / 69	306 / 376 / 135	265 / 470 / 110	350 / 464 / 35	278 / 565 / 28	432 / 368 / 81	343 / 450 / 64	292 / 405 / 129	263 / 500 / 104						
		2	317 / 513 / 32	253 / 622 / 25	375 / 422 / 70	299 / 515 / 56	278 / 425 / 122	235 / 518 / 98	298 / 543 / 30	240 / 663 / 24	350 / 444 / 66	286 / 555 / 54	259 / 447 / 114	237 / 558 / 94						
		3	265 / 605 / 27	214 / 738 / 22	286 / 536 / 54	235 / 669 / 44	203 / 576 / 89	175 / 710 / 73	246 / 631 / 25	201 / 779 / 20	273 / 576 / 51	223 / 712 / 42	189 / 602 / 83	174 / 752 / 69						
	25	1	369 / 435 / 37	298 / 536 / 30	438 / 330 / 82	369 / 429 / 69	342 / 376 / 162	294 / 470 / 132	350 / 464 / 35	278 / 565 / 28	432 / 368 / 81	343 / 450 / 64	326 / 405 / 155	290 / 500 / 125						
		2	317 / 513 / 32	253 / 622 / 25	375 / 422 / 70	299 / 515 / 56	310 / 425 / 147	261 / 518 / 117	298 / 543 / 30	240 / 663 / 24	350 / 444 / 66	286 / 555 / 54	289 / 447 / 137	261 / 558 / 112						
3		265 / 605 / 27	214 / 738 / 22	286 / 536 / 54	235 / 669 / 44	226 / 576 / 107	194 / 710 / 88	246 / 631 / 25	201 / 779 / 20	273 / 576 / 51	223 / 712 / 42	210 / 602 / 100	192 / 752 / 83							
15	Wind Speed [mph]		190						200											
	1	281 / 491 / 30	232 / 602 / 25	347 / 389 / 66	284 / 477 / 52	242 / 425 / 98	234 / 526 / 79	265 / 515 / 29	229 / 636 / 23	325 / 407 / 62	284 / 510 / 50	236 / 449 / 93	232 / 547 / 74							
	2	237 / 568 / 26	198 / 701 / 21	282 / 471 / 53	234 / 580 / 43	217 / 473 / 88	210 / 582 / 71	226 / 602 / 25	194 / 734 / 20	266 / 494 / 50	232 / 613 / 41	210 / 496 / 83	211 / 616 / 67							
	3	199 / 667 / 22	165 / 813 / 18	217 / 599 / 41	184 / 749 / 34	158 / 639 / 64	155 / 788 / 52	188 / 700 / 20	165 / 871 / 17	206 / 633 / 39	180 / 781 / 32	155 / 673 / 61	153 / 818 / 49							
	20	1	330 / 491 / 33	272 / 602 / 27	407 / 389 / 76	332 / 477 / 61	273 / 425 / 120	260 / 526 / 98	311 / 515 / 31	267 / 636 / 25	381 / 407 / 71	330 / 510 / 58	266 / 449 / 114	256 / 547 / 91						
		2	278 / 568 / 28	232 / 701 / 23	331 / 471 / 62	273 / 580 / 50	245 / 473 / 108	232 / 582 / 87	265 / 602 / 27	226 / 734 / 22	312 / 494 / 58	269 / 613 / 48	237 / 496 / 102	233 / 616 / 83						
		3	233 / 667 / 23	192 / 813 / 19	254 / 599 / 48	215 / 749 / 40	179 / 639 / 79	172 / 788 / 65	220 / 700 / 22	192 / 871 / 18	242 / 633 / 45	209 / 781 / 37	174 / 673 / 75	169 / 818 / 60						
	25	1	330 / 491 / 33	272 / 602 / 27	407 / 389 / 76	332 / 477 / 61	305 / 425 / 145	286 / 526 / 117	311 / 515 / 31	267 / 636 / 25	381 / 407 / 71	330 / 510 / 58	296 / 449 / 137	280 / 547 / 110						
		2	278 / 568 / 28	232 / 701 / 23	331 / 471 / 62	273 / 580 / 50	273 / 473 / 130	255 / 582 / 105	265 / 602 / 27	226 / 734 / 22	312 / 494 / 58	269 / 613 / 48	264 / 496 / 122	255 / 616 / 100						
3		233 / 667 / 23	192 / 813 / 19	254 / 599 / 48	215 / 749 / 40	200 / 639 / 95	189 / 788 / 78	220 / 700 / 22	192 / 871 / 18	242 / 633 / 45	209 / 781 / 37	194 / 673 / 90	185 / 818 / 73							

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	468 / 135 / 45	468 / 149 / 45	466 / 137 / 87	466 / 193 / 87	412 / 156 / 207	412 / 247 / 207	468 / 135 / 45	468 / 166 / 45	466 / 137 / 87	466 / 213 / 87	412 / 173 / 207	412 / 273 / 207	468 / 135 / 45	468 / 184 / 45	466 / 147 / 87	466 / 235 / 87	412 / 191 / 207	412 / 300 / 207
2		468 / 276 / 45	433 / 397 / 42	466 / 186 / 87	466 / 294 / 87	412 / 198 / 207	412 / 311 / 207	468 / 305 / 45	412 / 416 / 40	466 / 206 / 87	466 / 324 / 87	412 / 219 / 207	412 / 342 / 207	468 / 334 / 45	398 / 440 / 38	466 / 227 / 87	466 / 356 / 87	412 / 241 / 207	400 / 365 / 201	
3		454 / 384 / 44	363 / 473 / 35	466 / 321 / 87	398 / 424 / 74	395 / 365 / 198	319 / 454 / 160	433 / 403 / 42	349 / 499 / 34	466 / 354 / 87	377 / 442 / 70	377 / 384 / 190	302 / 471 / 152	412 / 420 / 40	335 / 524 / 32	452 / 377 / 84	363 / 466 / 68	360 / 401 / 181	290 / 495 / 146	
35		1	501 / 131 / 46	501 / 145 / 46	499 / 133 / 93	499 / 187 / 93	438 / 151 / 230	438 / 240 / 230	501 / 131 / 46	501 / 161 / 46	499 / 133 / 93	499 / 207 / 93	438 / 168 / 230	438 / 265 / 230	501 / 131 / 46	501 / 178 / 46	499 / 142 / 93	499 / 228 / 93	438 / 185 / 230	438 / 291 / 230
		2	501 / 268 / 46	478 / 397 / 44	499 / 180 / 93	499 / 285 / 93	438 / 192 / 230	438 / 302 / 230	501 / 295 / 46	455 / 416 / 42	499 / 200 / 93	499 / 315 / 93	438 / 213 / 230	438 / 333 / 230	501 / 324 / 46	440 / 440 / 41	499 / 220 / 93	499 / 345 / 93	438 / 234 / 230	438 / 365 / 230
		3	501 / 384 / 46	401 / 473 / 37	499 / 312 / 93	439 / 424 / 81	432 / 365 / 227	349 / 454 / 184	478 / 403 / 44	386 / 499 / 36	499 / 343 / 93	416 / 442 / 77	413 / 384 / 217	330 / 471 / 174	455 / 420 / 42	370 / 524 / 34	499 / 377 / 93	401 / 466 / 74	394 / 401 / 207	318 / 495 / 167
40		1	546 / 129 / 105	546 / 143 / 105	531 / 129 / 147	531 / 181 / 147	469 / 149 / 262	469 / 237 / 262	546 / 129 / 105	546 / 159 / 105	531 / 129 / 147	531 / 201 / 147	469 / 165 / 262	469 / 262 / 262	546 / 129 / 105	546 / 175 / 105	531 / 138 / 147	531 / 221 / 147	469 / 183 / 262	469 / 287 / 262
		2	546 / 264 / 105	529 / 397 / 101	531 / 175 / 147	531 / 277 / 147	469 / 190 / 262	469 / 298 / 262	546 / 291 / 105	503 / 416 / 97	531 / 194 / 147	531 / 305 / 147	469 / 210 / 262	469 / 328 / 262	546 / 319 / 105	486 / 440 / 93	531 / 214 / 147	531 / 335 / 147	469 / 231 / 262	469 / 360 / 262
		3	546 / 378 / 105	443 / 473 / 85	531 / 302 / 147	482 / 424 / 134	469 / 365 / 262	379 / 454 / 212	529 / 403 / 101	426 / 499 / 82	531 / 333 / 147	457 / 442 / 127	448 / 384 / 251	359 / 471 / 201	503 / 420 / 97	409 / 524 / 79	531 / 365 / 147	440 / 466 / 122	428 / 401 / 239	345 / 495 / 193
Wind Speed [mph]		110						115												
30	1	468 / 135 / 45	447 / 390 / 43	466 / 162 / 87	466 / 258 / 87	412 / 209 / 207	412 / 328 / 207	468 / 137 / 45	426 / 404 / 41	466 / 177 / 87	466 / 281 / 87	412 / 228 / 207	406 / 352 / 204							
	2	468 / 365 / 45	377 / 454 / 36	466 / 249 / 87	452 / 377 / 84	412 / 264 / 207	383 / 381 / 192	454 / 386 / 44	363 / 475 / 35	466 / 272 / 87	432 / 392 / 81	412 / 288 / 207	366 / 395 / 184							
	3	391 / 435 / 38	322 / 546 / 31	432 / 393 / 81	350 / 488 / 65	342 / 416 / 172	279 / 518 / 140	377 / 456 / 36	308 / 567 / 30	411 / 407 / 77	336 / 509 / 63	331 / 437 / 166	267 / 538 / 134							
	35	1	501 / 131 / 46	494 / 390 / 45	499 / 157 / 93	499 / 250 / 93	438 / 203 / 230	438 / 318 / 230	501 / 133 / 46	470 / 404 / 43	499 / 172 / 93	499 / 273 / 93	438 / 222 / 230	438 / 347 / 230						
		2	501 / 354 / 46	417 / 454 / 38	499 / 242 / 93	499 / 377 / 93	438 / 256 / 230	419 / 381 / 220	501 / 386 / 46	401 / 475 / 37	499 / 264 / 93	476 / 392 / 88	438 / 280 / 230	400 / 395 / 210						
		3	432 / 435 / 40	355 / 546 / 33	476 / 393 / 88	386 / 488 / 72	375 / 416 / 197	305 / 518 / 160	417 / 456 / 38	340 / 567 / 31	454 / 407 / 84	371 / 509 / 69	362 / 437 / 190	292 / 538 / 154						
	40	1	546 / 129 / 105	546 / 193 / 105	531 / 152 / 147	531 / 243 / 147	469 / 200 / 262	469 / 314 / 262	546 / 131 / 105	520 / 404 / 100	531 / 167 / 147	531 / 265 / 147	469 / 219 / 262	469 / 342 / 262						
		2	546 / 349 / 105	460 / 454 / 88	531 / 234 / 147	531 / 366 / 147	469 / 253 / 262	455 / 381 / 255	546 / 380 / 105	443 / 475 / 85	531 / 256 / 147	523 / 392 / 145	469 / 276 / 262	434 / 395 / 243						
		3	478 / 435 / 92	392 / 546 / 75	523 / 393 / 145	424 / 488 / 117	407 / 416 / 228	331 / 518 / 185	460 / 456 / 88	375 / 567 / 72	498 / 407 / 138	407 / 509 / 113	393 / 437 / 220	317 / 538 / 178						
Wind Speed [mph]		120						130												
30	1	468 / 150 / 45	412 / 424 / 40	466 / 194 / 87	466 / 306 / 87	412 / 249 / 207	389 / 365 / 195	468 / 137 / 45	426 / 404 / 41	466 / 177 / 87	466 / 281 / 87	412 / 228 / 207	406 / 352 / 204							
	2	433 / 399 / 42	349 / 494 / 34	466 / 295 / 87	418 / 411 / 78	412 / 312 / 207	348 / 408 / 175	454 / 386 / 44	363 / 475 / 35	466 / 272 / 87	432 / 392 / 81	412 / 288 / 207	366 / 395 / 184							
	3	363 / 475 / 35	294 / 585 / 28	398 / 426 / 74	322 / 528 / 60	319 / 456 / 160	256 / 556 / 128	377 / 456 / 36	308 / 567 / 30	411 / 407 / 77	336 / 509 / 63	331 / 437 / 166	267 / 538 / 134							
	35	1	501 / 146 / 46	455 / 424 / 42	499 / 188 / 93	499 / 297 / 93	438 / 242 / 230	425 / 365 / 224	501 / 133 / 46	470 / 404 / 43	499 / 172 / 93	499 / 273 / 93	438 / 222 / 230	438 / 347 / 230						
		2	478 / 399 / 44	386 / 494 / 36	499 / 287 / 93	461 / 411 / 86	438 / 304 / 230	381 / 408 / 200	501 / 386 / 46	401 / 475 / 37	499 / 264 / 93	476 / 392 / 88	438 / 280 / 230	400 / 395 / 210						
		3	401 / 475 / 37	324 / 585 / 30	439 / 426 / 81	356 / 528 / 66	349 / 456 / 184	280 / 556 / 147	417 / 456 / 38	340 / 567 / 31	454 / 407 / 84	371 / 509 / 69	362 / 437 / 190	292 / 538 / 154						
	40	1	546 / 143 / 105	503 / 424 / 97	531 / 182 / 147	531 / 288 / 147	469 / 238 / 262	462 / 365 / 258	546 / 131 / 105	520 / 404 / 100	531 / 167 / 147	531 / 265 / 147	469 / 219 / 262	469 / 342 / 262						
		2	529 / 399 / 101	426 / 494 / 82	531 / 278 / 147	506 / 411 / 140	469 / 299 / 262	414 / 408 / 231	546 / 380 / 105	443 / 475 / 85	531 / 256 / 147	523 / 392 / 145	469 / 276 / 262	434 / 395 / 243						
		3	443 / 475 / 85	358 / 585 / 69	482 / 426 / 134	390 / 528 / 108	379 / 456 / 212	304 / 556 / 170	460 / 456 / 88	375 / 567 / 72	498 / 407 / 138	407 / 509 / 113	393 / 437 / 220	317 / 538 / 178						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	468 / 164 / 45	391 / 435 / 38	466 / 211 / 87	466 / 331 / 87	412 / 269 / 207	377 / 383 / 190	454 / 379 / 44	363 / 467 / 35	466 / 246 / 87	452 / 373 / 84	412 / 313 / 207	348 / 409 / 175	426 / 409 / 41	342 / 504 / 33	466 / 284 / 87	425 / 403 / 79	406 / 355 / 204	327 / 438 / 163
2		419 / 417 / 40	335 / 512 / 32	466 / 320 / 87	398 / 423 / 74	412 / 338 / 207	337 / 426 / 169	384 / 443 / 37	315 / 554 / 30	459 / 366 / 86	370 / 455 / 69	389 / 370 / 195	313 / 458 / 158	363 / 480 / 35	294 / 591 / 28	432 / 396 / 81	350 / 492 / 65	366 / 399 / 184	292 / 485 / 146	
3		349 / 493 / 34	280 / 601 / 27	384 / 444 / 72	309 / 545 / 58	308 / 474 / 155	244 / 572 / 123	328 / 535 / 32	266 / 658 / 26	357 / 477 / 67	288 / 587 / 54	284 / 506 / 143	232 / 628 / 117	301 / 560 / 29	245 / 691 / 24	329 / 504 / 62	268 / 623 / 50	267 / 543 / 134	217 / 663 / 108	
35		1	501 / 159 / 46	432 / 435 / 40	499 / 204 / 93	499 / 321 / 93	438 / 262 / 230	413 / 383 / 217	501 / 187 / 46	401 / 467 / 37	499 / 239 / 93	499 / 373 / 93	438 / 305 / 230	381 / 409 / 200	470 / 409 / 43	378 / 504 / 35	499 / 276 / 93	469 / 403 / 87	438 / 350 / 230	358 / 438 / 187
		2	463 / 417 / 43	370 / 512 / 34	499 / 311 / 93	439 / 423 / 81	438 / 329 / 230	368 / 426 / 194	424 / 443 / 39	347 / 554 / 32	499 / 361 / 93	408 / 455 / 76	425 / 370 / 224	343 / 458 / 180	401 / 480 / 37	324 / 591 / 30	476 / 396 / 88	386 / 492 / 72	400 / 399 / 210	320 / 485 / 167
		3	386 / 493 / 36	309 / 601 / 29	424 / 444 / 79	340 / 545 / 63	337 / 474 / 177	267 / 572 / 140	363 / 535 / 33	293 / 658 / 27	393 / 477 / 73	318 / 587 / 59	311 / 506 / 164	254 / 628 / 134	332 / 560 / 31	270 / 691 / 25	363 / 504 / 67	295 / 623 / 55	292 / 543 / 154	237 / 663 / 124
40		1	546 / 157 / 105	478 / 435 / 92	531 / 198 / 147	531 / 312 / 147	469 / 258 / 262	448 / 383 / 251	546 / 184 / 105	443 / 467 / 85	531 / 232 / 147	531 / 362 / 147	469 / 300 / 262	414 / 409 / 231	520 / 409 / 100	418 / 504 / 80	531 / 268 / 147	515 / 403 / 143	469 / 345 / 262	389 / 438 / 216
		2	512 / 417 / 98	409 / 512 / 79	531 / 301 / 147	482 / 423 / 134	469 / 324 / 262	400 / 426 / 224	469 / 443 / 90	384 / 554 / 74	531 / 350 / 147	448 / 455 / 124	462 / 370 / 258	372 / 458 / 208	443 / 480 / 85	358 / 591 / 69	523 / 396 / 145	424 / 492 / 117	434 / 399 / 243	347 / 485 / 193
		3	426 / 493 / 82	341 / 601 / 66	465 / 444 / 129	374 / 545 / 104	366 / 474 / 205	290 / 572 / 162	401 / 535 / 77	324 / 658 / 62	432 / 477 / 120	349 / 587 / 97	338 / 506 / 189	276 / 628 / 154	367 / 560 / 70	299 / 691 / 57	399 / 504 / 111	324 / 623 / 90	317 / 543 / 178	257 / 663 / 143
Wind Speed [mph]		170						180												
30	1	398 / 435 / 38	322 / 536 / 31	466 / 325 / 87	398 / 429 / 74	377 / 376 / 190	323 / 470 / 155	377 / 464 / 36	301 / 565 / 29	466 / 368 / 87	370 / 450 / 69	360 / 405 / 181	318 / 500 / 146							
	2	342 / 513 / 33	273 / 622 / 26	405 / 422 / 75	322 / 515 / 60	342 / 425 / 172	286 / 518 / 137	322 / 543 / 31	259 / 663 / 25	377 / 444 / 70	309 / 555 / 58	319 / 447 / 160	286 / 558 / 131							
	3	287 / 605 / 28	231 / 738 / 22	309 / 536 / 58	254 / 669 / 48	250 / 576 / 126	213 / 710 / 102	266 / 631 / 26	217 / 779 / 21	295 / 576 / 55	240 / 712 / 45	232 / 602 / 117	210 / 752 / 96							
	35	1	440 / 435 / 41	355 / 536 / 33	499 / 315 / 93	439 / 429 / 81	413 / 376 / 217	352 / 470 / 177	417 / 464 / 38	332 / 565 / 31	499 / 357 / 93	408 / 450 / 76	394 / 405 / 207	345 / 500 / 167						
		2	378 / 513 / 35	301 / 622 / 28	446 / 422 / 83	356 / 515 / 66	375 / 425 / 197	312 / 518 / 157	355 / 543 / 33	286 / 663 / 26	416 / 444 / 77	340 / 555 / 63	349 / 447 / 184	310 / 558 / 150						
		3	316 / 605 / 29	255 / 738 / 24	340 / 536 / 63	280 / 669 / 52	273 / 576 / 144	233 / 710 / 117	293 / 631 / 27	239 / 779 / 22	325 / 576 / 61	265 / 712 / 49	254 / 602 / 134	228 / 752 / 110						
	40	1	486 / 435 / 93	392 / 536 / 75	531 / 306 / 147	482 / 429 / 134	448 / 376 / 251	381 / 470 / 205	460 / 464 / 88	367 / 565 / 70	531 / 346 / 147	448 / 450 / 124	428 / 405 / 239	372 / 500 / 193						
		2	418 / 513 / 80	333 / 622 / 64	490 / 422 / 136	390 / 515 / 108	407 / 425 / 228	338 / 518 / 181	392 / 543 / 75	316 / 663 / 61	457 / 444 / 127	374 / 555 / 104	379 / 447 / 212	335 / 558 / 174						
		3	350 / 605 / 67	282 / 738 / 54	374 / 536 / 104	307 / 669 / 85	297 / 576 / 166	252 / 710 / 135	324 / 631 / 62	265 / 779 / 51	357 / 576 / 99	291 / 712 / 81	276 / 602 / 154	246 / 752 / 128						
Wind Speed [mph]		190						200												
30	1	356 / 491 / 34	293 / 602 / 28	439 / 389 / 82	358 / 477 / 65	337 / 425 / 169	311 / 526 / 137	335 / 515 / 32	287 / 636 / 26	411 / 407 / 77	354 / 510 / 63	326 / 449 / 160	304 / 547 / 128							
	2	301 / 568 / 29	250 / 701 / 24	357 / 471 / 67	295 / 580 / 54	302 / 473 / 152	278 / 582 / 123	287 / 602 / 28	243 / 734 / 22	336 / 494 / 63	289 / 613 / 51	290 / 496 / 143	277 / 616 / 117							
	3	252 / 667 / 24	207 / 813 / 20	274 / 599 / 51	232 / 749 / 42	221 / 639 / 111	206 / 788 / 91	238 / 700 / 23	206 / 871 / 19	261 / 633 / 49	224 / 781 / 40	214 / 673 / 105	201 / 818 / 85							
	35	1	393 / 491 / 36	323 / 602 / 29	484 / 389 / 90	394 / 477 / 72	368 / 425 / 194	337 / 526 / 157	370 / 515 / 34	315 / 636 / 28	454 / 407 / 84	389 / 510 / 69	356 / 449 / 184	328 / 547 / 147						
		2	332 / 568 / 31	276 / 701 / 25	393 / 471 / 73	324 / 580 / 59	330 / 473 / 174	301 / 582 / 140	316 / 602 / 29	267 / 734 / 24	371 / 494 / 69	317 / 613 / 56	317 / 496 / 164	299 / 616 / 134						
		3	278 / 667 / 26	228 / 813 / 21	303 / 599 / 56	255 / 749 / 47	241 / 639 / 127	223 / 788 / 104	262 / 700 / 24	227 / 871 / 20	288 / 633 / 54	246 / 781 / 44	233 / 673 / 120	217 / 818 / 97						
	40	1	435 / 491 / 84	352 / 602 / 67	531 / 389 / 147	430 / 477 / 117	400 / 425 / 224	363 / 526 / 181	409 / 515 / 79	344 / 636 / 64	498 / 407 / 138	423 / 510 / 113	386 / 449 / 212	352 / 547 / 170						
		2	367 / 568 / 70	301 / 701 / 57	432 / 471 / 120	354 / 580 / 97	359 / 473 / 201	324 / 582 / 162	350 / 602 / 67	291 / 734 / 54	407 / 494 / 113	346 / 613 / 92	344 / 496 / 189	320 / 616 / 154						
		3	307 / 667 / 59	249 / 813 / 48	332 / 599 / 92	278 / 749 / 76	262 / 639 / 147	239 / 788 / 120	290 / 700 / 56	247 / 871 / 46	316 / 633 / 88	268 / 781 / 72	253 / 673 / 139	232 / 818 / 112						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 74in x 41.2in

Exposure Category : B	Enclosed Mono Slope Roof 0-30ft 74in x 41.2in																					
	95						100						105									
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																			
45	1	589 / 125 / 110	589 / 138 / 110	573 / 125 / 156	573 / 176 / 156	491 / 145 / 280	491 / 230 / 280	589 / 125 / 110	589 / 154 / 110	573 / 125 / 156	573 / 195 / 156	491 / 161 / 280	491 / 254 / 280	589 / 125 / 110	589 / 170 / 110	573 / 134 / 156	573 / 214 / 156	491 / 177 / 280	491 / 279 / 280			
	2	589 / 255 / 110	589 / 397 / 110	573 / 170 / 156	573 / 268 / 156	491 / 184 / 280	491 / 289 / 280	589 / 282 / 110	560 / 416 / 104	573 / 188 / 156	573 / 296 / 156	491 / 204 / 280	491 / 318 / 280	589 / 309 / 110	541 / 440 / 101	573 / 207 / 156	573 / 324 / 156	491 / 224 / 280	491 / 349 / 280			
	3	589 / 366 / 110	494 / 473 / 92	573 / 293 / 156	536 / 424 / 146	491 / 355 / 280	409 / 454 / 234	589 / 403 / 110	475 / 499 / 89	573 / 323 / 156	509 / 442 / 139	484 / 384 / 276	387 / 471 / 221	560 / 420 / 104	456 / 524 / 85	573 / 354 / 156	490 / 466 / 134	461 / 401 / 263	372 / 495 / 212			
	50	1	628 / 121 / 114	628 / 134 / 114	621 / 123 / 167	621 / 173 / 167	519 / 143 / 301	519 / 227 / 301	628 / 121 / 114	628 / 149 / 114	621 / 123 / 167	621 / 192 / 167	519 / 158 / 301	519 / 250 / 301	628 / 121 / 114	628 / 165 / 114	621 / 132 / 167	621 / 211 / 167	519 / 174 / 301	519 / 274 / 301		
		2	628 / 247 / 114	628 / 385 / 114	621 / 167 / 167	621 / 264 / 167	519 / 181 / 301	519 / 285 / 301	628 / 273 / 114	617 / 416 / 112	621 / 185 / 167	621 / 291 / 167	519 / 201 / 301	519 / 314 / 301	628 / 299 / 114	596 / 440 / 108	621 / 204 / 167	621 / 319 / 167	519 / 221 / 301	519 / 344 / 301		
		3	628 / 355 / 114	544 / 473 / 99	621 / 288 / 167	591 / 424 / 159	519 / 349 / 301	439 / 454 / 255	628 / 390 / 114	523 / 499 / 95	621 / 317 / 167	560 / 442 / 151	519 / 384 / 301	416 / 471 / 241	617 / 420 / 112	502 / 524 / 91	621 / 348 / 167	540 / 466 / 146	495 / 401 / 288	400 / 495 / 232		
	60	1	694 / 113 / 121	694 / 125 / 121	688 / 115 / 182	688 / 162 / 182	584 / 136 / 337	584 / 216 / 337	694 / 113 / 121	694 / 139 / 121	688 / 115 / 182	688 / 179 / 182	584 / 151 / 337	584 / 238 / 337	694 / 113 / 121	694 / 154 / 121	688 / 123 / 182	688 / 197 / 182	584 / 166 / 337	584 / 262 / 337		
		2	694 / 231 / 121	694 / 359 / 121	688 / 156 / 182	688 / 247 / 182	584 / 173 / 337	584 / 272 / 337	694 / 255 / 121	694 / 395 / 121	688 / 173 / 182	688 / 272 / 182	584 / 191 / 337	584 / 299 / 337	694 / 280 / 121	694 / 432 / 121	688 / 190 / 182	688 / 298 / 182	584 / 210 / 337	584 / 328 / 337		
		3	694 / 331 / 121	645 / 473 / 113	688 / 269 / 182	688 / 417 / 182	584 / 333 / 337	518 / 454 / 299	694 / 364 / 121	620 / 499 / 108	688 / 297 / 182	664 / 442 / 175	584 / 367 / 337	490 / 471 / 283	694 / 399 / 121	595 / 524 / 104	688 / 325 / 182	640 / 466 / 169	584 / 401 / 337	471 / 495 / 272		
45	110																					
	1	589 / 125 / 110	589 / 187 / 110	573 / 147 / 156	573 / 235 / 156	491 / 194 / 280	491 / 305 / 280	589 / 127 / 110	579 / 404 / 108	573 / 162 / 156	573 / 256 / 156	491 / 212 / 280	491 / 332 / 280	ASCE Group Zone								
	2	589 / 338 / 110	513 / 454 / 96	573 / 227 / 156	573 / 354 / 156	491 / 245 / 280	491 / 381 / 280	589 / 368 / 110	494 / 475 / 92	573 / 248 / 156	573 / 386 / 156	491 / 267 / 280	469 / 395 / 268	Panal Angle		Mono Slope						
	3	532 / 435 / 99	437 / 546 / 81	573 / 386 / 156	472 / 488 / 129	439 / 416 / 251	357 / 518 / 204	513 / 456 / 96	418 / 567 / 78	555 / 407 / 151	453 / 509 / 124	424 / 437 / 242	342 / 538 / 196	0 - 3		1 = 1' / 1						
	50	1	628 / 121 / 114	628 / 181 / 114	621 / 145 / 167	621 / 231 / 167	519 / 191 / 301	519 / 300 / 301	628 / 123 / 114	628 / 198 / 114	621 / 159 / 167	621 / 252 / 167	519 / 209 / 301			519 / 327 / 301	3 - 10		2 = 2			
		2	628 / 327 / 114	565 / 454 / 103	621 / 223 / 167	621 / 349 / 167	519 / 242 / 301	519 / 375 / 301	628 / 356 / 114	544 / 475 / 99	621 / 244 / 167	621 / 379 / 167	519 / 263 / 301			503 / 395 / 292			10 - 30		3 = 3	
		3	586 / 435 / 107	481 / 546 / 88	621 / 380 / 167	520 / 488 / 140	471 / 416 / 274	384 / 518 / 223	565 / 456 / 103	461 / 567 / 84	611 / 407 / 165	499 / 509 / 135	455 / 437 / 264	368 / 538 / 213	1 = 1						2 = 2' / 2	
	60	1	694 / 113 / 121	694 / 169 / 121	688 / 136 / 182	688 / 216 / 182	584 / 183 / 337	584 / 286 / 337	694 / 115 / 121	694 / 185 / 121	688 / 149 / 182	688 / 236 / 182	584 / 200 / 337	584 / 312 / 337			3 = 3' / 3				3 = 3	
		2	694 / 305 / 121	670 / 454 / 117	688 / 209 / 182	688 / 326 / 182	584 / 230 / 337	584 / 358 / 337	694 / 332 / 121	645 / 475 / 113	688 / 228 / 182	688 / 355 / 182	584 / 251 / 337	584 / 389 / 337					1 = 1		2 = 2	
3		694 / 435 / 121	571 / 546 / 100	688 / 355 / 182	616 / 488 / 163	556 / 416 / 321	452 / 518 / 261	670 / 456 / 117	546 / 567 / 95	688 / 386 / 182	592 / 509 / 156	537 / 437 / 310	433 / 538 / 250	2 = 2		3 = 3						
45	120																					
	1	589 / 139 / 110	560 / 424 / 104	573 / 177 / 156	573 / 279 / 156	491 / 231 / 280	491 / 360 / 280	589 / 127 / 110	579 / 404 / 108	573 / 162 / 156	573 / 256 / 156	491 / 212 / 280	491 / 332 / 280									
	2	589 / 399 / 110	475 / 494 / 89	573 / 269 / 156	564 / 411 / 154	491 / 290 / 280	447 / 408 / 255	589 / 368 / 110	494 / 475 / 92	573 / 248 / 156	573 / 386 / 156	491 / 267 / 280	469 / 395 / 268									
	3	494 / 475 / 92	399 / 585 / 74	536 / 426 / 146	435 / 528 / 119	409 / 456 / 234	328 / 556 / 187	513 / 456 / 96	418 / 567 / 78	555 / 407 / 151	453 / 509 / 124	424 / 437 / 242	342 / 538 / 196									
	50	1	628 / 135 / 114	617 / 424 / 112	621 / 174 / 167	621 / 274 / 167	519 / 228 / 301	519 / 354 / 301	628 / 123 / 114	628 / 198 / 114	621 / 159 / 167	621 / 252 / 167	519 / 209 / 301	519 / 327 / 301								
		2	628 / 386 / 114	523 / 494 / 95	621 / 265 / 167	621 / 411 / 167	519 / 286 / 301	479 / 408 / 278	628 / 356 / 114	544 / 475 / 99	621 / 244 / 167	621 / 379 / 167	519 / 263 / 301	503 / 395 / 292								
		3	544 / 475 / 99	440 / 585 / 80	591 / 426 / 159	479 / 528 / 129	439 / 456 / 255	352 / 556 / 204	565 / 456 / 103	461 / 567 / 84	611 / 407 / 165	499 / 509 / 135	455 / 437 / 264	368 / 538 / 213								
	60	1	694 / 126 / 121	694 / 201 / 121	688 / 162 / 182	688 / 256 / 182	584 / 217 / 337	584 / 338 / 337	694 / 115 / 121	694 / 185 / 121	688 / 149 / 182	688 / 236 / 182	584 / 200 / 337	584 / 312 / 337								
		2	694 / 360 / 121	620 / 494 / 108	688 / 248 / 182	688 / 384 / 182	584 / 273 / 337	565 / 408 / 326	694 / 332 / 121	645 / 475 / 113	688 / 228 / 182	688 / 355 / 182	584 / 251 / 337	584 / 389 / 337								
3		645 / 475 / 113	521 / 585 / 91	688 / 419 / 182	567 / 528 / 150	518 / 456 / 299	414 / 556 / 240	670 / 456 / 117	546 / 567 / 95	688 / 386 / 182	592 / 509 / 156	537 / 437 / 310	433 / 538 / 250									

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge												
	45	1	589 / 152 / 110	532 / 435 / 99	573 / 192 / 156	573 / 302 / 156	491 / 250 / 280	484 / 383 / 276	589 / 178 / 110	494 / 467 / 92	573 / 224 / 156	573 / 351 / 156	491 / 291 / 280	447 / 409 / 255	579 / 409 / 108	465 / 504 / 87	573 / 259 / 156	573 / 403 / 156	491 / 335 / 280	419 / 438 / 238					
2		570 / 417 / 106	456 / 512 / 85	573 / 292 / 156	536 / 423 / 146	491 / 314 / 280	432 / 426 / 246	522 / 443 / 97	427 / 554 / 80	573 / 339 / 156	499 / 455 / 136	491 / 365 / 280	402 / 458 / 229	494 / 480 / 92	399 / 591 / 74	573 / 390 / 156	472 / 492 / 129	469 / 399 / 268	374 / 485 / 212						
3		475 / 493 / 89	380 / 601 / 71	518 / 444 / 141	416 / 545 / 114	395 / 474 / 225	313 / 572 / 179	446 / 535 / 83	361 / 658 / 67	481 / 477 / 131	388 / 587 / 106	365 / 506 / 208	298 / 628 / 170	408 / 560 / 76	333 / 691 / 62	444 / 504 / 121	361 / 623 / 99	342 / 543 / 196	277 / 663 / 157						
50		1	628 / 147 / 114	586 / 435 / 107	621 / 189 / 167	621 / 297 / 167	519 / 247 / 301	519 / 383 / 301	628 / 173 / 114	544 / 467 / 99	621 / 221 / 167	621 / 345 / 167	519 / 287 / 301	479 / 409 / 278	628 / 200 / 114	513 / 504 / 93	621 / 255 / 167	621 / 396 / 167	519 / 330 / 301	450 / 438 / 260					
		2	628 / 417 / 114	502 / 512 / 91	621 / 287 / 167	591 / 423 / 159	519 / 310 / 301	463 / 426 / 269	576 / 443 / 105	471 / 554 / 86	621 / 334 / 167	550 / 455 / 148	519 / 359 / 301	431 / 458 / 251	544 / 480 / 99	440 / 591 / 80	621 / 383 / 167	520 / 492 / 140	503 / 399 / 292	402 / 485 / 232					
		3	523 / 493 / 95	419 / 601 / 76	571 / 444 / 154	459 / 545 / 124	423 / 474 / 246	336 / 572 / 195	492 / 535 / 89	398 / 658 / 72	530 / 477 / 143	428 / 587 / 115	392 / 506 / 227	320 / 628 / 186	450 / 560 / 82	366 / 691 / 67	489 / 504 / 132	397 / 623 / 107	368 / 543 / 213	297 / 663 / 172					
60		1	694 / 137 / 121	694 / 218 / 121	688 / 177 / 182	688 / 278 / 182	584 / 235 / 337	584 / 365 / 337	694 / 161 / 121	645 / 467 / 113	688 / 206 / 182	688 / 322 / 182	584 / 274 / 337	565 / 409 / 326	694 / 187 / 121	608 / 504 / 106	688 / 238 / 182	688 / 370 / 182	584 / 315 / 337	527 / 438 / 305					
		2	694 / 390 / 121	595 / 512 / 104	688 / 268 / 182	688 / 415 / 182	584 / 295 / 337	546 / 426 / 316	682 / 443 / 119	558 / 554 / 98	688 / 312 / 182	652 / 455 / 172	584 / 343 / 337	509 / 458 / 294	645 / 480 / 113	521 / 591 / 91	688 / 358 / 182	616 / 492 / 163	584 / 393 / 337	471 / 485 / 272					
		3	620 / 493 / 108	496 / 601 / 87	676 / 444 / 179	543 / 545 / 144	499 / 474 / 288	396 / 572 / 229	583 / 535 / 102	471 / 658 / 83	628 / 477 / 166	507 / 587 / 134	462 / 506 / 267	377 / 628 / 218	533 / 560 / 93	434 / 691 / 76	580 / 504 / 153	471 / 623 / 124	433 / 543 / 250	349 / 663 / 201					
Wind Speed [mph]		170								180															
45	1	541 / 435 / 101	437 / 536 / 81	573 / 296 / 156	536 / 429 / 146	484 / 376 / 276	410 / 470 / 225	513 / 464 / 96	408 / 565 / 76	573 / 335 / 156	499 / 450 / 136	461 / 405 / 263	400 / 500 / 212												
	2	465 / 513 / 87	370 / 622 / 69	545 / 422 / 149	435 / 515 / 119	439 / 425 / 251	363 / 518 / 200	437 / 543 / 81	352 / 663 / 66	509 / 444 / 139	416 / 555 / 114	409 / 447 / 234	360 / 558 / 191												
	3	389 / 605 / 73	314 / 738 / 59	416 / 536 / 114	342 / 669 / 94	320 / 576 / 183	271 / 710 / 149	361 / 631 / 67	295 / 779 / 55	398 / 576 / 109	324 / 712 / 89	298 / 602 / 170	264 / 752 / 140												
	50	1	596 / 435 / 108	481 / 536 / 88	621 / 291 / 167	591 / 429 / 159	519 / 376 / 301	439 / 470 / 246	565 / 464 / 103	450 / 565 / 82	621 / 330 / 167	550 / 450 / 148	495 / 405 / 288	427 / 500 / 232											
		2	513 / 513 / 93	408 / 622 / 74	601 / 422 / 162	479 / 515 / 129	471 / 425 / 274	389 / 518 / 218	481 / 543 / 88	387 / 663 / 71	560 / 444 / 151	459 / 555 / 124	439 / 447 / 255	384 / 558 / 209											
		3	429 / 605 / 78	346 / 738 / 63	459 / 536 / 124	377 / 669 / 102	344 / 576 / 200	290 / 710 / 163	398 / 631 / 72	325 / 779 / 59	438 / 576 / 118	357 / 712 / 96	320 / 602 / 186	282 / 752 / 153											
	60	1	694 / 214 / 121	571 / 536 / 100	688 / 272 / 182	688 / 421 / 182	584 / 359 / 337	499 / 470 / 288	670 / 464 / 117	533 / 565 / 93	688 / 308 / 182	652 / 450 / 172	584 / 405 / 337	482 / 500 / 272											
		2	608 / 513 / 106	484 / 622 / 85	688 / 408 / 182	567 / 515 / 150	556 / 425 / 321	443 / 518 / 256	571 / 543 / 100	459 / 663 / 80	664 / 444 / 175	543 / 555 / 144	518 / 447 / 299	433 / 558 / 245											
		3	509 / 605 / 89	409 / 738 / 72	543 / 536 / 144	447 / 669 / 118	405 / 576 / 234	330 / 710 / 191	471 / 631 / 83	385 / 779 / 67	519 / 576 / 137	423 / 712 / 112	377 / 602 / 218	318 / 752 / 180											
Wind Speed [mph]		190								200															
45	1	484 / 491 / 90	389 / 602 / 73	573 / 377 / 156	472 / 477 / 129	432 / 425 / 246	388 / 526 / 200	456 / 515 / 85	372 / 636 / 69	555 / 407 / 151	458 / 510 / 124	416 / 449 / 234	376 / 547 / 187												
	2	408 / 568 / 76	333 / 701 / 62	481 / 471 / 131	388 / 580 / 106	387 / 473 / 221	347 / 582 / 179	389 / 602 / 73	315 / 734 / 59	453 / 494 / 124	374 / 613 / 101	371 / 496 / 208	342 / 616 / 170												
	3	342 / 667 / 64	276 / 813 / 52	370 / 599 / 101	305 / 749 / 83	283 / 639 / 162	256 / 788 / 132	323 / 700 / 60	267 / 871 / 50	351 / 633 / 96	290 / 781 / 78	273 / 673 / 153	248 / 818 / 123												
	50	1	534 / 491 / 97	429 / 602 / 78	621 / 371 / 167	520 / 477 / 140	463 / 425 / 269	414 / 526 / 218	502 / 515 / 91	408 / 636 / 74	611 / 407 / 165	499 / 510 / 135	446 / 449 / 255	400 / 547 / 204											
		2	450 / 568 / 82	366 / 701 / 67	530 / 471 / 143	428 / 580 / 115	416 / 473 / 241	370 / 582 / 195	429 / 602 / 78	346 / 734 / 63	499 / 494 / 135	408 / 613 / 110	398 / 496 / 227	364 / 616 / 186											
		3	377 / 667 / 69	304 / 813 / 55	408 / 599 / 110	336 / 749 / 91	304 / 639 / 176	273 / 788 / 144	356 / 700 / 65	293 / 871 / 54	387 / 633 / 104	316 / 781 / 85	292 / 673 / 167	264 / 818 / 135											
	60	1	633 / 491 / 111	509 / 602 / 89	688 / 347 / 182	616 / 477 / 163	546 / 425 / 316	466 / 526 / 256	595 / 515 / 104	484 / 636 / 85	688 / 387 / 182	592 / 510 / 156	518 / 449 / 299	449 / 547 / 240											
		2	533 / 568 / 93	434 / 701 / 76	628 / 471 / 166	507 / 580 / 134	490 / 473 / 283	416 / 582 / 229	509 / 602 / 89	409 / 734 / 72	592 / 494 / 156	483 / 613 / 128	462 / 496 / 267	408 / 616 / 218											
		3	447 / 667 / 78	360 / 813 / 63	483 / 599 / 128	399 / 749 / 105	358 / 639 / 207	307 / 788 / 169	422 / 700 / 74	347 / 871 / 61	459 / 633 / 121	374 / 781 / 99	339 / 673 / 196	296 / 818 / 158											

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		95						100						105																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	70	1	746 / 105 / 127	746 / 116 / 127	740 / 107 / 192	740 / 150 / 192	642 / 129 / 371	642 / 206 / 371	746 / 105 / 127	746 / 129 / 127	740 / 107 / 192	740 / 166 / 192	642 / 144 / 371	642 / 227 / 371	746 / 105 / 127	746 / 143 / 127	740 / 114 / 192	740 / 183 / 192	642 / 158 / 371	642 / 249 / 371															
2		746 / 214 / 127	746 / 333 / 127	740 / 145 / 192	740 / 229 / 192	642 / 165 / 371	642 / 259 / 371	746 / 236 / 127	746 / 366 / 127	740 / 161 / 192	740 / 253 / 192	642 / 182 / 371	642 / 285 / 371	746 / 260 / 127	746 / 401 / 127	740 / 177 / 192	740 / 277 / 192	642 / 200 / 371	642 / 312 / 371																
3		746 / 307 / 127	746 / 473 / 127	740 / 250 / 192	740 / 387 / 192	642 / 317 / 371	598 / 454 / 346	746 / 338 / 127	717 / 499 / 122	740 / 276 / 192	740 / 426 / 192	642 / 349 / 371	566 / 471 / 327	746 / 370 / 127	688 / 524 / 117	740 / 303 / 192	740 / 466 / 192	642 / 382 / 371	544 / 495 / 314																
1		798 / 99 / 132	798 / 109 / 132	776 / 99 / 200	776 / 139 / 200	691 / 123 / 399	691 / 195 / 399	798 / 99 / 132	798 / 122 / 132	776 / 99 / 200	776 / 154 / 200	691 / 136 / 399	691 / 215 / 399	798 / 99 / 132	798 / 134 / 132	776 / 106 / 200	776 / 170 / 200	691 / 150 / 399	691 / 237 / 399																
2		798 / 202 / 132	798 / 314 / 132	776 / 134 / 200	776 / 212 / 200	691 / 156 / 399	691 / 245 / 399	798 / 223 / 132	798 / 345 / 132	776 / 149 / 200	776 / 234 / 200	691 / 173 / 399	691 / 270 / 399	798 / 245 / 132	798 / 378 / 132	776 / 164 / 200	776 / 257 / 200	691 / 190 / 399	691 / 296 / 399																
3		798 / 290 / 132	798 / 446 / 132	776 / 232 / 200	776 / 358 / 200	691 / 301 / 399	678 / 454 / 392	798 / 319 / 132	798 / 489 / 132	776 / 255 / 200	776 / 394 / 200	691 / 331 / 399	641 / 471 / 370	798 / 349 / 132	781 / 524 / 130	776 / 280 / 200	776 / 431 / 200	691 / 362 / 399	617 / 495 / 356																
90	1	838 / 93 / 136	838 / 103 / 136	833 / 95 / 212	833 / 133 / 212	731 / 116 / 422	731 / 185 / 422	838 / 93 / 136	838 / 114 / 136	833 / 95 / 212	833 / 148 / 212	731 / 129 / 422	731 / 204 / 422	838 / 93 / 136	838 / 126 / 136	833 / 101 / 212	833 / 163 / 212	731 / 142 / 422	731 / 224 / 422																
	2	838 / 190 / 136	838 / 295 / 136	833 / 129 / 212	833 / 203 / 212	731 / 148 / 422	731 / 232 / 422	838 / 209 / 136	838 / 324 / 136	833 / 143 / 212	833 / 224 / 212	731 / 164 / 422	731 / 256 / 422	838 / 230 / 136	838 / 355 / 136	833 / 157 / 212	833 / 246 / 212	731 / 180 / 422	731 / 280 / 422																
	3	838 / 272 / 136	838 / 418 / 136	833 / 222 / 212	833 / 344 / 212	731 / 285 / 422	731 / 438 / 422	838 / 299 / 136	838 / 459 / 136	833 / 245 / 212	833 / 378 / 212	731 / 313 / 422	717 / 471 / 414	838 / 328 / 136	838 / 502 / 136	833 / 268 / 212	833 / 413 / 212	731 / 343 / 422	689 / 495 / 398																
70	1	746 / 105 / 127	746 / 157 / 127	740 / 126 / 192	740 / 201 / 192	642 / 174 / 371	642 / 272 / 371	746 / 106 / 127	746 / 171 / 127	740 / 138 / 192	740 / 219 / 192	642 / 190 / 371	642 / 296 / 371	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
0 - 3	1 = 1' / 1																																		
	2 = 2																																		
	3 = 3																																		
3 - 10	1 = 1																																		
	2 = 2' / 2																																		
	3 = 3' / 3																																		
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	746 / 284 / 127	746 / 437 / 127	740 / 194 / 192	740 / 303 / 192	642 / 219 / 371	642 / 341 / 371	746 / 309 / 127	746 / 475 / 127	740 / 212 / 192	740 / 330 / 192	642 / 239 / 371	642 / 370 / 371																							
3	746 / 404 / 127	660 / 546 / 112	740 / 330 / 192	712 / 488 / 185	642 / 416 / 371	522 / 518 / 302	746 / 439 / 127	631 / 567 / 107	740 / 359 / 192	684 / 509 / 178	620 / 437 / 358	500 / 538 / 289																							
80	1	798 / 99 / 132	798 / 148 / 132	776 / 117 / 200	776 / 186 / 200	691 / 165 / 399	691 / 259 / 399	798 / 100 / 132	798 / 162 / 132	776 / 128 / 200	776 / 203 / 200	691 / 180 / 399	691 / 281 / 399																						
	2	798 / 267 / 132	798 / 412 / 132	776 / 180 / 200	776 / 280 / 200	691 / 208 / 399	691 / 323 / 399	798 / 291 / 132	798 / 447 / 132	776 / 196 / 200	776 / 305 / 200	691 / 227 / 399	691 / 351 / 399																						
	3	798 / 381 / 132	749 / 546 / 124	776 / 305 / 200	776 / 469 / 200	691 / 395 / 399	592 / 518 / 342	798 / 413 / 132	716 / 567 / 119	776 / 332 / 200	776 / 509 / 200	691 / 429 / 399	567 / 538 / 328																						
90	1	838 / 93 / 136	838 / 139 / 136	833 / 112 / 212	833 / 178 / 212	731 / 156 / 422	731 / 245 / 422	838 / 94 / 136	838 / 152 / 136	833 / 123 / 212	833 / 195 / 212	731 / 171 / 422	731 / 266 / 422																						
	2	838 / 251 / 136	838 / 387 / 136	833 / 172 / 212	833 / 269 / 212	731 / 197 / 422	731 / 306 / 422	838 / 273 / 136	838 / 420 / 136	833 / 188 / 212	833 / 292 / 212	731 / 215 / 422	731 / 333 / 422																						
	3	838 / 357 / 136	838 / 546 / 136	833 / 293 / 212	833 / 450 / 212	731 / 374 / 422	662 / 518 / 382	838 / 388 / 136	801 / 567 / 130	833 / 319 / 212	833 / 488 / 212	731 / 406 / 422	634 / 538 / 366																						
70	1	746 / 117 / 127	746 / 187 / 127	740 / 151 / 192	740 / 238 / 192	642 / 207 / 371	642 / 322 / 371	746 / 106 / 127	746 / 171 / 127	740 / 138 / 192	740 / 219 / 192	642 / 190 / 371	642 / 296 / 371																						
	2	746 / 335 / 127	717 / 494 / 122	740 / 230 / 192	740 / 357 / 192	642 / 260 / 371	642 / 401 / 371	746 / 309 / 127	746 / 475 / 127	740 / 212 / 192	740 / 330 / 192	642 / 239 / 371	642 / 370 / 371																						
	3	746 / 475 / 127	602 / 585 / 102	740 / 389 / 192	656 / 528 / 171	598 / 456 / 346	479 / 556 / 277	746 / 439 / 127	631 / 567 / 107	740 / 359 / 192	684 / 509 / 178	620 / 437 / 358	500 / 538 / 289																						
80	1	798 / 110 / 132	798 / 176 / 132	776 / 140 / 200	776 / 220 / 200	691 / 196 / 399	691 / 305 / 399	798 / 100 / 132	798 / 162 / 132	776 / 128 / 200	776 / 203 / 200	691 / 180 / 399	691 / 281 / 399																						
	2	798 / 315 / 132	798 / 484 / 132	776 / 213 / 200	776 / 330 / 200	691 / 246 / 399	691 / 381 / 399	798 / 291 / 132	798 / 447 / 132	776 / 196 / 200	776 / 305 / 200	691 / 227 / 399	691 / 351 / 399																						
	3	798 / 448 / 132	684 / 585 / 113	776 / 360 / 200	745 / 528 / 192	678 / 456 / 392	543 / 556 / 314	798 / 413 / 132	716 / 567 / 119	776 / 332 / 200	776 / 509 / 200	691 / 429 / 399	567 / 538 / 328																						
90	1	838 / 103 / 136	838 / 165 / 136	833 / 134 / 212	833 / 211 / 212	731 / 186 / 422	731 / 289 / 422	838 / 94 / 136	838 / 152 / 136	833 / 123 / 212	833 / 195 / 212	731 / 171 / 422	731 / 266 / 422																						
	2	838 / 296 / 136	838 / 455 / 136	833 / 204 / 212	833 / 317 / 212	731 / 233 / 422	731 / 360 / 422	838 / 273 / 136	838 / 420 / 136	833 / 188 / 212	833 / 292 / 212	731 / 215 / 422	731 / 333 / 422																						
	3	838 / 420 / 136	765 / 585 / 125	833 / 345 / 212	833 / 528 / 212	731 / 440 / 422	607 / 556 / 351	838 / 388 / 136	801 / 567 / 130	833 / 319 / 212	833 / 488 / 212	731 / 406 / 422	634 / 538 / 366																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph] 140				150				160																										
	Panal Angle 0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																												
Ground Snow	70	1	746 / 127 / 127	746 / 203 / 127	740 / 164 / 192	740 / 258 / 192	642 / 224 / 371	642 / 348 / 371	746 / 150 / 127	746 / 236 / 127	740 / 192 / 192	740 / 300 / 192	642 / 261 / 371	642 / 402 / 371	746 / 173 / 127	703 / 504 / 119	740 / 222 / 192	740 / 344 / 192	642 / 300 / 371	609 / 438 / 352															
		2	746 / 362 / 127	688 / 512 / 117	740 / 250 / 192	740 / 386 / 192	642 / 281 / 371	631 / 426 / 364	746 / 419 / 127	645 / 554 / 110	740 / 290 / 192	740 / 447 / 192	642 / 326 / 371	587 / 458 / 339	746 / 480 / 127	602 / 591 / 102	740 / 333 / 192	712 / 492 / 185	642 / 374 / 371	544 / 485 / 314															
		3	717 / 493 / 122	574 / 601 / 97	740 / 420 / 192	628 / 545 / 163	576 / 474 / 333	457 / 572 / 264	674 / 535 / 114	545 / 658 / 93	726 / 477 / 189	586 / 587 / 153	533 / 506 / 308	435 / 628 / 251	617 / 560 / 105	502 / 691 / 85	670 / 504 / 174	544 / 623 / 142	500 / 543 / 289	403 / 663 / 233															
	80	1	798 / 120 / 132	798 / 191 / 132	776 / 152 / 200	776 / 239 / 200	691 / 213 / 399	691 / 330 / 399	798 / 141 / 132	798 / 223 / 132	776 / 178 / 200	776 / 277 / 200	691 / 247 / 399	691 / 382 / 399	798 / 163 / 132	798 / 256 / 132	776 / 205 / 200	776 / 318 / 200	691 / 284 / 399	691 / 438 / 399															
		2	798 / 341 / 132	781 / 512 / 130	776 / 231 / 200	776 / 357 / 200	691 / 267 / 399	691 / 411 / 399	798 / 395 / 132	733 / 554 / 121	776 / 268 / 200	776 / 413 / 200	691 / 309 / 399	666 / 458 / 385	798 / 452 / 132	684 / 591 / 113	776 / 308 / 200	776 / 473 / 200	691 / 355 / 399	617 / 485 / 356															
		3	798 / 483 / 132	651 / 601 / 108	776 / 389 / 200	713 / 545 / 183	654 / 474 / 378	518 / 572 / 299	765 / 535 / 127	619 / 658 / 103	776 / 449 / 200	665 / 587 / 171	604 / 506 / 349	493 / 628 / 285	700 / 560 / 116	570 / 691 / 95	760 / 504 / 196	618 / 623 / 159	567 / 543 / 328	456 / 663 / 264															
	90	1	838 / 113 / 136	838 / 179 / 136	833 / 146 / 212	833 / 229 / 212	731 / 201 / 422	731 / 312 / 422	838 / 132 / 136	838 / 209 / 136	833 / 170 / 212	833 / 266 / 212	731 / 234 / 422	731 / 362 / 422	838 / 153 / 136	838 / 241 / 136	833 / 197 / 212	833 / 305 / 212	731 / 269 / 422	731 / 414 / 422															
		2	838 / 320 / 136	838 / 491 / 136	833 / 221 / 212	833 / 343 / 212	731 / 252 / 422	731 / 389 / 422	838 / 371 / 136	820 / 554 / 133	833 / 257 / 212	833 / 396 / 212	731 / 293 / 422	731 / 450 / 422	838 / 424 / 136	765 / 591 / 125	833 / 296 / 212	833 / 454 / 212	731 / 336 / 422	689 / 485 / 398															
		3	838 / 454 / 136	729 / 601 / 119	833 / 373 / 212	798 / 545 / 203	731 / 474 / 422	579 / 572 / 335	838 / 524 / 136	692 / 658 / 113	833 / 431 / 212	745 / 587 / 190	676 / 506 / 390	552 / 628 / 319	783 / 560 / 128	638 / 691 / 104	833 / 493 / 212	691 / 623 / 176	634 / 543 / 366	510 / 663 / 295															
70	170	1	746 / 199 / 127	660 / 536 / 112	740 / 253 / 192	740 / 392 / 192	642 / 341 / 371	576 / 470 / 333	746 / 226 / 127	617 / 565 / 105	740 / 287 / 192	740 / 442 / 192	642 / 385 / 371	544 / 500 / 314	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>					ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																	
		Panal Angle	Mono Slope																																
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	703 / 513 / 119	559 / 622 / 95	740 / 379 / 192	656 / 515 / 171	642 / 425 / 371	511 / 518 / 295	660 / 543 / 112	531 / 663 / 90	740 / 428 / 192	628 / 555 / 163	598 / 447 / 346	489 / 558 / 283																							
3	588 / 605 / 100	473 / 738 / 80	628 / 536 / 163	517 / 669 / 134	468 / 576 / 270	381 / 710 / 220	545 / 631 / 93	445 / 779 / 76	600 / 576 / 156	489 / 712 / 127	435 / 602 / 251	359 / 752 / 208																							
80	1	798 / 187 / 132	749 / 536 / 124	776 / 234 / 200	776 / 362 / 200	691 / 324 / 399	654 / 470 / 378	798 / 213 / 132	700 / 565 / 116	776 / 265 / 200	776 / 409 / 200	691 / 366 / 399	617 / 500 / 356																						
	2	798 / 513 / 132	635 / 622 / 105	776 / 351 / 200	745 / 515 / 192	691 / 404 / 399	580 / 518 / 335	749 / 543 / 124	602 / 663 / 100	776 / 396 / 200	713 / 555 / 183	678 / 447 / 392	555 / 558 / 321																						
	3	667 / 605 / 111	537 / 738 / 89	713 / 536 / 183	586 / 669 / 151	530 / 576 / 306	432 / 710 / 250	619 / 631 / 103	505 / 779 / 84	681 / 576 / 175	555 / 712 / 143	493 / 602 / 285	407 / 752 / 235																						
90	1	838 / 176 / 136	838 / 274 / 136	833 / 225 / 212	833 / 347 / 212	731 / 307 / 422	731 / 470 / 422	838 / 200 / 136	783 / 565 / 128	833 / 254 / 212	833 / 392 / 212	731 / 346 / 422	689 / 500 / 398																						
	2	838 / 482 / 136	710 / 622 / 116	833 / 336 / 212	833 / 515 / 212	731 / 382 / 422	648 / 518 / 374	838 / 543 / 136	674 / 663 / 110	833 / 380 / 212	798 / 555 / 203	731 / 431 / 422	621 / 558 / 359																						
	3	747 / 605 / 122	601 / 738 / 98	798 / 536 / 203	656 / 669 / 167	593 / 576 / 343	483 / 710 / 279	692 / 631 / 113	565 / 779 / 92	762 / 576 / 194	621 / 712 / 158	552 / 602 / 319	455 / 752 / 263																						
70	190	1	731 / 491 / 124	588 / 602 / 100	740 / 322 / 192	712 / 477 / 185	631 / 425 / 364	517 / 526 / 295	688 / 515 / 117	559 / 636 / 95	740 / 360 / 192	684 / 510 / 178	598 / 449 / 346	497 / 547 / 277																					
		2	617 / 568 / 105	502 / 701 / 85	726 / 471 / 189	586 / 580 / 153	566 / 473 / 327	462 / 582 / 264	588 / 602 / 100	473 / 734 / 80	684 / 494 / 178	558 / 613 / 145	533 / 496 / 308	451 / 616 / 251																					
		3	516 / 667 / 88	416 / 813 / 71	558 / 599 / 145	461 / 749 / 120	413 / 639 / 239	341 / 788 / 195	488 / 700 / 83	402 / 871 / 68	530 / 633 / 138	433 / 781 / 113	392 / 673 / 226	327 / 818 / 182																					
	80	1	798 / 240 / 132	667 / 602 / 111	776 / 298 / 200	776 / 458 / 200	691 / 410 / 399	580 / 526 / 335	781 / 515 / 130	635 / 636 / 105	776 / 333 / 200	776 / 510 / 200	678 / 449 / 392	545 / 547 / 314																					
		2	700 / 568 / 116	570 / 701 / 95	776 / 443 / 200	665 / 580 / 171	641 / 473 / 370	518 / 582 / 299	667 / 602 / 111	537 / 734 / 89	776 / 494 / 200	634 / 613 / 163	604 / 496 / 349	495 / 616 / 285																					
		3	586 / 667 / 97	472 / 813 / 78	634 / 599 / 163	523 / 749 / 135	469 / 639 / 271	382 / 788 / 221	554 / 700 / 92	456 / 871 / 76	602 / 633 / 155	491 / 781 / 126	444 / 673 / 257	359 / 818 / 207																					
	90	1	838 / 225 / 136	747 / 602 / 122	833 / 286 / 212	833 / 439 / 212	731 / 388 / 422	648 / 526 / 374	838 / 251 / 136	710 / 636 / 116	833 / 319 / 212	833 / 489 / 212	731 / 432 / 422	607 / 547 / 351																					
		2	783 / 568 / 128	638 / 701 / 104	833 / 425 / 212	745 / 580 / 190	717 / 473 / 414	579 / 582 / 335	747 / 602 / 122	601 / 734 / 98	833 / 474 / 212	709 / 613 / 181	676 / 496 / 390	552 / 616 / 319																					
		3	656 / 667 / 107	528 / 813 / 86	709 / 599 / 181	585 / 749 / 149	524 / 639 / 303	428 / 788 / 247	619 / 700 / 101	510 / 871 / 83	674 / 633 / 172	550 / 781 / 140	497 / 673 / 287	400 / 818 / 231																					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]																		
	95						100						105						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	887 / 89 / 142	887 / 98 / 142	863 / 89 / 218	863 / 125 / 218	762 / 110 / 440	762 / 174 / 440	887 / 89 / 142	887 / 109 / 142	863 / 89 / 218	863 / 138 / 218	762 / 122 / 440	762 / 192 / 440	887 / 89 / 142	887 / 121 / 142	863 / 95 / 218	863 / 152 / 218	762 / 134 / 440	762 / 211 / 440
	2	887 / 181 / 142	887 / 282 / 142	863 / 120 / 218	863 / 190 / 218	762 / 140 / 440	762 / 219 / 440	887 / 200 / 142	887 / 310 / 142	863 / 134 / 218	863 / 210 / 218	762 / 154 / 440	762 / 241 / 440	887 / 220 / 142	887 / 339 / 142	863 / 147 / 218	863 / 230 / 218	762 / 170 / 440	762 / 265 / 440
	3	887 / 260 / 142	887 / 400 / 142	863 / 208 / 218	863 / 322 / 218	762 / 269 / 440	762 / 413 / 440	887 / 286 / 142	887 / 439 / 142	863 / 229 / 218	863 / 354 / 218	762 / 296 / 440	762 / 453 / 440	887 / 313 / 142	887 / 480 / 142	863 / 251 / 218	863 / 387 / 218	762 / 324 / 440	762 / 495 / 440

Ground Snow	Wind Speed [mph]																		
	110									115									
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge												
100	1	887 / 89 / 142	887 / 133 / 142	863 / 105 / 218	863 / 167 / 218	762 / 147 / 440	762 / 231 / 440	887 / 90 / 142	887 / 145 / 142	863 / 115 / 218	863 / 182 / 218	762 / 161 / 440	762 / 251 / 440						
	2	887 / 240 / 142	887 / 370 / 142	863 / 161 / 218	863 / 252 / 218	762 / 186 / 440	762 / 289 / 440	887 / 261 / 142	887 / 402 / 142	863 / 176 / 218	863 / 274 / 218	762 / 203 / 440	762 / 314 / 440						
	3	887 / 342 / 142	887 / 523 / 142	863 / 274 / 218	863 / 421 / 218	762 / 353 / 440	732 / 518 / 423	887 / 371 / 142	887 / 567 / 142	863 / 298 / 218	863 / 457 / 218	762 / 383 / 440	701 / 538 / 405						

Ground Snow	Wind Speed [mph]																		
	120									130									
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge												
100	1	887 / 99 / 142	887 / 158 / 142	863 / 125 / 218	863 / 198 / 218	762 / 175 / 440	762 / 273 / 440	887 / 90 / 142	887 / 145 / 142	863 / 115 / 218	863 / 182 / 218	762 / 161 / 440	762 / 251 / 440						
	2	887 / 283 / 142	887 / 435 / 142	863 / 191 / 218	863 / 297 / 218	762 / 220 / 440	762 / 340 / 440	887 / 261 / 142	887 / 402 / 142	863 / 176 / 218	863 / 274 / 218	762 / 203 / 440	762 / 314 / 440						
	3	887 / 402 / 142	846 / 585 / 136	863 / 323 / 218	863 / 495 / 218	762 / 415 / 440	671 / 556 / 388	887 / 371 / 142	887 / 567 / 142	863 / 298 / 218	863 / 457 / 218	762 / 383 / 440	701 / 538 / 405						

ASCE Group Zone	
Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	0	1	240 / 317 / 42	198 / 405 / 35	262 / 212 / 53	242 / 311 / 50	254 / 261 / 69	220 / 353 / 59	230 / 335 / 41	188 / 424 / 33	262 / 235 / 53	233 / 329 / 48	248 / 281 / 67	210 / 371 / 57	224 / 357 / 40	182 / 448 / 32	262 / 259 / 53	226 / 351 / 46	239 / 297 / 65	201 / 388 / 54
2		211 / 387 / 37	169 / 476 / 30	246 / 304 / 50	204 / 393 / 42	236 / 305 / 64	198 / 396 / 54	201 / 406 / 36	162 / 502 / 29	236 / 323 / 48	194 / 411 / 40	229 / 327 / 62	189 / 415 / 51	191 / 423 / 34	153 / 516 / 27	230 / 345 / 47	184 / 428 / 38	223 / 349 / 60	179 / 431 / 49	
3		175 / 457 / 31	143 / 568 / 25	194 / 408 / 40	159 / 510 / 33	179 / 438 / 49	145 / 539 / 39	169 / 483 / 30	136 / 595 / 24	188 / 433 / 38	149 / 526 / 31	170 / 455 / 46	138 / 565 / 38	159 / 497 / 28	130 / 618 / 23	178 / 449 / 36	142 / 549 / 29	163 / 479 / 44	132 / 589 / 36	
5		1	265 / 317 / 42	219 / 405 / 35	288 / 212 / 56	266 / 311 / 52	254 / 261 / 85	220 / 353 / 74	255 / 335 / 41	208 / 424 / 33	288 / 235 / 56	256 / 329 / 50	248 / 281 / 83	210 / 371 / 70	248 / 357 / 40	201 / 448 / 32	288 / 259 / 56	249 / 351 / 49	239 / 297 / 80	201 / 388 / 67
		2	233 / 387 / 37	187 / 476 / 30	270 / 304 / 53	224 / 393 / 44	236 / 305 / 79	198 / 396 / 66	223 / 406 / 36	180 / 502 / 29	259 / 323 / 51	213 / 411 / 42	229 / 327 / 77	189 / 415 / 63	212 / 423 / 34	169 / 516 / 27	252 / 345 / 49	202 / 428 / 40	223 / 349 / 75	179 / 431 / 60
		3	194 / 457 / 31	158 / 568 / 25	213 / 408 / 42	174 / 510 / 34	179 / 438 / 60	145 / 539 / 49	187 / 483 / 30	151 / 595 / 24	206 / 433 / 40	164 / 526 / 32	170 / 455 / 57	138 / 565 / 46	176 / 497 / 28	144 / 618 / 23	195 / 449 / 38	156 / 549 / 31	163 / 479 / 55	132 / 589 / 44
10		1	337 / 317 / 42	278 / 405 / 35	341 / 199 / 65	336 / 311 / 64	293 / 261 / 111	253 / 353 / 96	323 / 335 / 41	264 / 424 / 33	341 / 220 / 65	323 / 329 / 62	286 / 281 / 108	242 / 371 / 92	314 / 357 / 40	255 / 448 / 32	341 / 243 / 65	314 / 351 / 60	275 / 297 / 104	232 / 388 / 87
		2	296 / 387 / 37	237 / 476 / 30	341 / 304 / 65	283 / 393 / 54	271 / 305 / 102	228 / 396 / 86	282 / 406 / 36	228 / 502 / 29	327 / 323 / 63	269 / 411 / 52	264 / 327 / 100	217 / 415 / 82	268 / 423 / 34	214 / 516 / 27	318 / 345 / 61	256 / 428 / 49	257 / 349 / 97	206 / 431 / 78
		3	246 / 457 / 31	200 / 568 / 25	269 / 408 / 52	220 / 510 / 42	206 / 438 / 78	167 / 539 / 63	237 / 483 / 30	191 / 595 / 24	260 / 433 / 50	206 / 526 / 40	195 / 455 / 74	159 / 565 / 60	223 / 497 / 28	182 / 618 / 23	247 / 449 / 47	198 / 549 / 38	188 / 479 / 71	152 / 589 / 58
Wind Speed [mph]		110						115												
0	1	214 / 373 / 38	172 / 462 / 31	255 / 277 / 52	217 / 367 / 44	232 / 317 / 63	192 / 404 / 52	204 / 388 / 36	166 / 483 / 29	249 / 295 / 51	207 / 382 / 42	226 / 336 / 61	185 / 424 / 50							
	2	182 / 438 / 32	146 / 538 / 26	220 / 361 / 45	178 / 450 / 36	214 / 364 / 58	173 / 453 / 47	175 / 459 / 31	143 / 571 / 25	213 / 381 / 44	171 / 471 / 35	204 / 379 / 55	167 / 474 / 45							
	3	153 / 520 / 27	123 / 639 / 22	171 / 472 / 35	139 / 584 / 29	157 / 502 / 43	126 / 610 / 34	146 / 540 / 26	120 / 674 / 21	165 / 493 / 34	133 / 604 / 27	151 / 523 / 41	123 / 645 / 33							
	5	1	237 / 373 / 38	190 / 462 / 31	280 / 277 / 55	238 / 367 / 47	232 / 317 / 78	192 / 404 / 64	226 / 388 / 36	183 / 483 / 29	273 / 295 / 53	227 / 382 / 45	226 / 336 / 76	185 / 424 / 62						
		2	201 / 438 / 32	162 / 538 / 26	241 / 361 / 47	195 / 450 / 38	214 / 364 / 71	173 / 453 / 58	194 / 459 / 31	158 / 571 / 25	234 / 381 / 46	188 / 471 / 37	204 / 379 / 68	167 / 474 / 56						
		3	169 / 520 / 27	137 / 639 / 22	188 / 472 / 37	153 / 584 / 30	157 / 502 / 53	126 / 610 / 42	162 / 540 / 26	133 / 674 / 21	181 / 493 / 36	146 / 604 / 29	151 / 523 / 51	123 / 645 / 41						
	10	1	300 / 373 / 38	241 / 462 / 31	341 / 266 / 65	301 / 367 / 58	268 / 317 / 101	221 / 404 / 83	287 / 388 / 36	232 / 483 / 29	341 / 291 / 65	287 / 382 / 55	260 / 336 / 98	214 / 424 / 81						
		2	255 / 438 / 32	205 / 538 / 26	305 / 361 / 59	247 / 450 / 47	246 / 364 / 93	199 / 453 / 75	246 / 459 / 31	200 / 571 / 25	296 / 381 / 57	238 / 471 / 46	235 / 379 / 89	192 / 474 / 73						
		3	214 / 520 / 27	173 / 639 / 22	238 / 472 / 46	193 / 584 / 37	181 / 502 / 68	145 / 610 / 55	205 / 540 / 26	169 / 674 / 21	229 / 493 / 44	184 / 604 / 35	174 / 523 / 66	141 / 645 / 53						
Wind Speed [mph]		120						130												
0	1	198 / 407 / 35	159 / 502 / 28	242 / 312 / 50	200 / 401 / 41	220 / 354 / 59	179 / 436 / 48	204 / 388 / 36	166 / 483 / 29	249 / 295 / 51	207 / 382 / 42	226 / 336 / 61	185 / 424 / 50							
	2	169 / 478 / 30	136 / 589 / 24	204 / 395 / 42	165 / 491 / 34	198 / 398 / 54	163 / 493 / 43	175 / 459 / 31	143 / 571 / 25	213 / 381 / 44	171 / 471 / 35	204 / 379 / 55	167 / 474 / 45							
	3	143 / 571 / 25	114 / 689 / 20	159 / 513 / 33	126 / 621 / 26	145 / 542 / 39	118 / 661 / 32	146 / 540 / 26	120 / 674 / 21	165 / 493 / 34	133 / 604 / 27	151 / 523 / 41	123 / 645 / 33							
	5	1	219 / 407 / 35	176 / 502 / 28	266 / 312 / 52	220 / 401 / 43	220 / 354 / 74	179 / 436 / 59	226 / 388 / 36	183 / 483 / 29	273 / 295 / 53	227 / 382 / 45	226 / 336 / 76	185 / 424 / 62						
		2	187 / 478 / 30	151 / 589 / 24	224 / 395 / 44	181 / 491 / 36	198 / 398 / 66	163 / 493 / 54	194 / 459 / 31	158 / 571 / 25	234 / 381 / 46	188 / 471 / 37	204 / 379 / 68	167 / 474 / 56						
		3	158 / 571 / 25	126 / 689 / 20	174 / 513 / 34	139 / 621 / 27	145 / 542 / 49	118 / 661 / 39	162 / 540 / 26	133 / 674 / 21	181 / 493 / 36	146 / 604 / 29	151 / 523 / 51	123 / 645 / 41						
	10	1	278 / 407 / 35	223 / 502 / 28	336 / 312 / 64	278 / 401 / 53	253 / 354 / 96	205 / 436 / 77	287 / 388 / 36	232 / 483 / 29	341 / 291 / 65	287 / 382 / 55	260 / 336 / 98	214 / 424 / 81						
		2	237 / 478 / 30	191 / 589 / 24	283 / 395 / 54	229 / 491 / 44	228 / 398 / 86	187 / 493 / 70	246 / 459 / 31	200 / 571 / 25	296 / 381 / 57	238 / 471 / 46	235 / 379 / 89	192 / 474 / 73						
		3	200 / 571 / 25	159 / 689 / 20	220 / 513 / 42	175 / 621 / 34	167 / 542 / 63	135 / 661 / 51	205 / 540 / 26	169 / 674 / 21	229 / 493 / 44	184 / 604 / 35	174 / 523 / 66	141 / 645 / 53						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
	0	1	191 / 426 / 34	153 / 519 / 27	236 / 329 / 48	191 / 413 / 39	210 / 367 / 57	183 / 454 / 46	175 / 451 / 31	143 / 561 / 25	223 / 362 / 46	178 / 445 / 36	198 / 399 / 54	189 / 485 / 43	166 / 488 / 29	141 / 598 / 24	207 / 386 / 42	178 / 482 / 34	182 / 421 / 49	198 / 522 / 40
2		162 / 496 / 29	130 / 604 / 23	194 / 406 / 40	159 / 509 / 33	189 / 409 / 51	166 / 511 / 42	149 / 527 / 27	123 / 662 / 22	181 / 439 / 37	146 / 539 / 30	176 / 442 / 48	170 / 542 / 38	140 / 563 / 25	120 / 696 / 20	168 / 467 / 34	144 / 575 / 28	163 / 470 / 44	177 / 578 / 36	
3		136 / 587 / 24	111 / 721 / 20	152 / 530 / 31	123 / 652 / 25	138 / 558 / 38	122 / 692 / 31	127 / 629 / 23	104 / 781 / 19	139 / 560 / 29	113 / 691 / 23	129 / 600 / 35	125 / 731 / 28	117 / 663 / 21	103 / 835 / 18	133 / 610 / 27	113 / 744 / 22	120 / 635 / 33	131 / 783 / 27	
5		1	212 / 426 / 34	169 / 519 / 27	259 / 329 / 51	210 / 413 / 41	210 / 367 / 70	183 / 454 / 57	194 / 451 / 31	158 / 561 / 25	245 / 362 / 48	195 / 445 / 38	198 / 399 / 66	189 / 485 / 53	183 / 488 / 29	153 / 598 / 24	227 / 386 / 45	192 / 482 / 36	182 / 421 / 61	198 / 522 / 50
		2	180 / 496 / 29	144 / 604 / 23	213 / 406 / 42	174 / 509 / 34	189 / 409 / 63	166 / 511 / 52	165 / 527 / 27	137 / 662 / 22	199 / 439 / 39	160 / 539 / 31	176 / 442 / 59	170 / 542 / 47	154 / 563 / 25	131 / 696 / 20	185 / 467 / 36	155 / 575 / 29	163 / 470 / 55	177 / 578 / 44
		3	151 / 587 / 24	122 / 721 / 20	167 / 530 / 33	135 / 652 / 27	138 / 558 / 46	122 / 692 / 38	140 / 629 / 23	115 / 781 / 19	153 / 560 / 30	125 / 691 / 25	129 / 600 / 43	125 / 731 / 35	129 / 663 / 21	112 / 835 / 18	146 / 610 / 29	122 / 744 / 23	120 / 635 / 40	131 / 783 / 33
10		1	268 / 426 / 34	214 / 519 / 27	327 / 329 / 63	265 / 413 / 51	242 / 367 / 92	205 / 454 / 74	246 / 451 / 31	200 / 561 / 25	309 / 362 / 59	247 / 445 / 47	228 / 399 / 86	205 / 485 / 68	232 / 488 / 29	192 / 598 / 24	287 / 386 / 55	241 / 482 / 45	210 / 421 / 79	208 / 522 / 64
		2	228 / 496 / 29	182 / 604 / 23	269 / 406 / 52	220 / 509 / 42	217 / 409 / 82	186 / 511 / 67	209 / 527 / 27	173 / 662 / 22	251 / 439 / 48	202 / 539 / 39	203 / 442 / 77	185 / 542 / 62	196 / 563 / 25	164 / 696 / 20	233 / 467 / 45	194 / 575 / 36	188 / 470 / 71	186 / 578 / 58
		3	191 / 587 / 24	155 / 721 / 20	211 / 530 / 41	171 / 652 / 33	159 / 558 / 60	137 / 692 / 49	178 / 629 / 23	146 / 781 / 19	193 / 560 / 37	157 / 691 / 30	149 / 600 / 56	135 / 731 / 45	164 / 663 / 21	141 / 835 / 18	184 / 610 / 35	153 / 744 / 29	138 / 635 / 52	137 / 783 / 43
Wind Speed [mph]		170						180												
0	1	156 / 521 / 28	147 / 644 / 23	194 / 412 / 40	181 / 505 / 32	184 / 454 / 47	205 / 554 / 38	146 / 550 / 26	149 / 668 / 21	181 / 434 / 37	190 / 545 / 31	190 / 484 / 44	216 / 594 / 36							
	2	133 / 609 / 24	125 / 742 / 19	159 / 500 / 33	151 / 621 / 27	164 / 502 / 42	187 / 623 / 34	123 / 635 / 22	128 / 784 / 18	149 / 528 / 31	153 / 646 / 25	168 / 531 / 39	191 / 648 / 32							
	3	111 / 708 / 20	106 / 881 / 16	123 / 640 / 25	117 / 790 / 21	120 / 680 / 31	136 / 828 / 25	104 / 749 / 19	108 / 919 / 15	117 / 682 / 24	120 / 831 / 19	125 / 722 / 29	144 / 897 / 24							
	5	1	172 / 521 / 28	156 / 644 / 23	213 / 412 / 42	190 / 505 / 34	184 / 454 / 58	205 / 554 / 46	162 / 550 / 26	153 / 668 / 21	199 / 434 / 39	194 / 545 / 32	190 / 484 / 55	216 / 594 / 44						
		2	147 / 609 / 24	132 / 742 / 19	174 / 500 / 34	158 / 621 / 28	164 / 502 / 52	187 / 623 / 42	137 / 635 / 22	132 / 784 / 18	164 / 528 / 32	156 / 646 / 26	168 / 531 / 49	191 / 648 / 39						
		3	122 / 708 / 20	112 / 881 / 16	135 / 640 / 27	123 / 790 / 22	120 / 680 / 38	136 / 828 / 31	115 / 749 / 19	111 / 919 / 15	128 / 682 / 25	123 / 831 / 20	125 / 722 / 36	144 / 897 / 30						
	10	1	218 / 521 / 28	193 / 644 / 23	269 / 412 / 52	234 / 505 / 41	207 / 454 / 75	210 / 554 / 60	205 / 550 / 26	188 / 668 / 21	251 / 434 / 48	237 / 545 / 40	208 / 484 / 71	216 / 594 / 58						
		2	187 / 609 / 24	163 / 742 / 19	220 / 500 / 42	195 / 621 / 35	185 / 502 / 67	191 / 623 / 55	173 / 635 / 22	162 / 784 / 18	206 / 528 / 40	191 / 646 / 32	184 / 531 / 63	191 / 648 / 51						
		3	155 / 708 / 20	139 / 881 / 16	171 / 640 / 33	152 / 790 / 27	136 / 680 / 49	138 / 828 / 40	146 / 749 / 19	136 / 919 / 15	162 / 682 / 31	150 / 831 / 25	136 / 722 / 47	144 / 897 / 39						
Wind Speed [mph]		190						200												
0	1	138 / 574 / 24	154 / 705 / 20	173 / 461 / 35	194 / 570 / 29	196 / 510 / 42	221 / 617 / 33	142 / 608 / 23	163 / 760 / 19	177 / 484 / 33	201 / 605 / 27	201 / 533 / 39	230 / 650 / 32							
	2	118 / 672 / 21	131 / 818 / 17	144 / 565 / 29	158 / 682 / 23	176 / 568 / 38	198 / 684 / 30	121 / 705 / 20	138 / 877 / 16	145 / 586 / 27	167 / 736 / 23	179 / 588 / 35	211 / 738 / 29							
	3	102 / 810 / 18	113 / 986 / 15	111 / 719 / 23	126 / 895 / 19	128 / 759 / 27	147 / 930 / 22	103 / 841 / 17	113 / 1006 / 14	113 / 752 / 21	128 / 922 / 17	131 / 789 / 26	155 / 992 / 22							
	5	1	152 / 574 / 24	155 / 705 / 20	189 / 461 / 37	194 / 570 / 30	196 / 510 / 52	221 / 617 / 41	153 / 608 / 23	163 / 760 / 19	189 / 484 / 35	201 / 605 / 29	201 / 533 / 49	230 / 650 / 39						
		2	130 / 672 / 21	132 / 818 / 17	157 / 565 / 31	158 / 682 / 25	176 / 568 / 46	198 / 684 / 37	130 / 705 / 20	138 / 877 / 16	155 / 586 / 29	167 / 736 / 24	179 / 588 / 43	211 / 738 / 36						
		3	112 / 810 / 18	114 / 986 / 15	122 / 719 / 24	126 / 895 / 20	128 / 759 / 34	147 / 930 / 28	111 / 841 / 17	113 / 1006 / 14	121 / 752 / 23	128 / 922 / 18	131 / 789 / 32	155 / 992 / 27						
	10	1	192 / 574 / 24	187 / 705 / 20	239 / 461 / 46	234 / 570 / 37	209 / 510 / 67	221 / 617 / 53	191 / 608 / 23	192 / 760 / 19	235 / 484 / 43	236 / 605 / 35	209 / 533 / 63	230 / 650 / 51						
		2	165 / 672 / 21	160 / 818 / 17	198 / 565 / 38	191 / 682 / 30	188 / 568 / 60	198 / 684 / 48	162 / 705 / 20	163 / 877 / 16	193 / 586 / 35	195 / 736 / 30	186 / 588 / 56	211 / 738 / 47						
		3	142 / 810 / 18	138 / 986 / 15	153 / 719 / 30	153 / 895 / 24	137 / 759 / 44	147 / 930 / 36	139 / 841 / 17	134 / 1006 / 14	151 / 752 / 28	150 / 922 / 23	136 / 789 / 41	155 / 992 / 34						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	397 / 148 / 43	336 / 405 / 36	390 / 188 / 74	390 / 299 / 74	325 / 252 / 131	291 / 353 / 118	391 / 335 / 42	320 / 424 / 35	390 / 209 / 74	390 / 329 / 74	325 / 278 / 131	279 / 371 / 113	380 / 357 / 41	309 / 448 / 33	390 / 230 / 74	379 / 351 / 72	316 / 297 / 128	267 / 388 / 108
2		358 / 387 / 39	287 / 476 / 31	390 / 288 / 74	341 / 393 / 65	312 / 305 / 126	262 / 396 / 106	342 / 406 / 37	276 / 502 / 30	390 / 318 / 74	325 / 411 / 62	304 / 327 / 123	250 / 415 / 101	325 / 423 / 35	259 / 516 / 28	385 / 345 / 73	309 / 428 / 59	296 / 349 / 119	237 / 431 / 96	
3		298 / 457 / 32	243 / 568 / 26	325 / 408 / 62	266 / 510 / 50	237 / 438 / 96	192 / 539 / 78	287 / 483 / 31	232 / 595 / 25	314 / 433 / 60	249 / 526 / 47	225 / 455 / 91	183 / 565 / 74	270 / 497 / 29	221 / 618 / 24	298 / 449 / 56	239 / 549 / 45	217 / 479 / 88	175 / 589 / 71	
20		1	446 / 142 / 44	395 / 405 / 39	438 / 180 / 82	438 / 286 / 82	353 / 242 / 156	330 / 353 / 145	446 / 158 / 44	375 / 424 / 37	438 / 200 / 82	438 / 316 / 82	353 / 267 / 156	316 / 371 / 139	446 / 174 / 44	362 / 448 / 36	438 / 221 / 82	438 / 346 / 82	353 / 294 / 156	301 / 388 / 133
		2	421 / 387 / 42	337 / 476 / 34	438 / 276 / 82	400 / 393 / 75	353 / 305 / 156	297 / 396 / 131	401 / 406 / 40	324 / 502 / 32	438 / 305 / 82	381 / 411 / 71	344 / 327 / 151	283 / 415 / 125	382 / 423 / 38	304 / 516 / 30	438 / 335 / 82	362 / 428 / 68	334 / 349 / 147	269 / 431 / 118
		3	350 / 457 / 35	285 / 568 / 29	381 / 408 / 71	312 / 510 / 58	269 / 438 / 118	217 / 539 / 96	337 / 483 / 34	272 / 595 / 27	369 / 433 / 69	292 / 526 / 55	254 / 455 / 112	207 / 565 / 91	317 / 497 / 32	259 / 618 / 26	350 / 449 / 66	280 / 549 / 53	245 / 479 / 108	198 / 589 / 87
25		1	446 / 142 / 44	395 / 405 / 39	438 / 180 / 82	438 / 286 / 82	384 / 236 / 182	368 / 353 / 175	446 / 158 / 44	375 / 424 / 37	438 / 200 / 82	438 / 316 / 82	384 / 260 / 182	352 / 371 / 167	446 / 174 / 44	362 / 448 / 36	438 / 221 / 82	438 / 346 / 82	384 / 286 / 182	336 / 388 / 160
		2	421 / 387 / 42	337 / 476 / 34	438 / 276 / 82	400 / 393 / 75	384 / 296 / 182	331 / 396 / 157	401 / 406 / 40	324 / 502 / 32	438 / 305 / 82	381 / 411 / 71	384 / 327 / 182	315 / 415 / 150	382 / 423 / 38	304 / 516 / 30	438 / 335 / 82	362 / 428 / 68	373 / 349 / 177	300 / 431 / 142
		3	350 / 457 / 35	285 / 568 / 29	381 / 408 / 71	312 / 510 / 58	300 / 438 / 142	242 / 539 / 115	337 / 483 / 34	272 / 595 / 27	369 / 433 / 69	292 / 526 / 55	284 / 455 / 135	231 / 565 / 110	317 / 497 / 32	259 / 618 / 26	350 / 449 / 66	280 / 549 / 53	273 / 479 / 130	221 / 589 / 105
15	Wind Speed [mph]		110						115											
	1	364 / 373 / 39	292 / 462 / 32	390 / 252 / 74	363 / 367 / 69	308 / 317 / 124	254 / 404 / 103	347 / 388 / 37	281 / 483 / 30	390 / 276 / 74	347 / 382 / 66	300 / 336 / 121	246 / 424 / 99							
	2	309 / 438 / 33	248 / 538 / 27	369 / 361 / 70	298 / 450 / 56	283 / 364 / 114	229 / 453 / 93	298 / 459 / 32	243 / 571 / 26	358 / 381 / 68	287 / 471 / 54	271 / 379 / 109	221 / 474 / 89							
	3	259 / 520 / 28	210 / 639 / 23	287 / 472 / 54	233 / 584 / 44	208 / 502 / 84	167 / 610 / 67	248 / 540 / 27	204 / 674 / 22	277 / 493 / 52	222 / 604 / 42	200 / 523 / 81	163 / 645 / 66							
	20	1	427 / 373 / 43	343 / 462 / 34	438 / 242 / 82	426 / 367 / 80	349 / 317 / 154	287 / 404 / 127	408 / 388 / 41	330 / 483 / 33	438 / 264 / 82	407 / 382 / 76	339 / 336 / 149	278 / 424 / 122						
		2	362 / 438 / 36	291 / 538 / 29	432 / 361 / 81	350 / 450 / 66	320 / 364 / 141	259 / 453 / 114	350 / 459 / 35	285 / 571 / 29	419 / 381 / 79	337 / 471 / 63	306 / 379 / 135	250 / 474 / 110						
		3	304 / 520 / 30	246 / 639 / 25	337 / 472 / 63	273 / 584 / 51	236 / 502 / 104	189 / 610 / 83	291 / 540 / 29	240 / 674 / 24	324 / 493 / 61	261 / 604 / 49	226 / 523 / 100	184 / 645 / 81						
	25	1	427 / 373 / 43	343 / 462 / 34	438 / 242 / 82	426 / 367 / 80	384 / 313 / 182	321 / 404 / 152	408 / 388 / 41	330 / 483 / 33	438 / 264 / 82	407 / 382 / 76	378 / 336 / 180	310 / 424 / 147						
		2	362 / 438 / 36	291 / 538 / 29	432 / 361 / 81	350 / 450 / 66	357 / 364 / 170	289 / 453 / 137	350 / 459 / 35	285 / 571 / 29	419 / 381 / 79	337 / 471 / 63	342 / 379 / 162	279 / 474 / 132						
3		304 / 520 / 30	246 / 639 / 25	337 / 472 / 63	273 / 584 / 51	263 / 502 / 125	210 / 610 / 100	291 / 540 / 29	240 / 674 / 24	324 / 493 / 61	261 / 604 / 49	252 / 523 / 120	205 / 645 / 98							
15	Wind Speed [mph]		120						130											
	1	336 / 407 / 36	270 / 502 / 29	390 / 300 / 74	336 / 401 / 64	291 / 354 / 118	235 / 436 / 94	347 / 388 / 37	281 / 483 / 30	390 / 276 / 74	347 / 382 / 66	300 / 336 / 121	246 / 424 / 99							
	2	287 / 478 / 31	232 / 589 / 25	341 / 395 / 65	277 / 491 / 52	262 / 398 / 106	214 / 493 / 86	298 / 459 / 32	243 / 571 / 26	358 / 381 / 68	287 / 471 / 54	271 / 379 / 109	221 / 474 / 89							
	3	243 / 571 / 26	193 / 689 / 21	266 / 513 / 50	212 / 621 / 40	192 / 542 / 78	156 / 661 / 62	248 / 540 / 27	204 / 674 / 22	277 / 493 / 52	222 / 604 / 42	200 / 523 / 81	163 / 645 / 66							
	20	1	395 / 407 / 39	317 / 502 / 32	438 / 287 / 82	394 / 401 / 74	330 / 354 / 145	266 / 436 / 116	408 / 388 / 41	330 / 483 / 33	438 / 264 / 82	407 / 382 / 76	339 / 336 / 149	278 / 424 / 122						
		2	337 / 478 / 34	272 / 589 / 27	400 / 395 / 75	324 / 491 / 61	297 / 398 / 131	242 / 493 / 106	350 / 459 / 35	285 / 571 / 29	419 / 381 / 79	337 / 471 / 63	306 / 379 / 135	250 / 474 / 110						
		3	285 / 571 / 29	227 / 689 / 23	312 / 513 / 58	248 / 621 / 47	217 / 542 / 96	176 / 661 / 77	291 / 540 / 29	240 / 674 / 24	324 / 493 / 61	261 / 604 / 49	226 / 523 / 100	184 / 645 / 81						
	25	1	395 / 407 / 39	317 / 502 / 32	438 / 287 / 82	394 / 401 / 74	368 / 354 / 175	297 / 436 / 140	408 / 388 / 41	330 / 483 / 33	438 / 264 / 82	407 / 382 / 76	378 / 336 / 180	310 / 424 / 147						
		2	337 / 478 / 34	272 / 589 / 27	400 / 395 / 75	324 / 491 / 61	331 / 398 / 157	270 / 493 / 127	350 / 459 / 35	285 / 571 / 29	419 / 381 / 79	337 / 471 / 63	342 / 379 / 162	279 / 474 / 132						
3		285 / 571 / 29	227 / 689 / 23	312 / 513 / 58	248 / 621 / 47	242 / 542 / 115	196 / 661 / 93	291 / 540 / 29	240 / 674 / 24	324 / 493 / 61	261 / 604 / 49	252 / 523 / 120	205 / 645 / 98							

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs														
Ground Snow	Wind Speed [mph]	140				150				160										
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	325 / 426 / 35	259 / 519 / 28	390 / 325 / 74	320 / 413 / 61	279 / 367 / 113	235 / 454 / 91	298 / 451 / 32	243 / 561 / 26	374 / 362 / 71	298 / 445 / 56	262 / 399 / 106	232 / 485 / 84	281 / 488 / 30	232 / 598 / 25	347 / 386 / 66	289 / 482 / 53	242 / 421 / 98	234 / 522 / 79
	2	276 / 496 / 30	221 / 604 / 24	325 / 406 / 62	266 / 509 / 50	250 / 409 / 101	213 / 511 / 83	254 / 527 / 27	210 / 662 / 23	304 / 439 / 57	244 / 539 / 46	233 / 442 / 94	209 / 542 / 76	237 / 563 / 26	198 / 696 / 21	282 / 467 / 53	234 / 575 / 43	217 / 470 / 88	209 / 578 / 71	
	3	232 / 587 / 25	188 / 721 / 20	255 / 530 / 48	206 / 652 / 39	183 / 558 / 74	157 / 692 / 61	215 / 629 / 23	177 / 781 / 19	233 / 560 / 44	190 / 691 / 36	171 / 600 / 69	154 / 731 / 56	199 / 663 / 22	170 / 835 / 18	222 / 610 / 42	184 / 744 / 34	158 / 635 / 64	154 / 783 / 52	
	20	1	382 / 426 / 38	304 / 519 / 30	438 / 311 / 82	375 / 413 / 70	316 / 367 / 139	264 / 454 / 112	350 / 451 / 35	285 / 561 / 29	438 / 362 / 82	350 / 445 / 66	297 / 399 / 131	260 / 485 / 104	330 / 488 / 33	271 / 598 / 27	407 / 386 / 76	338 / 482 / 62	273 / 421 / 120	259 / 522 / 98
	2	324 / 496 / 32	259 / 604 / 26	381 / 406 / 71	312 / 509 / 58	283 / 409 / 125	240 / 511 / 102	298 / 527 / 30	246 / 662 / 25	356 / 439 / 67	286 / 539 / 54	264 / 442 / 116	234 / 542 / 94	278 / 563 / 28	232 / 696 / 23	331 / 467 / 62	273 / 575 / 50	245 / 470 / 108	232 / 578 / 87	
	3	272 / 587 / 27	220 / 721 / 22	299 / 530 / 56	242 / 652 / 45	207 / 558 / 91	176 / 692 / 75	253 / 629 / 25	207 / 781 / 21	273 / 560 / 51	223 / 691 / 42	193 / 600 / 85	172 / 731 / 69	233 / 663 / 23	199 / 835 / 20	261 / 610 / 49	215 / 744 / 40	179 / 635 / 79	171 / 783 / 65	
	25	1	382 / 426 / 38	304 / 519 / 30	438 / 311 / 82	375 / 413 / 70	352 / 367 / 167	294 / 454 / 135	350 / 451 / 35	285 / 561 / 29	438 / 362 / 82	350 / 445 / 66	331 / 399 / 157	287 / 485 / 125	330 / 488 / 33	271 / 598 / 27	407 / 386 / 76	338 / 482 / 62	305 / 421 / 145	285 / 522 / 117
2	324 / 496 / 32	259 / 604 / 26	381 / 406 / 71	312 / 509 / 58	315 / 409 / 150	267 / 511 / 122	298 / 527 / 30	246 / 662 / 25	356 / 439 / 67	286 / 539 / 54	294 / 442 / 140	258 / 542 / 112	278 / 563 / 28	232 / 696 / 23	331 / 467 / 62	273 / 575 / 50	273 / 470 / 130	255 / 578 / 105		
3	272 / 587 / 27	220 / 721 / 22	299 / 530 / 56	242 / 652 / 45	231 / 558 / 110	196 / 692 / 90	253 / 629 / 25	207 / 781 / 21	273 / 560 / 51	223 / 691 / 42	216 / 600 / 103	190 / 731 / 83	233 / 663 / 23	199 / 835 / 20	261 / 610 / 49	215 / 744 / 40	200 / 635 / 95	188 / 783 / 78		
Exposure Category : C	Wind Speed [mph]	170				180				180				180						
	15	1	265 / 521 / 29	230 / 644 / 23	325 / 412 / 62	279 / 505 / 49	237 / 454 / 93	234 / 554 / 74	248 / 550 / 27	223 / 668 / 22	304 / 434 / 57	280 / 545 / 47	237 / 484 / 88	238 / 594 / 71	ASCE Group Zone					
	2	226 / 609 / 25	195 / 742 / 20	266 / 500 / 50	233 / 621 / 41	211 / 502 / 83	212 / 623 / 67	210 / 635 / 23	192 / 784 / 19	249 / 528 / 47	225 / 646 / 38	209 / 531 / 78	210 / 648 / 62	Mono Slope						
	3	188 / 708 / 20	166 / 881 / 17	206 / 640 / 39	181 / 790 / 32	155 / 680 / 61	154 / 828 / 49	177 / 749 / 19	161 / 919 / 16	195 / 682 / 37	177 / 831 / 30	155 / 722 / 57	159 / 897 / 47	1 = 1' / 1						
	20	1	311 / 521 / 31	268 / 644 / 25	381 / 412 / 71	324 / 505 / 57	267 / 454 / 114	258 / 554 / 91	291 / 550 / 29	257 / 668 / 23	356 / 434 / 67	323 / 545 / 55	265 / 484 / 108	261 / 594 / 87	2 = 2					
		2	265 / 609 / 27	227 / 742 / 22	312 / 500 / 58	270 / 621 / 48	238 / 502 / 102	234 / 623 / 83	246 / 635 / 25	222 / 784 / 20	292 / 528 / 55	260 / 646 / 44	235 / 531 / 96	230 / 648 / 77	3 = 3					
		3	220 / 708 / 22	193 / 881 / 18	242 / 640 / 45	209 / 790 / 37	175 / 680 / 75	170 / 828 / 60	207 / 749 / 21	186 / 919 / 17	229 / 682 / 43	204 / 831 / 35	174 / 722 / 71	174 / 897 / 58	1 = 1					
	25	1	311 / 521 / 31	268 / 644 / 25	381 / 412 / 71	324 / 505 / 57	297 / 454 / 137	282 / 554 / 110	291 / 550 / 29	257 / 668 / 23	356 / 434 / 67	323 / 545 / 55	294 / 484 / 130	284 / 594 / 105	2 = 2' / 2					
		2	265 / 609 / 27	227 / 742 / 22	312 / 500 / 58	270 / 621 / 48	265 / 502 / 122	256 / 623 / 100	246 / 635 / 25	222 / 784 / 20	292 / 528 / 55	260 / 646 / 44	260 / 531 / 115	250 / 648 / 93	3 = 3' / 3					
		3	220 / 708 / 22	193 / 881 / 18	242 / 640 / 45	209 / 790 / 37	195 / 680 / 90	186 / 828 / 73	207 / 749 / 21	186 / 919 / 17	229 / 682 / 43	204 / 831 / 35	192 / 722 / 85	190 / 897 / 70	1 = 1					
Exposure Category : C	Wind Speed [mph]	190				200				200				200						
	15	1	232 / 574 / 25	220 / 705 / 20	288 / 461 / 54	274 / 570 / 44	236 / 510 / 83	236 / 617 / 66	229 / 608 / 24	224 / 760 / 20	282 / 484 / 51	274 / 605 / 42	234 / 533 / 78	239 / 650 / 62	ASCE Group Zone					
	2	199 / 672 / 22	188 / 818 / 18	239 / 565 / 45	223 / 682 / 36	212 / 568 / 74	212 / 684 / 59	195 / 705 / 20	190 / 877 / 17	231 / 586 / 42	227 / 736 / 35	208 / 588 / 69	220 / 738 / 57	Mono Slope						
	3	172 / 810 / 19	162 / 986 / 15	185 / 719 / 35	179 / 895 / 29	154 / 759 / 54	158 / 930 / 44	166 / 841 / 18	156 / 1006 / 14	181 / 752 / 33	174 / 922 / 27	153 / 789 / 51	162 / 992 / 42	1 = 1						
	20	1	273 / 574 / 27	253 / 705 / 22	338 / 461 / 63	314 / 570 / 51	262 / 510 / 102	258 / 617 / 81	268 / 608 / 26	255 / 760 / 22	329 / 484 / 60	312 / 605 / 49	259 / 533 / 96	259 / 650 / 77	2 = 2					
		2	234 / 672 / 23	216 / 818 / 19	281 / 565 / 53	256 / 682 / 42	236 / 568 / 91	231 / 684 / 73	228 / 705 / 22	217 / 877 / 18	270 / 586 / 49	259 / 736 / 41	231 / 588 / 85	238 / 738 / 71	3 = 3					
		3	201 / 810 / 20	186 / 986 / 16	217 / 719 / 41	205 / 895 / 34	172 / 759 / 67	172 / 930 / 54	194 / 841 / 19	178 / 1006 / 15	211 / 752 / 38	198 / 922 / 31	169 / 789 / 63	175 / 992 / 52	1 = 1					
	25	1	273 / 574 / 27	253 / 705 / 22	338 / 461 / 63	314 / 570 / 51	289 / 510 / 122	279 / 617 / 98	268 / 608 / 26	255 / 760 / 22	329 / 484 / 60	312 / 605 / 49	284 / 533 / 115	280 / 650 / 93	2 = 2					
		2	234 / 672 / 23	216 / 818 / 19	281 / 565 / 53	256 / 682 / 42	260 / 568 / 110	250 / 684 / 88	228 / 705 / 22	217 / 877 / 18	270 / 586 / 49	259 / 736 / 41	253 / 588 / 103	257 / 738 / 85	3 = 3					
		3	201 / 810 / 20	186 / 986 / 16	217 / 719 / 41	205 / 895 / 34	189 / 759 / 80	186 / 930 / 65	194 / 841 / 19	178 / 1006 / 15	211 / 752 / 38	198 / 922 / 31	185 / 789 / 75	189 / 992 / 63	1 = 1					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	468 / 137 / 45	426 / 405 / 41	466 / 178 / 87	466 / 282 / 87	412 / 229 / 207	406 / 353 / 204	468 / 153 / 45	405 / 424 / 39	466 / 197 / 87	466 / 311 / 87	412 / 253 / 207	389 / 371 / 195	468 / 169 / 45	391 / 448 / 38	466 / 217 / 87	466 / 341 / 87	412 / 278 / 207	371 / 388 / 187
2		454 / 387 / 44	363 / 476 / 35	466 / 272 / 87	432 / 393 / 81	412 / 288 / 207	366 / 396 / 184	433 / 406 / 42	349 / 502 / 34	466 / 301 / 87	411 / 411 / 77	412 / 318 / 207	348 / 415 / 175	412 / 423 / 40	328 / 516 / 32	466 / 330 / 87	391 / 428 / 73	412 / 349 / 207	331 / 431 / 166	
3		377 / 457 / 36	308 / 568 / 30	411 / 408 / 77	336 / 510 / 63	331 / 438 / 166	267 / 539 / 134	363 / 483 / 35	294 / 595 / 28	398 / 433 / 74	316 / 526 / 59	313 / 455 / 158	256 / 565 / 128	342 / 497 / 33	280 / 618 / 27	377 / 449 / 70	302 / 549 / 56	302 / 479 / 152	244 / 589 / 123	
35		1	501 / 133 / 46	470 / 405 / 43	499 / 173 / 93	499 / 274 / 93	438 / 223 / 230	438 / 348 / 230	501 / 149 / 46	447 / 424 / 41	499 / 191 / 93	499 / 302 / 93	438 / 246 / 230	425 / 371 / 224	501 / 164 / 46	432 / 448 / 40	499 / 211 / 93	499 / 331 / 93	438 / 270 / 230	406 / 388 / 214
		2	501 / 387 / 46	401 / 476 / 37	499 / 264 / 93	476 / 393 / 88	438 / 280 / 230	400 / 396 / 210	478 / 406 / 44	386 / 502 / 36	499 / 292 / 93	454 / 411 / 84	438 / 309 / 230	381 / 415 / 200	455 / 423 / 42	363 / 516 / 33	499 / 320 / 93	431 / 428 / 80	438 / 339 / 230	362 / 431 / 190
		3	417 / 457 / 38	340 / 568 / 31	454 / 408 / 84	371 / 510 / 69	362 / 438 / 190	292 / 539 / 154	401 / 483 / 37	324 / 595 / 30	439 / 433 / 81	348 / 526 / 65	343 / 455 / 180	280 / 565 / 147	378 / 497 / 35	309 / 618 / 29	416 / 449 / 77	333 / 549 / 62	330 / 479 / 174	267 / 589 / 140
40		1	546 / 131 / 105	520 / 405 / 100	531 / 167 / 147	531 / 265 / 147	469 / 219 / 262	469 / 342 / 262	546 / 146 / 105	495 / 424 / 95	531 / 186 / 147	531 / 293 / 147	469 / 242 / 262	462 / 371 / 258	546 / 162 / 105	478 / 448 / 92	531 / 205 / 147	531 / 321 / 147	469 / 266 / 262	441 / 388 / 247
		2	546 / 381 / 105	443 / 476 / 85	531 / 256 / 147	523 / 393 / 145	469 / 276 / 262	434 / 396 / 243	529 / 406 / 101	426 / 502 / 82	531 / 283 / 147	498 / 411 / 138	469 / 304 / 262	414 / 415 / 231	503 / 423 / 97	401 / 516 / 77	531 / 311 / 147	473 / 428 / 131	469 / 334 / 262	393 / 431 / 220
		3	460 / 457 / 88	375 / 568 / 72	498 / 408 / 138	407 / 510 / 113	393 / 438 / 220	317 / 539 / 178	443 / 483 / 85	358 / 595 / 69	482 / 433 / 134	382 / 526 / 106	372 / 455 / 208	304 / 565 / 170	418 / 497 / 80	341 / 618 / 66	457 / 449 / 127	365 / 549 / 101	359 / 479 / 201	290 / 589 / 162
Wind Speed [mph]		110						115												
30	1	461 / 373 / 44	370 / 462 / 36	466 / 238 / 87	459 / 367 / 86	412 / 304 / 207	354 / 404 / 178	440 / 388 / 42	356 / 483 / 34	466 / 260 / 87	439 / 382 / 82	412 / 331 / 207	342 / 424 / 172							
	2	391 / 438 / 38	315 / 538 / 30	466 / 361 / 87	377 / 450 / 70	395 / 364 / 198	319 / 453 / 160	377 / 459 / 36	308 / 571 / 30	452 / 381 / 84	363 / 471 / 68	377 / 379 / 190	308 / 474 / 155							
	3	328 / 520 / 32	266 / 639 / 26	363 / 472 / 68	295 / 584 / 55	290 / 502 / 146	232 / 610 / 117	315 / 540 / 30	259 / 674 / 25	350 / 493 / 65	281 / 604 / 53	279 / 523 / 140	227 / 645 / 114							
	35	1	501 / 181 / 46	409 / 462 / 38	499 / 231 / 93	499 / 362 / 93	438 / 295 / 230	387 / 404 / 204	486 / 388 / 45	393 / 483 / 36	499 / 253 / 93	484 / 382 / 90	438 / 322 / 230	375 / 424 / 197						
		2	432 / 438 / 40	347 / 538 / 32	499 / 350 / 93	416 / 450 / 77	432 / 364 / 227	349 / 453 / 184	417 / 459 / 38	340 / 571 / 31	499 / 381 / 93	401 / 471 / 74	413 / 379 / 217	337 / 474 / 177						
		3	363 / 520 / 33	293 / 639 / 27	401 / 472 / 74	325 / 584 / 61	318 / 502 / 167	254 / 610 / 134	347 / 540 / 32	286 / 674 / 26	386 / 493 / 72	310 / 604 / 58	305 / 523 / 160	248 / 645 / 130						
	40	1	546 / 178 / 105	452 / 462 / 87	531 / 224 / 147	531 / 351 / 147	469 / 291 / 262	421 / 404 / 235	537 / 388 / 103	435 / 483 / 84	531 / 245 / 147	531 / 382 / 147	469 / 317 / 262	407 / 424 / 228						
		2	478 / 438 / 92	384 / 538 / 74	531 / 340 / 147	457 / 450 / 127	469 / 364 / 262	379 / 453 / 212	460 / 459 / 88	375 / 571 / 72	531 / 370 / 147	440 / 471 / 122	448 / 379 / 251	366 / 474 / 205						
		3	401 / 520 / 77	324 / 639 / 62	440 / 472 / 122	357 / 584 / 99	345 / 502 / 193	276 / 610 / 154	384 / 540 / 74	316 / 674 / 61	424 / 493 / 117	341 / 604 / 95	331 / 523 / 185	269 / 645 / 151						
Wind Speed [mph]		120						130												
30	1	426 / 407 / 41	342 / 502 / 33	466 / 283 / 87	425 / 401 / 79	406 / 354 / 204	327 / 436 / 163	440 / 388 / 42	356 / 483 / 34	466 / 260 / 87	439 / 382 / 82	412 / 331 / 207	342 / 424 / 172							
	2	363 / 478 / 35	294 / 589 / 28	432 / 395 / 81	350 / 491 / 65	366 / 398 / 184	298 / 493 / 149	377 / 459 / 36	308 / 571 / 30	452 / 381 / 84	363 / 471 / 68	377 / 379 / 190	308 / 474 / 155							
	3	308 / 571 / 30	245 / 689 / 24	336 / 513 / 63	268 / 621 / 50	267 / 542 / 134	216 / 661 / 108	315 / 540 / 30	259 / 674 / 25	350 / 493 / 65	281 / 604 / 53	279 / 523 / 140	227 / 645 / 114							
	35	1	470 / 407 / 43	378 / 502 / 35	499 / 275 / 93	469 / 401 / 87	438 / 349 / 230	358 / 436 / 187	486 / 388 / 45	393 / 483 / 36	499 / 253 / 93	484 / 382 / 90	438 / 322 / 230	375 / 424 / 197						
		2	401 / 478 / 37	324 / 589 / 30	476 / 395 / 88	386 / 491 / 72	400 / 398 / 210	326 / 493 / 170	417 / 459 / 38	340 / 571 / 31	499 / 381 / 93	401 / 471 / 74	413 / 379 / 217	337 / 474 / 177						
		3	340 / 571 / 31	270 / 689 / 25	371 / 513 / 69	295 / 621 / 55	292 / 542 / 154	237 / 661 / 124	347 / 540 / 32	286 / 674 / 26	386 / 493 / 72	310 / 604 / 58	305 / 523 / 160	248 / 645 / 130						
	40	1	520 / 407 / 100	418 / 502 / 80	531 / 267 / 147	515 / 401 / 143	469 / 344 / 262	388 / 436 / 216	537 / 388 / 103	435 / 483 / 84	531 / 245 / 147	531 / 382 / 147	469 / 317 / 262	407 / 424 / 228						
		2	443 / 478 / 85	358 / 589 / 69	523 / 395 / 145	424 / 491 / 117	434 / 398 / 243	354 / 493 / 197	460 / 459 / 88	375 / 571 / 72	531 / 370 / 147	440 / 471 / 122	448 / 379 / 251	366 / 474 / 205						
		3	375 / 571 / 72	299 / 689 / 57	407 / 513 / 113	324 / 621 / 90	317 / 542 / 178	257 / 661 / 143	384 / 540 / 74	316 / 674 / 61	424 / 493 / 117	341 / 604 / 95	331 / 523 / 185	269 / 645 / 151						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	412 / 426 / 40	328 / 519 / 32	466 / 307 / 87	405 / 413 / 75	389 / 367 / 195	323 / 454 / 158	377 / 451 / 36	308 / 561 / 30	466 / 357 / 87	377 / 445 / 70	366 / 399 / 184	314 / 485 / 146	356 / 488 / 34	292 / 598 / 28	439 / 386 / 82	364 / 482 / 67	337 / 421 / 169
2		349 / 496 / 34	280 / 604 / 27	411 / 406 / 77	336 / 509 / 63	348 / 409 / 175	293 / 511 / 143	322 / 527 / 31	266 / 662 / 26	384 / 439 / 72	309 / 539 / 58	325 / 442 / 163	283 / 542 / 131	301 / 563 / 29	250 / 696 / 24	357 / 467 / 67	294 / 575 / 54	302 / 470 / 152	278 / 578 / 123
3		294 / 587 / 28	238 / 721 / 23	322 / 530 / 60	261 / 652 / 49	256 / 558 / 128	216 / 692 / 105	273 / 629 / 26	224 / 781 / 22	295 / 560 / 55	240 / 691 / 45	238 / 600 / 120	208 / 731 / 96	252 / 663 / 24	214 / 835 / 20	281 / 610 / 53	231 / 744 / 42	221 / 635 / 111	205 / 783 / 91
35	1	455 / 426 / 42	363 / 519 / 33	499 / 298 / 93	446 / 413 / 83	425 / 367 / 224	353 / 454 / 180	417 / 451 / 38	340 / 561 / 31	499 / 346 / 93	416 / 445 / 77	400 / 399 / 210	342 / 485 / 167	393 / 488 / 36	322 / 598 / 29	484 / 386 / 90	401 / 482 / 73	368 / 421 / 194	336 / 522 / 157
	2	386 / 496 / 36	309 / 604 / 29	454 / 406 / 84	371 / 509 / 69	381 / 409 / 200	320 / 511 / 164	355 / 527 / 33	293 / 662 / 27	424 / 439 / 79	340 / 539 / 63	356 / 442 / 187	307 / 542 / 150	332 / 563 / 31	275 / 696 / 25	393 / 467 / 73	324 / 575 / 59	330 / 470 / 174	301 / 578 / 140
	3	324 / 587 / 30	262 / 721 / 24	356 / 530 / 66	288 / 652 / 54	280 / 558 / 147	235 / 692 / 120	301 / 629 / 28	247 / 781 / 23	325 / 560 / 61	265 / 691 / 49	261 / 600 / 137	226 / 731 / 110	278 / 663 / 26	236 / 835 / 22	310 / 610 / 58	254 / 744 / 47	241 / 635 / 127	222 / 783 / 104
40	1	503 / 426 / 97	401 / 519 / 77	531 / 289 / 147	490 / 413 / 136	462 / 367 / 258	382 / 454 / 208	460 / 451 / 88	375 / 561 / 72	531 / 336 / 147	457 / 445 / 127	434 / 399 / 243	369 / 485 / 193	435 / 488 / 84	352 / 598 / 67	531 / 386 / 147	437 / 482 / 120	400 / 421 / 224	362 / 522 / 181
	2	426 / 496 / 82	341 / 604 / 66	498 / 406 / 138	407 / 509 / 113	414 / 409 / 231	347 / 511 / 189	392 / 527 / 75	324 / 662 / 62	465 / 439 / 129	374 / 539 / 104	386 / 442 / 216	332 / 542 / 174	367 / 563 / 70	300 / 696 / 57	432 / 467 / 120	353 / 575 / 97	359 / 470 / 201	323 / 578 / 162
	3	358 / 587 / 69	290 / 721 / 56	390 / 530 / 108	316 / 652 / 88	304 / 558 / 170	255 / 692 / 139	333 / 629 / 64	273 / 781 / 53	357 / 560 / 99	291 / 691 / 81	283 / 600 / 158	244 / 731 / 128	307 / 663 / 59	258 / 835 / 49	341 / 610 / 95	278 / 744 / 76	262 / 635 / 147	239 / 783 / 120
Wind Speed [mph]		170						180											
30	1	335 / 521 / 32	288 / 644 / 26	411 / 412 / 77	348 / 505 / 62	327 / 454 / 160	306 / 554 / 128	315 / 550 / 30	276 / 668 / 24	384 / 434 / 72	346 / 545 / 59	322 / 484 / 152	307 / 594 / 123						
	2	287 / 609 / 28	244 / 742 / 22	336 / 500 / 63	290 / 621 / 51	292 / 502 / 143	278 / 623 / 117	266 / 635 / 26	237 / 784 / 21	316 / 528 / 59	279 / 646 / 48	285 / 531 / 134	271 / 648 / 108						
	3	238 / 708 / 23	207 / 881 / 19	261 / 640 / 49	225 / 790 / 40	214 / 680 / 105	202 / 828 / 85	224 / 749 / 22	199 / 919 / 18	247 / 682 / 46	218 / 831 / 37	211 / 722 / 99	205 / 897 / 82						
35	1	370 / 521 / 34	316 / 644 / 28	454 / 412 / 84	382 / 505 / 67	357 / 454 / 184	330 / 554 / 147	347 / 550 / 32	302 / 668 / 26	424 / 434 / 79	379 / 545 / 65	350 / 484 / 174	330 / 594 / 140						
	2	316 / 609 / 29	268 / 742 / 24	371 / 500 / 69	318 / 621 / 56	318 / 502 / 164	300 / 623 / 134	293 / 635 / 27	260 / 784 / 22	348 / 528 / 65	305 / 646 / 52	310 / 531 / 154	291 / 648 / 124						
	3	262 / 708 / 24	227 / 881 / 20	288 / 640 / 54	247 / 790 / 44	234 / 680 / 120	218 / 828 / 97	247 / 749 / 23	218 / 919 / 19	272 / 682 / 51	239 / 831 / 41	229 / 722 / 114	220 / 897 / 94						
40	1	409 / 521 / 79	345 / 644 / 64	498 / 412 / 138	416 / 505 / 111	387 / 454 / 212	354 / 554 / 170	384 / 550 / 74	328 / 668 / 59	465 / 434 / 129	411 / 545 / 106	379 / 484 / 201	353 / 594 / 162						
	2	350 / 609 / 67	292 / 742 / 54	407 / 500 / 113	347 / 621 / 92	345 / 502 / 189	322 / 623 / 154	324 / 635 / 62	283 / 784 / 51	382 / 528 / 106	331 / 646 / 85	335 / 531 / 178	311 / 648 / 143						
	3	290 / 708 / 56	248 / 881 / 46	316 / 640 / 88	269 / 790 / 72	254 / 680 / 139	233 / 828 / 112	273 / 749 / 53	237 / 919 / 43	299 / 682 / 83	259 / 831 / 67	248 / 722 / 131	236 / 897 / 108						
Wind Speed [mph]		190						200											
30	1	294 / 574 / 28	270 / 705 / 23	364 / 461 / 68	336 / 570 / 55	316 / 510 / 143	300 / 617 / 114	288 / 608 / 27	272 / 760 / 22	354 / 484 / 64	333 / 605 / 53	309 / 533 / 134	300 / 650 / 108						
	2	252 / 672 / 24	231 / 818 / 20	303 / 565 / 56	274 / 682 / 45	284 / 568 / 128	269 / 684 / 102	245 / 705 / 23	231 / 877 / 19	290 / 586 / 53	276 / 736 / 44	275 / 588 / 120	275 / 738 / 99						
	3	217 / 810 / 21	199 / 986 / 17	234 / 719 / 44	219 / 895 / 36	207 / 759 / 94	200 / 930 / 76	209 / 841 / 20	190 / 1006 / 16	227 / 752 / 41	211 / 922 / 34	202 / 789 / 88	203 / 992 / 73						
35	1	325 / 574 / 30	295 / 705 / 24	402 / 461 / 74	366 / 570 / 61	343 / 510 / 164	321 / 617 / 130	318 / 608 / 29	296 / 760 / 24	389 / 484 / 70	362 / 605 / 58	334 / 533 / 154	320 / 650 / 124						
	2	279 / 672 / 26	252 / 818 / 21	334 / 565 / 62	298 / 682 / 49	308 / 568 / 147	289 / 684 / 117	270 / 705 / 24	251 / 877 / 20	319 / 586 / 58	300 / 736 / 48	298 / 588 / 137	294 / 738 / 114						
	3	240 / 810 / 22	217 / 986 / 18	258 / 719 / 48	239 / 895 / 40	224 / 759 / 107	214 / 930 / 87	230 / 841 / 21	207 / 1006 / 17	249 / 752 / 45	230 / 922 / 37	218 / 789 / 100	216 / 992 / 84						
40	1	358 / 574 / 69	320 / 705 / 56	440 / 461 / 122	397 / 570 / 99	369 / 510 / 189	343 / 617 / 151	347 / 608 / 66	320 / 760 / 54	425 / 484 / 115	391 / 605 / 95	359 / 533 / 178	340 / 650 / 143						
	2	307 / 672 / 59	273 / 818 / 48	365 / 565 / 101	323 / 682 / 81	332 / 568 / 170	308 / 684 / 135	295 / 705 / 56	272 / 877 / 46	348 / 586 / 95	324 / 736 / 78	320 / 588 / 158	313 / 738 / 131						
	3	265 / 810 / 51	235 / 986 / 41	283 / 719 / 78	259 / 895 / 65	241 / 759 / 124	229 / 930 / 101	251 / 841 / 48	223 / 1006 / 38	272 / 752 / 74	248 / 922 / 60	234 / 789 / 116	230 / 992 / 97						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																														
Wind Speed [mph]		95				100				105																										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
	Exposure Category : C	45	1	589 / 127 / 110	579 / 405 / 108	573 / 162 / 156	573 / 257 / 156	491 / 213 / 280	491 / 332 / 280	589 / 142 / 110	551 / 424 / 103	573 / 180 / 156	573 / 284 / 156	491 / 235 / 280	491 / 366 / 280	589 / 157 / 110	532 / 448 / 99	573 / 198 / 156	573 / 311 / 156	491 / 258 / 280	476 / 388 / 272															
2			589 / 369 / 110	494 / 476 / 92	573 / 248 / 156	573 / 387 / 156	491 / 268 / 280	469 / 396 / 268	589 / 406 / 110	475 / 502 / 89	573 / 274 / 156	555 / 411 / 151	491 / 295 / 280	447 / 415 / 255	560 / 423 / 104	446 / 516 / 83	573 / 301 / 156	527 / 428 / 144	491 / 324 / 280	424 / 431 / 242																
3			513 / 457 / 96	418 / 568 / 78	555 / 408 / 151	453 / 510 / 124	424 / 438 / 242	342 / 539 / 196	494 / 483 / 92	399 / 595 / 74	536 / 433 / 146	425 / 526 / 116	402 / 455 / 229	328 / 565 / 187	465 / 497 / 87	380 / 618 / 71	509 / 449 / 139	407 / 549 / 111	387 / 479 / 221	313 / 589 / 179																
50		1	628 / 123 / 114	628 / 198 / 114	621 / 160 / 167	621 / 253 / 167	519 / 210 / 301	519 / 327 / 301	628 / 137 / 114	607 / 424 / 110	621 / 177 / 167	621 / 279 / 167	519 / 232 / 301	519 / 360 / 301	628 / 152 / 114	586 / 448 / 107	621 / 195 / 167	621 / 306 / 167	519 / 254 / 301	511 / 388 / 297																
		2	628 / 357 / 114	544 / 476 / 99	621 / 244 / 167	621 / 380 / 167	519 / 264 / 301	503 / 396 / 292	628 / 393 / 114	523 / 502 / 95	621 / 270 / 167	611 / 411 / 165	519 / 291 / 301	479 / 415 / 278	617 / 423 / 112	492 / 516 / 89	621 / 296 / 167	581 / 428 / 156	519 / 319 / 301	455 / 431 / 264																
		3	565 / 457 / 103	461 / 568 / 84	611 / 408 / 165	499 / 510 / 135	455 / 438 / 264	368 / 539 / 213	544 / 483 / 99	440 / 595 / 80	591 / 433 / 159	469 / 526 / 126	431 / 455 / 251	352 / 565 / 204	513 / 497 / 93	419 / 618 / 76	560 / 449 / 151	448 / 549 / 121	416 / 479 / 241	336 / 589 / 195																
60		1	694 / 115 / 121	694 / 185 / 121	688 / 149 / 182	688 / 236 / 182	584 / 200 / 337	584 / 312 / 337	694 / 128 / 121	694 / 205 / 121	688 / 165 / 182	688 / 261 / 182	584 / 221 / 337	584 / 344 / 337	694 / 142 / 121	694 / 225 / 121	688 / 182 / 182	688 / 286 / 182	584 / 243 / 337	584 / 376 / 337																
		2	694 / 333 / 121	645 / 476 / 113	688 / 228 / 182	688 / 355 / 182	584 / 252 / 337	584 / 390 / 337	694 / 367 / 121	620 / 502 / 108	688 / 252 / 182	688 / 391 / 182	584 / 278 / 337	565 / 415 / 326	694 / 401 / 121	583 / 516 / 102	688 / 277 / 182	688 / 428 / 182	584 / 304 / 337	537 / 431 / 310																
		3	670 / 457 / 117	546 / 568 / 95	688 / 387 / 182	592 / 510 / 156	537 / 438 / 310	433 / 539 / 250	645 / 483 / 113	521 / 595 / 91	688 / 426 / 182	555 / 526 / 147	509 / 455 / 294	414 / 565 / 240	608 / 497 / 106	496 / 618 / 87	664 / 449 / 175	531 / 549 / 140	490 / 479 / 283	396 / 589 / 229																
Exposure Category : C	45	1	589 / 173 / 110	503 / 462 / 94	573 / 217 / 156	573 / 340 / 156	491 / 283 / 280	454 / 404 / 259	589 / 189 / 110	484 / 483 / 90	573 / 238 / 156	573 / 370 / 156	491 / 308 / 280	439 / 424 / 251	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	532 / 438 / 99	427 / 538 / 80	573 / 329 / 156	509 / 450 / 139	491 / 354 / 280	409 / 453 / 234	513 / 459 / 96	418 / 571 / 78	573 / 358 / 156	490 / 471 / 134	484 / 379 / 276	395 / 474 / 225																								
3	446 / 520 / 83	361 / 639 / 67	490 / 472 / 134	398 / 584 / 109	372 / 502 / 212	298 / 610 / 170	427 / 540 / 80	352 / 674 / 66	472 / 493 / 129	379 / 604 / 104	357 / 523 / 204	290 / 645 / 166																								
50	1	628 / 167 / 114	555 / 462 / 101	621 / 214 / 167	621 / 335 / 167	519 / 278 / 301	487 / 404 / 283	628 / 183 / 114	534 / 483 / 97	621 / 234 / 167	621 / 364 / 167	519 / 303 / 301	471 / 424 / 274																							
	2	586 / 438 / 107	471 / 538 / 86	621 / 324 / 167	560 / 450 / 151	519 / 348 / 301	439 / 453 / 255	565 / 459 / 103	461 / 571 / 84	621 / 352 / 167	540 / 471 / 146	519 / 379 / 301	423 / 474 / 246																							
	3	492 / 520 / 89	398 / 639 / 72	540 / 472 / 146	438 / 584 / 118	400 / 502 / 232	320 / 610 / 186	471 / 540 / 86	387 / 674 / 71	520 / 493 / 140	418 / 604 / 113	384 / 523 / 223	312 / 645 / 181																							
60	1	694 / 156 / 121	657 / 462 / 115	688 / 200 / 182	688 / 313 / 182	584 / 265 / 337	574 / 404 / 332	694 / 171 / 121	633 / 483 / 111	688 / 218 / 182	688 / 340 / 182	584 / 289 / 337	556 / 424 / 321																							
	2	694 / 438 / 121	558 / 538 / 98	688 / 302 / 182	664 / 450 / 175	584 / 332 / 337	518 / 453 / 299	670 / 459 / 117	546 / 571 / 95	688 / 329 / 182	640 / 471 / 169	584 / 361 / 337	499 / 474 / 288																							
	3	583 / 520 / 102	471 / 639 / 83	640 / 472 / 169	519 / 584 / 137	471 / 502 / 272	377 / 610 / 218	558 / 540 / 98	459 / 674 / 80	616 / 493 / 163	495 / 604 / 131	452 / 523 / 261	367 / 645 / 212																							
Exposure Category : C	45	1	579 / 407 / 108	465 / 502 / 87	573 / 258 / 156	573 / 401 / 156	491 / 334 / 280	419 / 436 / 238	589 / 189 / 110	484 / 483 / 90	573 / 238 / 156	573 / 370 / 156	491 / 308 / 280	439 / 424 / 251																						
		2	494 / 478 / 92	399 / 589 / 74	573 / 388 / 156	472 / 491 / 129	469 / 398 / 268	382 / 493 / 217	513 / 459 / 96	418 / 571 / 78	573 / 358 / 156	490 / 471 / 134	484 / 379 / 276	395 / 474 / 225																						
		3	418 / 571 / 78	333 / 689 / 62	453 / 513 / 124	361 / 621 / 99	342 / 542 / 196	277 / 661 / 157	427 / 540 / 80	352 / 674 / 66	472 / 493 / 129	379 / 604 / 104	357 / 523 / 204	290 / 645 / 166																						
	50	1	628 / 199 / 114	513 / 502 / 93	621 / 254 / 167	621 / 395 / 167	519 / 329 / 301	450 / 436 / 260	628 / 183 / 114	534 / 483 / 97	621 / 234 / 167	621 / 364 / 167	519 / 303 / 301	471 / 424 / 274																						
		2	544 / 478 / 99	440 / 589 / 80	621 / 382 / 167	520 / 491 / 140	503 / 398 / 292	409 / 493 / 237	565 / 459 / 103	461 / 571 / 84	621 / 352 / 167	540 / 471 / 146	519 / 379 / 301	423 / 474 / 246																						
		3	461 / 571 / 84	366 / 689 / 67	499 / 513 / 135	397 / 621 / 107	368 / 542 / 213	297 / 661 / 172	471 / 540 / 86	387 / 674 / 71	520 / 493 / 140	418 / 604 / 113	384 / 523 / 223	312 / 645 / 181																						
	60	1	694 / 186 / 121	608 / 502 / 106	688 / 238 / 182	688 / 369 / 182	584 / 314 / 337	527 / 436 / 305	694 / 171 / 121	633 / 483 / 111	688 / 218 / 182	688 / 340 / 182	584 / 289 / 337	556 / 424 / 321																						
		2	645 / 478 / 113	521 / 589 / 91	688 / 357 / 182	616 / 491 / 163	584 / 392 / 337	480 / 493 / 278	670 / 459 / 117	546 / 571 / 95	688 / 329 / 182	640 / 471 / 169	584 / 361 / 337	499 / 474 / 288																						
		3	546 / 571 / 95	434 / 689 / 76	592 / 513 / 156	471 / 621 / 124	433 / 542 / 250	349 / 661 / 201	558 / 540 / 98	459 / 674 / 80	616 / 493 / 163	495 / 604 / 131	452 / 523 / 261	367 / 645 / 212																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																	
45	1	560 / 426 / 104	446 / 519 / 83	573 / 280 / 156	545 / 413 / 149	491 / 361 / 280	412 / 454 / 229	513 / 451 / 96	418 / 561 / 78	573 / 325 / 156	509 / 445 / 139	469 / 399 / 268	396 / 485 / 212	484 / 488 / 90	389 / 598 / 73	573 / 374 / 156	481 / 482 / 131	432 / 421 / 246	388 / 522 / 200	
	2	475 / 496 / 89	380 / 604 / 71	555 / 406 / 151	453 / 509 / 124	447 / 409 / 255	374 / 511 / 208	437 / 527 / 81	361 / 662 / 67	518 / 439 / 141	416 / 539 / 114	417 / 442 / 238	357 / 542 / 191	408 / 563 / 76	333 / 696 / 62	481 / 467 / 131	388 / 575 / 106	387 / 470 / 221	346 / 578 / 179	
	3	399 / 587 / 74	323 / 721 / 60	435 / 530 / 119	351 / 652 / 96	328 / 558 / 187	275 / 692 / 153	370 / 629 / 69	304 / 781 / 57	398 / 560 / 109	324 / 691 / 89	305 / 600 / 174	262 / 731 / 140	342 / 663 / 64	285 / 835 / 53	379 / 610 / 104	305 / 744 / 83	283 / 635 / 162	256 / 783 / 132	
	50	1	617 / 426 / 112	492 / 519 / 89	621 / 275 / 167	601 / 413 / 162	519 / 356 / 301	441 / 454 / 251	565 / 451 / 103	461 / 561 / 84	621 / 320 / 167	560 / 445 / 151	503 / 399 / 292	424 / 485 / 232	534 / 488 / 97	429 / 598 / 78	621 / 368 / 167	530 / 482 / 143	463 / 421 / 269	413 / 522 / 218
		2	523 / 496 / 95	419 / 604 / 76	611 / 406 / 165	499 / 509 / 135	479 / 409 / 278	400 / 511 / 227	481 / 527 / 88	398 / 662 / 72	571 / 439 / 154	459 / 539 / 124	447 / 442 / 260	381 / 542 / 209	450 / 563 / 82	366 / 696 / 67	530 / 467 / 143	428 / 575 / 115	416 / 470 / 241	369 / 578 / 195
		3	440 / 587 / 80	356 / 721 / 65	479 / 530 / 129	387 / 652 / 104	352 / 558 / 204	294 / 692 / 167	408 / 629 / 74	335 / 781 / 61	438 / 560 / 118	357 / 691 / 96	328 / 600 / 190	280 / 731 / 153	377 / 663 / 69	314 / 835 / 57	418 / 610 / 113	336 / 744 / 91	304 / 635 / 176	273 / 783 / 144
	60	1	694 / 202 / 121	583 / 519 / 102	688 / 257 / 182	688 / 399 / 182	584 / 339 / 337	509 / 454 / 294	670 / 451 / 117	546 / 561 / 95	688 / 299 / 182	664 / 445 / 175	584 / 393 / 337	478 / 485 / 272	633 / 488 / 111	509 / 598 / 89	688 / 344 / 182	628 / 482 / 166	546 / 421 / 316	465 / 522 / 256
		2	620 / 496 / 108	496 / 604 / 87	688 / 386 / 182	592 / 509 / 156	565 / 409 / 326	462 / 511 / 267	571 / 527 / 100	471 / 662 / 83	676 / 439 / 179	543 / 539 / 144	527 / 442 / 305	430 / 542 / 245	533 / 563 / 93	434 / 696 / 76	628 / 467 / 166	507 / 575 / 134	490 / 470 / 283	415 / 578 / 229
		3	521 / 587 / 91	422 / 721 / 74	567 / 530 / 150	459 / 652 / 121	414 / 558 / 240	339 / 692 / 196	484 / 629 / 85	397 / 781 / 70	519 / 560 / 137	423 / 691 / 112	386 / 600 / 223	316 / 731 / 180	447 / 663 / 78	372 / 835 / 65	495 / 610 / 131	399 / 744 / 105	358 / 635 / 207	307 / 783 / 169
45	Wind Speed [mph]																			
	170									180										
	1	456 / 521 / 85	373 / 644 / 69	555 / 412 / 151	450 / 505 / 121	417 / 454 / 234	378 / 554 / 187	427 / 550 / 80	354 / 668 / 64	518 / 434 / 141	444 / 545 / 116	407 / 484 / 221	376 / 594 / 179	ASCE Group Zone						
	45	2	389 / 609 / 73	316 / 742 / 59	453 / 500 / 124	375 / 621 / 101	372 / 502 / 208	344 / 623 / 170	361 / 635 / 67	305 / 784 / 55	425 / 528 / 116	357 / 646 / 94	360 / 531 / 196	331 / 648 / 157	Panal Angle					
		3	323 / 708 / 60	268 / 881 / 50	351 / 640 / 96	291 / 790 / 78	273 / 680 / 153	249 / 828 / 123	304 / 749 / 57	256 / 919 / 46	333 / 682 / 91	280 / 831 / 73	266 / 722 / 145	251 / 897 / 119	Mono Slope					
		1	502 / 521 / 91	408 / 644 / 74	611 / 412 / 165	489 / 505 / 132	447 / 454 / 255	402 / 554 / 204	471 / 550 / 86	380 / 668 / 69	571 / 434 / 154	476 / 545 / 126	436 / 484 / 241	399 / 594 / 195	0 - 3					
	50	2	429 / 609 / 78	346 / 742 / 63	499 / 500 / 135	408 / 621 / 110	399 / 502 / 227	365 / 623 / 186	398 / 635 / 72	328 / 784 / 59	469 / 528 / 126	383 / 646 / 102	385 / 531 / 213	351 / 648 / 172	3 - 10					
		3	356 / 708 / 65	293 / 881 / 54	387 / 640 / 104	316 / 790 / 85	293 / 680 / 167	265 / 828 / 135	335 / 749 / 61	275 / 919 / 50	367 / 682 / 99	300 / 831 / 80	285 / 722 / 158	266 / 897 / 130	10 - 30					
		1	595 / 521 / 104	484 / 644 / 85	688 / 392 / 182	580 / 505 / 153	518 / 454 / 299	450 / 554 / 240	558 / 550 / 98	447 / 668 / 78	676 / 434 / 179	555 / 545 / 147	492 / 484 / 283	445 / 594 / 229	1 = 1					
60	2	509 / 609 / 89	409 / 742 / 72	592 / 500 / 156	483 / 621 / 128	462 / 502 / 267	409 / 623 / 218	471 / 635 / 83	385 / 784 / 67	555 / 528 / 147	447 / 646 / 118	436 / 531 / 250	392 / 648 / 201	2 = 2' / 2						
	3	422 / 708 / 74	347 / 881 / 61	459 / 640 / 121	374 / 790 / 99	339 / 680 / 196	297 / 828 / 158	397 / 749 / 70	323 / 919 / 57	435 / 682 / 115	350 / 831 / 93	322 / 722 / 185	297 / 897 / 153	3 = 3' / 3						
	1	399 / 574 / 74	344 / 705 / 60	490 / 461 / 134	427 / 570 / 109	396 / 510 / 208	364 / 617 / 166	380 / 608 / 71	344 / 760 / 59	462 / 484 / 126	420 / 605 / 104	384 / 533 / 196	360 / 650 / 157	1 = 1						
45	2	342 / 672 / 64	294 / 818 / 52	407 / 565 / 111	348 / 682 / 89	356 / 568 / 187	327 / 684 / 149	323 / 705 / 60	292 / 877 / 50	379 / 586 / 104	348 / 736 / 86	343 / 588 / 174	331 / 738 / 145	2 = 2						
	3	295 / 810 / 55	253 / 986 / 45	315 / 719 / 86	278 / 895 / 71	259 / 759 / 136	243 / 930 / 111	276 / 841 / 52	240 / 1006 / 41	296 / 752 / 81	266 / 922 / 66	251 / 789 / 128	244 / 992 / 106	3 = 3						
	1	440 / 574 / 80	369 / 705 / 65	540 / 461 / 146	457 / 570 / 118	423 / 510 / 227	385 / 617 / 181	419 / 608 / 76	368 / 760 / 63	509 / 484 / 137	449 / 605 / 113	410 / 533 / 213	381 / 650 / 172	1 = 1						
50	2	377 / 672 / 69	315 / 818 / 55	448 / 565 / 121	372 / 682 / 96	380 / 568 / 204	346 / 684 / 163	356 / 705 / 65	312 / 877 / 54	418 / 586 / 113	372 / 736 / 94	365 / 588 / 190	350 / 738 / 158	2 = 2						
	3	325 / 810 / 59	271 / 986 / 48	347 / 719 / 94	298 / 895 / 77	276 / 759 / 149	257 / 930 / 121	304 / 841 / 55	257 / 1006 / 44	326 / 752 / 88	285 / 922 / 72	267 / 789 / 139	257 / 992 / 116	3 = 3						
	1	521 / 574 / 91	422 / 705 / 74	640 / 461 / 169	519 / 570 / 137	477 / 510 / 267	428 / 617 / 212	496 / 608 / 87	416 / 760 / 72	604 / 484 / 159	507 / 605 / 131	460 / 533 / 250	421 / 650 / 201	1 = 1						
60	2	447 / 672 / 78	360 / 818 / 63	531 / 565 / 140	423 / 682 / 112	428 / 568 / 240	384 / 684 / 191	422 / 705 / 74	353 / 877 / 61	495 / 586 / 131	420 / 736 / 109	410 / 588 / 223	387 / 738 / 185	2 = 2						
	3	385 / 810 / 67	310 / 986 / 54	411 / 719 / 109	338 / 895 / 90	311 / 759 / 174	286 / 930 / 142	360 / 841 / 63	290 / 1006 / 50	387 / 752 / 102	321 / 922 / 83	300 / 789 / 163	285 / 992 / 136	3 = 3						

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																													
Exposure Category : C	Wind Speed [mph]	95						100						105																					
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
	70	1	746 / 107 / 127	746 / 172 / 127	740 / 139 / 192	740 / 220 / 192	642 / 190 / 371	642 / 297 / 371	746 / 119 / 127	746 / 190 / 127	740 / 154 / 192	740 / 243 / 192	642 / 210 / 371	642 / 327 / 371	746 / 132 / 127	746 / 209 / 127	740 / 170 / 192	740 / 266 / 192	642 / 231 / 371	642 / 358 / 371															
		2	746 / 310 / 127	746 / 476 / 127	740 / 212 / 192	740 / 331 / 192	642 / 240 / 371	642 / 371 / 371	746 / 340 / 127	717 / 502 / 122	740 / 234 / 192	740 / 363 / 192	642 / 264 / 371	642 / 408 / 371	746 / 373 / 127	674 / 516 / 114	740 / 257 / 192	740 / 398 / 192	642 / 290 / 371	620 / 431 / 358															
		3	746 / 440 / 127	631 / 568 / 107	740 / 360 / 192	684 / 510 / 178	620 / 438 / 358	500 / 539 / 289	746 / 483 / 127	602 / 595 / 102	740 / 396 / 192	642 / 526 / 167	587 / 455 / 339	479 / 565 / 277	703 / 497 / 119	574 / 618 / 97	740 / 433 / 192	614 / 549 / 160	566 / 479 / 327	457 / 589 / 264															
	80	1	798 / 101 / 132	798 / 162 / 132	776 / 128 / 200	776 / 203 / 200	691 / 181 / 399	691 / 282 / 399	798 / 112 / 132	798 / 179 / 132	776 / 142 / 200	776 / 224 / 200	691 / 200 / 399	691 / 310 / 399	798 / 124 / 132	798 / 197 / 132	776 / 157 / 200	776 / 246 / 200	691 / 219 / 399	691 / 340 / 399															
		2	798 / 292 / 132	798 / 449 / 132	776 / 196 / 200	776 / 306 / 200	691 / 228 / 399	691 / 352 / 399	798 / 321 / 132	798 / 492 / 132	776 / 217 / 200	776 / 336 / 200	691 / 251 / 399	691 / 387 / 399	798 / 351 / 132	765 / 516 / 127	776 / 238 / 200	776 / 368 / 200	691 / 275 / 399	691 / 423 / 399															
		3	798 / 414 / 132	716 / 568 / 119	776 / 333 / 200	776 / 510 / 200	691 / 430 / 399	567 / 539 / 328	798 / 455 / 132	684 / 595 / 113	776 / 366 / 200	729 / 526 / 187	666 / 455 / 385	543 / 565 / 314	798 / 497 / 132	651 / 618 / 108	776 / 400 / 200	697 / 549 / 179	641 / 479 / 370	518 / 589 / 299															
	90	1	838 / 95 / 136	838 / 152 / 136	833 / 123 / 212	833 / 195 / 212	731 / 171 / 422	731 / 267 / 422	838 / 105 / 136	838 / 168 / 136	833 / 136 / 212	833 / 215 / 212	731 / 189 / 422	731 / 294 / 422	838 / 116 / 136	838 / 185 / 136	833 / 150 / 212	833 / 236 / 212	731 / 208 / 422	731 / 322 / 422															
	2	838 / 274 / 136	838 / 421 / 136	833 / 188 / 212	833 / 293 / 212	731 / 215 / 422	731 / 333 / 422	838 / 301 / 136	838 / 462 / 136	833 / 208 / 212	833 / 322 / 212	731 / 237 / 422	731 / 366 / 422	838 / 330 / 136	838 / 505 / 136	833 / 228 / 212	833 / 353 / 212	731 / 260 / 422	731 / 401 / 422																
	3	838 / 389 / 136	801 / 568 / 130	833 / 319 / 212	833 / 490 / 212	731 / 407 / 422	634 / 539 / 366	838 / 427 / 136	765 / 595 / 125	833 / 351 / 212	815 / 526 / 208	731 / 447 / 422	607 / 565 / 351	838 / 467 / 136	729 / 618 / 119	833 / 384 / 212	780 / 549 / 199	717 / 479 / 414	579 / 589 / 335																
	Wind Speed [mph]	110						115																											
70	1	746 / 145 / 127	746 / 229 / 127	740 / 186 / 192	740 / 291 / 192	642 / 253 / 371	642 / 391 / 371	746 / 158 / 127	731 / 483 / 124	740 / 203 / 192	740 / 316 / 192	642 / 275 / 371	642 / 424 / 371	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
ASCE Group Zone																																			
Panel Angle	Mono Slope																																		
0 - 3	1 = 1' / 1																																		
	2 = 2																																		
	3 = 3																																		
3 - 10	1 = 1																																		
	2 = 2' / 2																																		
	3 = 3' / 3																																		
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
	2	746 / 407 / 127	645 / 538 / 110	740 / 281 / 192	740 / 434 / 192	642 / 316 / 371	598 / 453 / 346	746 / 442 / 127	631 / 571 / 107	740 / 306 / 192	740 / 471 / 192	642 / 344 / 371	576 / 474 / 333																						
	3	674 / 520 / 114	545 / 639 / 93	740 / 472 / 192	600 / 584 / 156	544 / 502 / 314	435 / 610 / 251	645 / 540 / 110	531 / 674 / 90	712 / 493 / 185	572 / 604 / 149	522 / 523 / 302	424 / 645 / 245																						
80	1	798 / 136 / 132	798 / 216 / 132	776 / 172 / 200	776 / 269 / 200	691 / 240 / 399	691 / 371 / 399	798 / 149 / 132	798 / 235 / 132	776 / 188 / 200	776 / 293 / 200	691 / 261 / 399	691 / 403 / 399																						
	2	798 / 383 / 132	733 / 538 / 121	776 / 260 / 200	776 / 401 / 200	691 / 300 / 399	678 / 453 / 392	798 / 416 / 132	716 / 571 / 119	776 / 283 / 200	776 / 436 / 200	691 / 327 / 399	654 / 474 / 378																						
	3	765 / 520 / 127	619 / 639 / 103	776 / 436 / 200	681 / 584 / 175	617 / 502 / 356	493 / 610 / 285	733 / 540 / 121	602 / 674 / 100	776 / 474 / 200	650 / 604 / 167	592 / 523 / 342	481 / 645 / 278																						
90	1	838 / 128 / 136	838 / 203 / 136	833 / 165 / 212	833 / 258 / 212	731 / 227 / 422	731 / 351 / 422	838 / 140 / 136	838 / 221 / 136	833 / 180 / 212	833 / 281 / 212	731 / 247 / 422	731 / 381 / 422																						
	2	838 / 360 / 136	820 / 538 / 133	833 / 249 / 212	833 / 385 / 212	731 / 284 / 422	731 / 437 / 422	838 / 391 / 136	801 / 571 / 130	833 / 272 / 212	833 / 418 / 212	731 / 309 / 422	731 / 474 / 422																						
	3	838 / 509 / 136	692 / 639 / 113	833 / 418 / 212	762 / 584 / 194	689 / 502 / 398	552 / 610 / 319	820 / 540 / 133	674 / 674 / 110	833 / 454 / 212	727 / 604 / 185	662 / 523 / 382	538 / 645 / 311																						
	Wind Speed [mph]	120						130																											
70	1	746 / 173 / 127	703 / 502 / 119	740 / 221 / 192	740 / 343 / 192	642 / 299 / 371	609 / 436 / 352	746 / 158 / 127	731 / 483 / 124	740 / 203 / 192	740 / 316 / 192	642 / 275 / 371	642 / 424 / 371																						
	2	746 / 478 / 127	602 / 589 / 102	740 / 332 / 192	712 / 491 / 185	642 / 373 / 371	555 / 493 / 320	746 / 442 / 127	631 / 571 / 107	740 / 306 / 192	740 / 471 / 192	642 / 344 / 371	576 / 474 / 333																						
	3	631 / 571 / 107	502 / 689 / 85	684 / 513 / 178	544 / 621 / 142	500 / 542 / 289	403 / 661 / 233	645 / 540 / 110	531 / 674 / 90	712 / 493 / 185	572 / 604 / 149	522 / 523 / 302	424 / 645 / 245																						
80	1	798 / 163 / 132	798 / 255 / 132	776 / 204 / 200	776 / 317 / 200	691 / 283 / 399	691 / 436 / 399	798 / 149 / 132	798 / 235 / 132	776 / 188 / 200	776 / 293 / 200	691 / 261 / 399	691 / 403 / 399																						
	2	798 / 451 / 132	684 / 589 / 113	776 / 307 / 200	776 / 471 / 200	691 / 354 / 399	629 / 493 / 363	798 / 416 / 132	716 / 571 / 119	776 / 283 / 200	776 / 436 / 200	691 / 327 / 399	654 / 474 / 378																						
	3	716 / 571 / 119	570 / 689 / 95	776 / 513 / 200	618 / 621 / 159	567 / 542 / 328	456 / 661 / 264	733 / 540 / 121	602 / 674 / 100	776 / 474 / 200	650 / 604 / 167	592 / 523 / 342	481 / 645 / 278																						
90	1	838 / 153 / 136	838 / 240 / 136	833 / 196 / 212	833 / 304 / 212	731 / 268 / 422	731 / 413 / 422	838 / 140 / 136	838 / 221 / 136	833 / 180 / 212	833 / 281 / 212	731 / 247 / 422	731 / 381 / 422																						
	2	838 / 423 / 136	765 / 589 / 125	833 / 294 / 212	833 / 452 / 212	731 / 335 / 422	703 / 493 / 406	838 / 391 / 136	801 / 571 / 130	833 / 272 / 212	833 / 418 / 212	731 / 309 / 422	731 / 474 / 422																						
	3	801 / 571 / 130	638 / 689 / 104	833 / 492 / 212	691 / 621 / 176	634 / 542 / 366	510 / 661 / 295	820 / 540 / 133	674 / 674 / 110	833 / 454 / 212	727 / 604 / 185	662 / 523 / 382	538 / 645 / 311																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	70	1	746 / 188 / 127	674 / 519 / 114	740 / 239 / 192	740 / 371 / 192	642 / 323 / 371	587 / 454 / 339	746 / 219 / 127	631 / 561 / 107	740 / 278 / 192	740 / 429 / 192	642 / 374 / 371	544 / 485 / 314	731 / 488 / 124	588 / 598 / 100	740 / 320 / 192	726 / 482 / 189	631 / 421 / 364	516 / 522 / 295
2		717 / 496 / 122	574 / 604 / 97	740 / 359 / 192	684 / 509 / 178	642 / 403 / 371	533 / 511 / 308	660 / 527 / 112	545 / 662 / 93	740 / 415 / 192	628 / 539 / 163	609 / 442 / 352	489 / 542 / 283	617 / 563 / 105	502 / 696 / 85	726 / 467 / 189	586 / 575 / 153	566 / 470 / 327	461 / 578 / 264	
3		602 / 587 / 102	488 / 721 / 83	656 / 530 / 171	530 / 652 / 138	479 / 558 / 277	392 / 692 / 226	559 / 629 / 95	459 / 781 / 78	600 / 560 / 156	489 / 691 / 127	446 / 600 / 258	359 / 731 / 208	516 / 663 / 88	430 / 835 / 73	572 / 610 / 149	461 / 744 / 120	413 / 635 / 239	340 / 783 / 195	
80		1	798 / 177 / 132	765 / 519 / 127	776 / 221 / 200	776 / 343 / 200	691 / 306 / 399	666 / 454 / 385	798 / 206 / 132	716 / 561 / 119	776 / 257 / 200	776 / 397 / 200	691 / 355 / 399	617 / 485 / 356	798 / 238 / 132	667 / 598 / 111	776 / 296 / 200	776 / 454 / 200	691 / 407 / 399	580 / 522 / 335
		2	798 / 486 / 132	651 / 604 / 108	776 / 332 / 200	776 / 509 / 200	691 / 382 / 399	604 / 511 / 349	749 / 527 / 124	619 / 662 / 103	776 / 384 / 200	713 / 539 / 183	691 / 442 / 399	555 / 542 / 321	700 / 563 / 116	570 / 696 / 95	776 / 440 / 200	665 / 575 / 171	641 / 470 / 370	518 / 578 / 299
		3	684 / 587 / 113	554 / 721 / 92	745 / 530 / 192	602 / 652 / 155	543 / 558 / 314	444 / 692 / 257	635 / 629 / 105	521 / 781 / 87	681 / 560 / 175	555 / 691 / 143	506 / 600 / 292	407 / 731 / 235	586 / 663 / 97	489 / 835 / 81	650 / 610 / 167	523 / 744 / 135	469 / 635 / 271	382 / 783 / 221
90		1	838 / 166 / 136	838 / 259 / 136	833 / 212 / 212	833 / 329 / 212	731 / 290 / 422	731 / 445 / 422	838 / 194 / 136	801 / 561 / 130	833 / 247 / 212	833 / 381 / 212	731 / 336 / 422	689 / 485 / 398	838 / 223 / 136	747 / 598 / 122	833 / 284 / 212	833 / 436 / 212	731 / 385 / 422	648 / 522 / 374
		2	838 / 456 / 136	729 / 604 / 119	833 / 318 / 212	833 / 488 / 212	731 / 362 / 422	676 / 511 / 390	838 / 527 / 136	692 / 662 / 113	833 / 368 / 212	798 / 539 / 203	731 / 418 / 422	621 / 542 / 359	783 / 563 / 128	638 / 696 / 104	833 / 422 / 212	745 / 575 / 190	717 / 470 / 414	579 / 578 / 335
		3	765 / 587 / 125	619 / 721 / 101	833 / 530 / 212	674 / 652 / 172	607 / 558 / 351	497 / 692 / 287	710 / 629 / 116	583 / 781 / 95	762 / 560 / 194	621 / 691 / 158	565 / 600 / 327	455 / 731 / 263	656 / 663 / 107	547 / 835 / 89	727 / 610 / 185	585 / 744 / 149	524 / 635 / 303	428 / 783 / 247
Wind Speed [mph]		170						180												
70	1	688 / 521 / 117	559 / 644 / 95	740 / 364 / 192	670 / 505 / 174	598 / 454 / 346	498 / 554 / 277	645 / 550 / 110	516 / 668 / 88	740 / 411 / 192	642 / 545 / 167	566 / 484 / 327	491 / 594 / 264							
	2	588 / 609 / 100	473 / 742 / 80	684 / 500 / 178	558 / 621 / 145	533 / 502 / 308	453 / 623 / 251	545 / 635 / 93	445 / 784 / 76	642 / 528 / 167	517 / 646 / 134	500 / 531 / 289	432 / 648 / 233							
	3	488 / 708 / 83	402 / 881 / 68	530 / 640 / 138	433 / 790 / 113	392 / 680 / 226	328 / 828 / 182	459 / 749 / 78	373 / 919 / 64	503 / 682 / 131	405 / 831 / 106	370 / 722 / 214	327 / 897 / 176							
	80	1	781 / 521 / 130	635 / 644 / 105	776 / 337 / 200	760 / 505 / 196	678 / 454 / 392	546 / 554 / 314	733 / 550 / 121	586 / 668 / 97	776 / 380 / 200	729 / 545 / 187	641 / 484 / 370	537 / 594 / 299						
		2	667 / 609 / 111	537 / 742 / 89	776 / 500 / 200	634 / 621 / 163	604 / 502 / 349	497 / 623 / 285	619 / 635 / 103	505 / 784 / 84	729 / 528 / 187	586 / 646 / 151	567 / 531 / 328	473 / 648 / 264						
		3	554 / 708 / 92	456 / 881 / 76	602 / 640 / 155	491 / 790 / 126	444 / 680 / 257	360 / 828 / 207	521 / 749 / 87	423 / 919 / 70	570 / 682 / 147	460 / 831 / 118	419 / 722 / 242	358 / 897 / 200						
	90	1	838 / 255 / 136	710 / 644 / 116	833 / 323 / 212	833 / 495 / 212	731 / 438 / 422	607 / 554 / 351	820 / 550 / 133	656 / 668 / 107	833 / 365 / 212	815 / 545 / 208	717 / 484 / 414	582 / 594 / 335						
		2	747 / 609 / 122	601 / 742 / 98	833 / 479 / 212	709 / 621 / 181	676 / 502 / 390	552 / 623 / 319	692 / 635 / 113	565 / 784 / 92	815 / 528 / 208	656 / 646 / 167	634 / 531 / 366	513 / 648 / 295						
		3	619 / 708 / 101	510 / 881 / 83	674 / 640 / 172	550 / 790 / 140	497 / 680 / 287	400 / 828 / 231	583 / 749 / 95	474 / 919 / 77	638 / 682 / 163	514 / 831 / 131	469 / 722 / 271	388 / 897 / 223						
Wind Speed [mph]		190						200												
70	1	602 / 574 / 102	488 / 705 / 83	740 / 461 / 192	600 / 570 / 156	533 / 510 / 308	471 / 617 / 245	574 / 608 / 97	473 / 760 / 80	698 / 484 / 182	572 / 605 / 149	510 / 533 / 289	461 / 650 / 233							
	2	516 / 672 / 88	416 / 818 / 71	614 / 565 / 160	489 / 682 / 127	479 / 568 / 277	422 / 684 / 220	488 / 705 / 83	402 / 877 / 68	572 / 586 / 149	475 / 736 / 124	455 / 588 / 258	424 / 738 / 214							
	3	445 / 810 / 76	359 / 986 / 61	475 / 719 / 124	391 / 895 / 102	348 / 759 / 201	314 / 930 / 164	416 / 841 / 71	330 / 1006 / 56	447 / 752 / 116	363 / 922 / 95	333 / 789 / 189	312 / 992 / 157							
	80	1	684 / 574 / 113	554 / 705 / 92	776 / 426 / 200	681 / 570 / 175	604 / 510 / 349	513 / 617 / 278	651 / 608 / 108	537 / 760 / 89	776 / 474 / 200	650 / 605 / 167	567 / 533 / 328	502 / 650 / 264						
		2	586 / 672 / 97	472 / 818 / 78	697 / 565 / 179	555 / 682 / 143	543 / 568 / 314	461 / 684 / 250	554 / 705 / 92	456 / 877 / 76	650 / 586 / 167	539 / 736 / 139	506 / 588 / 292	461 / 738 / 242						
		3	505 / 810 / 84	407 / 986 / 68	539 / 719 / 139	444 / 895 / 114	395 / 759 / 228	342 / 930 / 185	472 / 841 / 78	375 / 1006 / 62	507 / 752 / 131	412 / 922 / 106	370 / 789 / 214	339 / 992 / 178						
	90	1	765 / 574 / 125	619 / 705 / 101	833 / 409 / 212	762 / 570 / 194	676 / 510 / 390	556 / 617 / 311	729 / 608 / 119	601 / 760 / 98	833 / 455 / 212	727 / 605 / 185	634 / 533 / 366	542 / 650 / 295						
		2	656 / 672 / 107	528 / 818 / 86	780 / 565 / 199	621 / 682 / 158	607 / 568 / 351	499 / 684 / 279	619 / 705 / 101	510 / 877 / 83	727 / 586 / 185	603 / 736 / 154	565 / 588 / 327	498 / 738 / 271						
		3	565 / 810 / 92	456 / 986 / 74	603 / 719 / 154	497 / 895 / 127	441 / 759 / 255	371 / 930 / 207	528 / 841 / 86	419 / 1006 / 68	567 / 752 / 145	461 / 922 / 118	414 / 789 / 239	367 / 992 / 199						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																	
100	1	887 / 90 / 142	887 / 146 / 142	863 / 115 / 218	863 / 183 / 218	762 / 161 / 440	762 / 252 / 440	887 / 101 / 142	887 / 161 / 142	863 / 128 / 218	863 / 201 / 218	762 / 178 / 440	762 / 277 / 440	887 / 111 / 142	887 / 177 / 142	863 / 141 / 218	863 / 221 / 218	762 / 196 / 440	762 / 304 / 440	
	2	887 / 262 / 142	887 / 403 / 142	863 / 176 / 218	863 / 275 / 218	762 / 203 / 440	762 / 315 / 440	887 / 288 / 142	887 / 442 / 142	863 / 195 / 218	863 / 302 / 218	762 / 224 / 440	762 / 346 / 440	887 / 316 / 142	887 / 483 / 142	863 / 214 / 218	863 / 330 / 218	762 / 246 / 440	762 / 378 / 440	
	3	887 / 372 / 142	887 / 568 / 142	863 / 299 / 218	863 / 458 / 218	762 / 384 / 440	701 / 539 / 405	887 / 409 / 142	846 / 595 / 136	863 / 329 / 218	863 / 503 / 218	762 / 422 / 440	671 / 565 / 388	887 / 447 / 142	806 / 618 / 129	863 / 360 / 218	863 / 549 / 218	762 / 461 / 440	640 / 589 / 370	
100	1	887 / 123 / 142	887 / 194 / 142	863 / 154 / 218	863 / 242 / 218	762 / 214 / 440	762 / 331 / 440	887 / 134 / 142	887 / 211 / 142	863 / 169 / 218	863 / 263 / 218	762 / 233 / 440	762 / 360 / 440							
	2	887 / 344 / 142	887 / 526 / 142	863 / 234 / 218	863 / 360 / 218	762 / 268 / 440	762 / 412 / 440	887 / 374 / 142	887 / 571 / 142	863 / 254 / 218	863 / 391 / 218	762 / 292 / 440	762 / 447 / 440							
	3	887 / 486 / 142	766 / 639 / 123	863 / 392 / 218	843 / 584 / 213	762 / 502 / 440	610 / 610 / 352	887 / 528 / 142	746 / 674 / 120	863 / 425 / 218	804 / 604 / 203	732 / 523 / 423	595 / 645 / 344							
100	1	887 / 146 / 142	887 / 229 / 142	863 / 183 / 218	863 / 285 / 218	762 / 253 / 440	762 / 389 / 440	887 / 134 / 142	887 / 211 / 142	863 / 169 / 218	863 / 263 / 218	762 / 233 / 440	762 / 360 / 440							
	2	887 / 405 / 142	846 / 589 / 136	863 / 276 / 218	863 / 423 / 218	762 / 316 / 440	762 / 484 / 440	887 / 374 / 142	887 / 571 / 142	863 / 254 / 218	863 / 391 / 218	762 / 292 / 440	762 / 447 / 440							
	3	887 / 571 / 142	705 / 689 / 113	863 / 460 / 218	765 / 621 / 194	701 / 542 / 405	564 / 661 / 326	887 / 528 / 142	746 / 674 / 120	863 / 425 / 218	804 / 604 / 203	732 / 523 / 423	595 / 645 / 344							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																		
	140						150						160						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
100	1	887 / 159 / 142	887 / 248 / 142	863 / 199 / 218	863 / 308 / 218	762 / 274 / 440	762 / 420 / 440	887 / 185 / 142	887 / 288 / 142	863 / 231 / 218	863 / 356 / 218	762 / 317 / 440	762 / 485 / 440	887 / 213 / 142	826 / 598 / 132	863 / 266 / 218	863 / 408 / 218	762 / 363 / 440	717 / 522 / 414
	2	887 / 437 / 142	806 / 604 / 129	863 / 298 / 218	863 / 457 / 218	762 / 341 / 440	747 / 511 / 432	887 / 504 / 142	766 / 662 / 123	863 / 345 / 218	863 / 527 / 218	762 / 395 / 440	686 / 542 / 396	867 / 563 / 139	705 / 696 / 113	863 / 395 / 218	824 / 575 / 208	762 / 452 / 440	640 / 578 / 370
	3	846 / 587 / 136	685 / 721 / 110	863 / 496 / 218	745 / 652 / 189	671 / 558 / 388	549 / 692 / 317	786 / 629 / 126	645 / 781 / 104	843 / 560 / 213	686 / 691 / 174	625 / 600 / 361	503 / 731 / 291	726 / 663 / 116	605 / 835 / 97	804 / 610 / 203	647 / 744 / 164	579 / 635 / 335	473 / 783 / 273
100	1	887 / 244 / 142	786 / 644 / 126	863 / 302 / 218	863 / 463 / 218	762 / 413 / 440	671 / 554 / 388	887 / 275 / 142	726 / 668 / 116	863 / 341 / 218	863 / 522 / 218	762 / 465 / 440	640 / 594 / 370						
	2	826 / 609 / 132	665 / 742 / 107	863 / 449 / 218	784 / 621 / 198	747 / 502 / 432	610 / 623 / 352	766 / 635 / 123	625 / 784 / 100	863 / 505 / 218	726 / 646 / 184	701 / 531 / 405	564 / 648 / 326						
	3	685 / 708 / 110	564 / 881 / 91	745 / 640 / 189	608 / 790 / 154	549 / 680 / 317	442 / 828 / 256	645 / 749 / 104	524 / 919 / 84	706 / 682 / 179	569 / 831 / 144	519 / 722 / 300	427 / 897 / 247						
100	1	846 / 574 / 136	685 / 705 / 110	863 / 383 / 218	843 / 570 / 213	747 / 510 / 432	598 / 617 / 344	806 / 608 / 129	665 / 760 / 107	863 / 426 / 218	804 / 605 / 203	701 / 533 / 405	583 / 650 / 326						
	2	726 / 672 / 116	585 / 818 / 94	863 / 565 / 218	686 / 682 / 174	671 / 568 / 388	537 / 684 / 308	685 / 705 / 110	564 / 877 / 91	804 / 586 / 203	667 / 736 / 169	625 / 588 / 361	536 / 738 / 300						
	3	625 / 810 / 100	504 / 986 / 81	667 / 719 / 169	549 / 895 / 139	488 / 759 / 282	399 / 930 / 229	585 / 841 / 94	464 / 1006 / 75	628 / 752 / 159	510 / 922 / 129	458 / 789 / 264	394 / 992 / 220						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior																
0	1	224 / 355 / 40	182 / 445 / 32	262 / 257 / 53	226 / 349 / 46	239 / 296 / 65	201 / 386 / 54	214 / 374 / 38	172 / 463 / 31	255 / 278 / 52	217 / 368 / 44	232 / 317 / 63	192 / 405 / 52	204 / 392 / 36	166 / 487 / 29	246 / 294 / 50	207 / 386 / 42	226 / 339 / 61	182 / 421 / 49	
	2	191 / 421 / 34	156 / 524 / 28	230 / 343 / 47	188 / 433 / 38	223 / 346 / 60	179 / 429 / 49	182 / 439 / 32	146 / 539 / 26	220 / 361 / 45	178 / 451 / 36	214 / 365 / 58	173 / 454 / 47	175 / 463 / 31	140 / 563 / 25	210 / 379 / 43	168 / 466 / 34	204 / 382 / 55	163 / 469 / 44	
	3	159 / 495 / 28	130 / 615 / 23	178 / 447 / 36	146 / 558 / 30	163 / 477 / 44	132 / 586 / 36	153 / 521 / 27	123 / 640 / 22	171 / 473 / 35	139 / 585 / 29	157 / 503 / 43	126 / 611 / 34	146 / 545 / 26	117 / 662 / 21	162 / 488 / 33	133 / 609 / 27	148 / 516 / 40	120 / 634 / 33	
	5	1	248 / 355 / 40	201 / 445 / 32	288 / 257 / 56	249 / 349 / 49	239 / 296 / 77	201 / 386 / 65	237 / 374 / 38	190 / 463 / 31	280 / 278 / 55	238 / 368 / 47	232 / 317 / 75	192 / 405 / 62	226 / 392 / 36	183 / 487 / 29	270 / 294 / 53	227 / 386 / 45	226 / 339 / 73	182 / 421 / 59
	2	212 / 421 / 34	172 / 524 / 28	252 / 343 / 49	206 / 433 / 40	223 / 346 / 72	179 / 429 / 58	201 / 439 / 32	162 / 539 / 26	241 / 361 / 47	195 / 451 / 38	214 / 365 / 69	173 / 454 / 56	194 / 463 / 31	154 / 563 / 25	231 / 379 / 45	185 / 466 / 36	204 / 382 / 66	163 / 469 / 53	
	3	176 / 495 / 28	144 / 615 / 23	195 / 447 / 38	160 / 558 / 31	163 / 477 / 53	132 / 586 / 43	169 / 521 / 27	137 / 640 / 22	188 / 473 / 37	153 / 585 / 30	157 / 503 / 51	126 / 611 / 41	162 / 545 / 26	129 / 662 / 21	178 / 488 / 35	146 / 609 / 29	148 / 516 / 48	120 / 634 / 39	
	10	1	314 / 355 / 40	255 / 445 / 32	341 / 241 / 65	314 / 349 / 60	266 / 296 / 98	224 / 386 / 83	300 / 374 / 38	241 / 463 / 31	341 / 267 / 65	301 / 368 / 58	259 / 317 / 96	213 / 405 / 79	287 / 392 / 36	232 / 487 / 29	341 / 294 / 65	287 / 386 / 55	252 / 339 / 93	203 / 421 / 75
	2	268 / 421 / 34	218 / 524 / 28	318 / 343 / 61	260 / 433 / 50	248 / 346 / 92	199 / 429 / 74	255 / 439 / 32	205 / 539 / 26	305 / 361 / 59	247 / 451 / 47	238 / 365 / 88	192 / 454 / 71	246 / 463 / 31	196 / 563 / 25	292 / 379 / 56	233 / 466 / 45	227 / 382 / 84	182 / 469 / 68	
	3	223 / 495 / 28	182 / 615 / 23	247 / 447 / 47	202 / 558 / 39	182 / 477 / 68	147 / 586 / 55	214 / 521 / 27	173 / 640 / 22	238 / 473 / 46	193 / 585 / 37	175 / 503 / 65	140 / 611 / 52	205 / 545 / 26	164 / 662 / 21	224 / 488 / 43	184 / 609 / 35	164 / 516 / 61	133 / 634 / 49	
5	1	195 / 407 / 35	159 / 510 / 28	239 / 313 / 49	197 / 401 / 40	217 / 355 / 59	181 / 443 / 48	188 / 428 / 33	153 / 531 / 27	233 / 332 / 48	191 / 422 / 39	210 / 375 / 57	186 / 464 / 46							
	2	166 / 476 / 29	136 / 598 / 24	200 / 394 / 41	162 / 488 / 33	195 / 398 / 53	162 / 491 / 43	159 / 497 / 28	130 / 617 / 23	194 / 415 / 40	155 / 509 / 32	189 / 418 / 51	165 / 512 / 41							
	3	140 / 566 / 25	114 / 699 / 20	155 / 510 / 32	126 / 630 / 26	142 / 538 / 38	120 / 671 / 32	133 / 586 / 24	111 / 736 / 20	149 / 530 / 31	120 / 648 / 25	138 / 570 / 38	121 / 687 / 30							
	5	1	215 / 407 / 35	176 / 510 / 28	263 / 313 / 51	217 / 401 / 42	217 / 355 / 70	181 / 443 / 57	208 / 428 / 33	169 / 531 / 27	256 / 332 / 50	210 / 422 / 41	210 / 375 / 68	186 / 464 / 55						
	2	183 / 476 / 29	151 / 598 / 24	220 / 394 / 43	178 / 488 / 35	195 / 398 / 63	162 / 491 / 51	176 / 497 / 28	144 / 617 / 23	213 / 415 / 42	171 / 509 / 34	189 / 418 / 61	165 / 512 / 49							
	3	154 / 566 / 25	126 / 699 / 20	171 / 510 / 34	139 / 630 / 27	142 / 538 / 46	120 / 671 / 38	147 / 586 / 24	122 / 736 / 20	164 / 530 / 32	132 / 648 / 26	138 / 570 / 45	121 / 687 / 36							
	10	1	273 / 407 / 35	223 / 510 / 28	332 / 313 / 64	274 / 401 / 53	241 / 355 / 89	200 / 443 / 73	264 / 428 / 33	214 / 531 / 27	323 / 332 / 62	265 / 422 / 51	234 / 375 / 87	201 / 464 / 70						
	2	232 / 476 / 29	191 / 598 / 24	278 / 394 / 53	224 / 488 / 43	217 / 398 / 80	178 / 491 / 65	223 / 497 / 28	182 / 617 / 23	269 / 415 / 52	215 / 509 / 41	210 / 418 / 78	179 / 512 / 62							
	3	196 / 566 / 25	159 / 699 / 20	215 / 510 / 41	175 / 630 / 34	157 / 538 / 58	132 / 671 / 48	187 / 586 / 24	155 / 736 / 20	206 / 530 / 40	166 / 648 / 32	154 / 570 / 57	130 / 687 / 46							
10	1	182 / 447 / 32	146 / 549 / 26	226 / 351 / 46	184 / 441 / 38	201 / 388 / 54	190 / 483 / 44	188 / 428 / 33	153 / 531 / 27	233 / 332 / 48	191 / 422 / 39	210 / 375 / 57	186 / 464 / 46							
	2	153 / 515 / 27	123 / 634 / 22	184 / 427 / 38	149 / 528 / 31	179 / 430 / 49	168 / 530 / 39	159 / 497 / 28	130 / 617 / 23	194 / 415 / 40	155 / 509 / 32	189 / 418 / 51	165 / 512 / 41							
	3	130 / 617 / 23	104 / 748 / 19	142 / 548 / 29	117 / 681 / 24	132 / 588 / 36	124 / 721 / 29	133 / 586 / 24	111 / 736 / 20	149 / 530 / 31	120 / 648 / 25	138 / 570 / 38	121 / 687 / 30							
	5	1	201 / 447 / 32	162 / 549 / 26	249 / 351 / 49	202 / 441 / 40	201 / 388 / 65	190 / 483 / 53	208 / 428 / 33	169 / 531 / 27	256 / 332 / 50	210 / 422 / 41	210 / 375 / 68	186 / 464 / 55						
	2	169 / 515 / 27	137 / 634 / 22	202 / 427 / 40	164 / 528 / 32	179 / 430 / 58	168 / 530 / 47	176 / 497 / 28	144 / 617 / 23	213 / 415 / 42	171 / 509 / 34	189 / 418 / 61	165 / 512 / 49							
	3	144 / 617 / 23	115 / 748 / 19	156 / 548 / 31	128 / 681 / 25	132 / 588 / 43	124 / 721 / 35	147 / 586 / 24	122 / 736 / 20	164 / 530 / 32	132 / 648 / 26	138 / 570 / 45	121 / 687 / 36							
	10	1	255 / 447 / 32	205 / 549 / 26	314 / 351 / 60	256 / 441 / 49	224 / 388 / 83	202 / 483 / 68	264 / 428 / 33	214 / 531 / 27	323 / 332 / 62	265 / 422 / 51	234 / 375 / 87	201 / 464 / 70						
	2	214 / 515 / 27	173 / 634 / 22	256 / 427 / 49	206 / 528 / 40	199 / 430 / 74	179 / 530 / 60	223 / 497 / 28	182 / 617 / 23	269 / 415 / 52	215 / 509 / 41	210 / 418 / 78	179 / 512 / 62							
	3	182 / 617 / 23	146 / 748 / 19	198 / 548 / 38	162 / 681 / 31	147 / 588 / 55	132 / 721 / 44	187 / 586 / 24	155 / 736 / 20	206 / 530 / 40	166 / 648 / 32	154 / 570 / 57	130 / 687 / 46							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs							
Wind Speed [mph]		140						150						160							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	175 / 466 / 31	140 / 566 / 25	220 / 369 / 45	175 / 452 / 36	192 / 399 / 52	194 / 501 / 43	162 / 498 / 29	142 / 607 / 23	204 / 397 / 42	180 / 493 / 34	179 / 432 / 49	200 / 532 / 39	149 / 525 / 27	149 / 659 / 22	191 / 426 / 39	184 / 520 / 31	184 / 460 / 45	209 / 568 / 37
0	2	149 / 544 / 27	120 / 665 / 21	178 / 445 / 36	146 / 557 / 30	173 / 448 / 47	175 / 559 / 38	136 / 573 / 24	120 / 704 / 20	165 / 477 / 34	145 / 585 / 27	160 / 480 / 43	179 / 587 / 35	130 / 624 / 23	126 / 756 / 19	155 / 514 / 32	152 / 635 / 26	166 / 517 / 41	190 / 638 / 33		
0	3	123 / 632 / 22	101 / 781 / 18	139 / 578 / 29	113 / 713 / 23	126 / 604 / 34	128 / 754 / 28	117 / 690 / 21	103 / 840 / 17	130 / 620 / 27	113 / 751 / 21	120 / 661 / 33	131 / 788 / 26	107 / 722 / 19	106 / 892 / 16	120 / 654 / 25	117 / 803 / 20	121 / 694 / 30	136 / 839 / 24		
5	1	194 / 466 / 31	154 / 566 / 25	241 / 369 / 47	192 / 452 / 38	192 / 399 / 62	194 / 501 / 51	180 / 498 / 29	152 / 607 / 23	224 / 397 / 44	192 / 493 / 36	179 / 432 / 58	200 / 532 / 47	165 / 525 / 27	156 / 659 / 22	210 / 426 / 41	191 / 520 / 33	184 / 460 / 54	209 / 568 / 44		
5	2	165 / 544 / 27	133 / 665 / 21	195 / 445 / 38	160 / 557 / 31	173 / 448 / 56	175 / 559 / 46	151 / 573 / 24	130 / 704 / 20	181 / 477 / 36	155 / 585 / 29	160 / 480 / 52	179 / 587 / 42	144 / 624 / 23	131 / 756 / 19	171 / 514 / 34	158 / 635 / 27	166 / 517 / 49	190 / 638 / 40		
5	3	137 / 632 / 22	112 / 781 / 18	153 / 578 / 30	125 / 713 / 25	126 / 604 / 41	128 / 754 / 34	129 / 690 / 21	111 / 840 / 17	142 / 620 / 28	121 / 751 / 23	120 / 661 / 39	131 / 788 / 31	119 / 722 / 19	111 / 892 / 16	132 / 654 / 26	122 / 803 / 21	121 / 694 / 36	136 / 839 / 29		
10	1	246 / 466 / 31	196 / 566 / 25	305 / 369 / 59	242 / 452 / 47	213 / 399 / 79	203 / 501 / 65	228 / 498 / 29	191 / 607 / 23	283 / 397 / 54	240 / 493 / 44	199 / 432 / 74	203 / 532 / 60	209 / 525 / 27	192 / 659 / 22	265 / 426 / 51	235 / 520 / 41	198 / 460 / 69	209 / 568 / 56		
10	2	209 / 544 / 27	169 / 665 / 21	247 / 445 / 47	202 / 557 / 39	192 / 448 / 71	182 / 559 / 58	191 / 573 / 24	162 / 704 / 20	229 / 477 / 44	193 / 585 / 35	178 / 480 / 66	181 / 587 / 53	182 / 624 / 23	162 / 756 / 19	215 / 514 / 41	195 / 635 / 34	180 / 517 / 62	190 / 638 / 51		
10	3	173 / 632 / 22	141 / 781 / 18	193 / 578 / 37	157 / 713 / 30	140 / 604 / 52	134 / 754 / 43	164 / 690 / 21	139 / 840 / 17	180 / 620 / 35	151 / 751 / 28	133 / 661 / 49	132 / 788 / 39	150 / 722 / 19	137 / 892 / 16	166 / 654 / 32	150 / 803 / 26	131 / 694 / 46	136 / 839 / 37		
Wind Speed [mph]		170						180													
Exposure Category : D	0	1	143 / 569 / 25	151 / 687 / 20	178 / 452 / 36	190 / 552 / 29	191 / 492 / 43	222 / 613 / 35	141 / 597 / 24	157 / 728 / 19	178 / 482 / 34	199 / 593 / 28	198 / 521 / 40	227 / 639 / 33							
		2	120 / 653 / 21	130 / 801 / 18	146 / 547 / 30	155 / 664 / 24	172 / 549 / 38	195 / 666 / 31	120 / 695 / 20	133 / 840 / 16	144 / 574 / 28	161 / 705 / 23	177 / 577 / 36	203 / 707 / 29							
		3	101 / 767 / 18	108 / 934 / 15	113 / 701 / 23	121 / 847 / 19	126 / 741 / 28	146 / 914 / 23	103 / 834 / 18	114 / 1006 / 14	113 / 743 / 22	128 / 918 / 18	131 / 782 / 27	150 / 950 / 22							
	5	1	158 / 569 / 25	154 / 687 / 20	195 / 452 / 38	192 / 552 / 31	191 / 492 / 51	222 / 613 / 42	153 / 597 / 24	157 / 728 / 19	192 / 482 / 36	199 / 593 / 29	198 / 521 / 48	227 / 639 / 39							
		2	133 / 653 / 21	132 / 801 / 18	160 / 547 / 31	157 / 664 / 25	172 / 549 / 46	195 / 666 / 37	131 / 695 / 20	133 / 840 / 16	155 / 574 / 29	161 / 705 / 24	177 / 577 / 43	203 / 707 / 35							
		3	112 / 767 / 18	110 / 934 / 15	125 / 701 / 25	122 / 847 / 20	126 / 741 / 34	146 / 914 / 28	112 / 834 / 18	114 / 1006 / 14	122 / 743 / 23	128 / 918 / 19	131 / 782 / 32	150 / 950 / 26							
	10	1	200 / 569 / 25	188 / 687 / 20	247 / 452 / 47	233 / 552 / 38	201 / 492 / 65	222 / 613 / 53	192 / 597 / 24	188 / 728 / 19	240 / 482 / 45	236 / 593 / 36	202 / 521 / 61	227 / 639 / 49							
		2	169 / 653 / 21	161 / 801 / 18	202 / 547 / 39	191 / 664 / 31	181 / 549 / 58	195 / 666 / 47	164 / 695 / 20	159 / 840 / 16	194 / 574 / 36	191 / 705 / 30	181 / 577 / 55	203 / 707 / 44							
		3	141 / 767 / 18	134 / 934 / 15	157 / 701 / 30	148 / 847 / 24	133 / 741 / 43	146 / 914 / 35	141 / 834 / 18	137 / 1006 / 14	153 / 743 / 29	152 / 918 / 24	133 / 782 / 40	150 / 950 / 33							
Wind Speed [mph]		190						200													
Exposure Category : D	0	1	146 / 634 / 23	162 / 764 / 18	182 / 508 / 33	203 / 616 / 26	208 / 558 / 38	237 / 676 / 31	150 / 669 / 21	171 / 820 / 18	186 / 531 / 31	210 / 649 / 25	212 / 579 / 36	245 / 709 / 29							
		2	123 / 732 / 19	141 / 904 / 16	149 / 612 / 27	166 / 741 / 21	185 / 614 / 34	211 / 743 / 27	126 / 763 / 18	148 / 966 / 15	154 / 646 / 25	176 / 797 / 21	191 / 648 / 33	224 / 799 / 27							
		3	105 / 869 / 16	120 / 1076 / 14	115 / 779 / 21	130 / 948 / 17	134 / 816 / 25	158 / 1018 / 21	110 / 929 / 16	125 / 1141 / 13	121 / 837 / 20	136 / 1009 / 16	141 / 874 / 24	166 / 1081 / 20							
	5	1	154 / 634 / 23	162 / 764 / 18	192 / 508 / 34	203 / 616 / 27	208 / 558 / 46	237 / 676 / 37	155 / 669 / 21	171 / 820 / 18	191 / 531 / 32	210 / 649 / 26	212 / 579 / 43	245 / 709 / 35							
		2	131 / 732 / 19	141 / 904 / 16	157 / 612 / 28	166 / 741 / 23	185 / 614 / 41	211 / 743 / 33	130 / 763 / 18	148 / 966 / 15	158 / 646 / 27	176 / 797 / 22	191 / 648 / 39	224 / 799 / 32							
		3	111 / 869 / 16	120 / 1076 / 14	122 / 779 / 22	130 / 948 / 18	134 / 816 / 30	158 / 1018 / 25	113 / 929 / 16	125 / 1141 / 13	125 / 837 / 21	136 / 1009 / 17	141 / 874 / 29	166 / 1081 / 24							
	10	1	192 / 634 / 23	187 / 764 / 18	238 / 508 / 42	232 / 616 / 34	208 / 558 / 58	237 / 676 / 47	191 / 669 / 21	192 / 820 / 18	234 / 531 / 40	234 / 649 / 32	212 / 579 / 55	245 / 709 / 44							
		2	162 / 732 / 19	163 / 904 / 16	194 / 612 / 35	191 / 741 / 28	185 / 614 / 52	211 / 743 / 42	160 / 763 / 18	166 / 966 / 15	194 / 646 / 33	196 / 797 / 27	191 / 648 / 49	224 / 799 / 40							
		3	138 / 869 / 16	139 / 1076 / 14	151 / 779 / 27	149 / 948 / 22	134 / 816 / 38	158 / 1018 / 31	139 / 929 / 16	141 / 1141 / 13	153 / 837 / 26	152 / 1009 / 21	141 / 874 / 37	166 / 1081 / 30							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs														
Wind Speed [mph]	95				100				105											
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
Ground Snow	Group		Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
	1	2	380 / 355 / 41	309 / 445 / 33	390 / 229 / 74	379 / 349 / 72	303 / 296 / 120	255 / 386 / 101	364 / 374 / 39	292 / 463 / 32	390 / 253 / 74	363 / 368 / 69	295 / 317 / 117	243 / 405 / 96	347 / 392 / 37	281 / 487 / 30	390 / 278 / 74	347 / 386 / 66	287 / 339 / 113	231 / 421 / 92
15	2	3	325 / 421 / 35	265 / 524 / 29	385 / 343 / 73	314 / 433 / 60	283 / 346 / 112	227 / 429 / 90	309 / 439 / 33	248 / 539 / 27	369 / 361 / 70	298 / 451 / 56	271 / 365 / 107	219 / 454 / 87	298 / 463 / 32	237 / 563 / 26	352 / 379 / 67	282 / 466 / 53	259 / 382 / 102	207 / 469 / 82
	1	2	270 / 495 / 29	221 / 615 / 24	298 / 447 / 56	244 / 558 / 46	207 / 477 / 82	167 / 586 / 66	259 / 521 / 28	210 / 640 / 23	287 / 473 / 54	233 / 585 / 44	199 / 503 / 79	159 / 611 / 63	248 / 545 / 27	199 / 662 / 22	271 / 488 / 51	222 / 609 / 42	187 / 516 / 74	152 / 634 / 60
	3	1	446 / 173 / 44	362 / 445 / 36	438 / 219 / 82	438 / 344 / 82	339 / 296 / 143	286 / 386 / 121	427 / 374 / 43	343 / 463 / 34	438 / 243 / 82	426 / 368 / 80	331 / 317 / 140	273 / 405 / 115	408 / 392 / 41	330 / 487 / 33	438 / 267 / 82	407 / 386 / 76	322 / 339 / 136	259 / 421 / 110
20	2	3	382 / 421 / 38	311 / 524 / 31	438 / 333 / 82	369 / 433 / 69	317 / 346 / 134	255 / 429 / 108	362 / 439 / 36	291 / 539 / 29	432 / 361 / 81	350 / 451 / 66	304 / 365 / 128	246 / 454 / 104	350 / 463 / 35	278 / 563 / 28	413 / 379 / 77	331 / 466 / 62	290 / 382 / 123	232 / 469 / 98
	1	2	317 / 495 / 32	259 / 615 / 26	350 / 447 / 66	286 / 558 / 54	232 / 477 / 98	188 / 586 / 79	304 / 521 / 30	246 / 640 / 25	337 / 473 / 63	273 / 585 / 51	224 / 503 / 95	179 / 611 / 76	291 / 545 / 29	233 / 662 / 23	318 / 488 / 60	261 / 609 / 49	210 / 516 / 89	170 / 634 / 72
	3	1	446 / 173 / 44	362 / 445 / 36	438 / 219 / 82	438 / 344 / 82	366 / 288 / 167	317 / 386 / 145	427 / 374 / 43	343 / 463 / 34	438 / 243 / 82	426 / 368 / 80	366 / 317 / 167	302 / 405 / 138	408 / 392 / 41	330 / 487 / 33	438 / 267 / 82	407 / 386 / 76	357 / 339 / 163	287 / 421 / 131
25	2	3	382 / 421 / 38	311 / 524 / 31	438 / 333 / 82	369 / 433 / 69	352 / 346 / 161	282 / 429 / 129	362 / 439 / 36	291 / 539 / 29	432 / 361 / 81	350 / 451 / 66	337 / 365 / 154	273 / 454 / 125	350 / 463 / 35	278 / 563 / 28	413 / 379 / 77	331 / 466 / 62	322 / 382 / 147	258 / 469 / 118
	1	2	317 / 495 / 32	259 / 615 / 26	350 / 447 / 66	286 / 558 / 54	258 / 477 / 118	208 / 586 / 95	304 / 521 / 30	246 / 640 / 25	337 / 473 / 63	273 / 585 / 51	248 / 503 / 113	198 / 611 / 91	291 / 545 / 29	233 / 662 / 23	318 / 488 / 60	261 / 609 / 49	233 / 516 / 106	188 / 634 / 86
	3	1	331 / 407 / 36	270 / 510 / 29	390 / 305 / 74	331 / 401 / 63	275 / 355 / 109	227 / 443 / 88	320 / 428 / 35	259 / 531 / 28	390 / 332 / 74	320 / 422 / 61	267 / 375 / 106	227 / 464 / 85	270 / 497 / 29	221 / 617 / 24	325 / 415 / 62	260 / 509 / 49	239 / 418 / 95	202 / 512 / 76
15	2	3	281 / 476 / 30	232 / 598 / 25	336 / 394 / 64	271 / 488 / 51	247 / 398 / 98	202 / 491 / 79	270 / 497 / 29	221 / 617 / 24	325 / 415 / 62	260 / 509 / 49	239 / 418 / 95	202 / 512 / 76	226 / 586 / 25	188 / 736 / 20	249 / 530 / 47	201 / 648 / 38	175 / 570 / 70	147 / 687 / 55
	1	2	388 / 407 / 39	317 / 510 / 32	438 / 292 / 82	388 / 401 / 73	308 / 355 / 130	254 / 443 / 106	375 / 428 / 37	304 / 531 / 30	438 / 318 / 82	375 / 422 / 70	299 / 375 / 127	253 / 464 / 102	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	268 / 418 / 113	225 / 512 / 91
	3	1	278 / 566 / 28	227 / 699 / 23	305 / 510 / 57	248 / 630 / 47	201 / 538 / 85	168 / 671 / 70	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	197 / 570 / 83	164 / 687 / 66	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	197 / 570 / 83	164 / 687 / 66
20	2	3	388 / 407 / 39	317 / 510 / 32	438 / 292 / 82	388 / 401 / 73	342 / 355 / 156	281 / 443 / 127	375 / 428 / 37	304 / 531 / 30	438 / 318 / 82	375 / 422 / 70	332 / 375 / 152	280 / 464 / 122	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	297 / 418 / 136	249 / 512 / 109
	1	2	330 / 476 / 33	272 / 598 / 27	394 / 394 / 74	318 / 488 / 60	277 / 398 / 117	227 / 491 / 95	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	268 / 418 / 113	225 / 512 / 91	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	197 / 570 / 83	164 / 687 / 66
	3	1	278 / 566 / 28	227 / 699 / 23	305 / 510 / 57	248 / 630 / 47	201 / 538 / 85	168 / 671 / 70	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	197 / 570 / 83	164 / 687 / 66	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79
25	2	3	388 / 407 / 39	317 / 510 / 32	438 / 292 / 82	388 / 401 / 73	342 / 355 / 156	281 / 443 / 127	375 / 428 / 37	304 / 531 / 30	438 / 318 / 82	375 / 422 / 70	332 / 375 / 152	280 / 464 / 122	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	297 / 418 / 136	249 / 512 / 109
	1	2	330 / 476 / 33	272 / 598 / 27	394 / 394 / 74	318 / 488 / 60	307 / 398 / 140	251 / 491 / 113	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	297 / 418 / 136	249 / 512 / 109	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79
	3	1	278 / 566 / 28	227 / 699 / 23	305 / 510 / 57	248 / 630 / 47	223 / 538 / 102	186 / 671 / 84	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79
15	2	3	309 / 447 / 33	248 / 549 / 27	379 / 351 / 72	309 / 441 / 59	255 / 388 / 101	227 / 483 / 82	320 / 428 / 35	259 / 531 / 28	390 / 332 / 74	320 / 422 / 61	267 / 375 / 106	227 / 464 / 85	270 / 497 / 29	221 / 617 / 24	325 / 415 / 62	260 / 509 / 49	239 / 418 / 95	202 / 512 / 76
	1	2	259 / 515 / 28	210 / 634 / 23	309 / 427 / 59	249 / 528 / 47	227 / 430 / 90	201 / 530 / 73	270 / 497 / 29	221 / 617 / 24	325 / 415 / 62	260 / 509 / 49	239 / 418 / 95	202 / 512 / 76	226 / 586 / 25	188 / 736 / 20	249 / 530 / 47	201 / 648 / 38	175 / 570 / 70	147 / 687 / 55
	3	1	221 / 617 / 24	177 / 748 / 19	239 / 548 / 45	195 / 681 / 37	167 / 588 / 66	149 / 721 / 54	226 / 586 / 25	188 / 736 / 20	249 / 530 / 47	201 / 648 / 38	175 / 570 / 70	147 / 687 / 55	226 / 586 / 25	188 / 736 / 20	249 / 530 / 47	201 / 648 / 38	175 / 570 / 70	147 / 687 / 55
20	2	3	362 / 447 / 36	291 / 549 / 29	438 / 346 / 82	362 / 441 / 68	286 / 388 / 121	252 / 483 / 98	375 / 428 / 37	304 / 531 / 30	438 / 318 / 82	375 / 422 / 70	299 / 375 / 127	253 / 464 / 102	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	268 / 418 / 113	225 / 512 / 91
	1	2	304 / 515 / 30	246 / 634 / 25	362 / 427 / 68	292 / 528 / 55	255 / 430 / 108	223 / 530 / 87	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	268 / 418 / 113	225 / 512 / 91	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	197 / 570 / 83	164 / 687 / 66
	3	1	259 / 617 / 26	207 / 748 / 21	280 / 548 / 53	229 / 681 / 43	188 / 588 / 79	165 / 721 / 64	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	197 / 570 / 83	164 / 687 / 66	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79
25	2	3	362 / 447 / 36	291 / 549 / 29	438 / 346 / 82	362 / 441 / 68	317 / 388 / 145	278 / 483 / 118	375 / 428 / 37	304 / 531 / 30	438 / 318 / 82	375 / 422 / 70	332 / 375 / 152	280 / 464 / 122	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	297 / 418 / 136	249 / 512 / 109
	1	2	304 / 515 / 30	246 / 634 / 25	362 / 427 / 68	292 / 528 / 55	282 / 430 / 129	246 / 530 / 104	317 / 497 / 32	259 / 617 / 26	381 / 415 / 71	305 / 509 / 57	297 / 418 / 136	249 / 512 / 109	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79
	3	1	259 / 617 / 26	207 / 748 / 21	280 / 548 / 53	229 / 681 / 43	208 / 588 / 95	182 / 721 / 77	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79	265 / 586 / 27	220 / 736 / 22	292 / 530 / 55	235 / 648 / 44	218 / 570 / 100	181 / 687 / 79

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																																		
	140						150						160																						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
15	1	298 / 466 / 32	237 / 566 / 26	369 / 369 / 70	293 / 452 / 55	243 / 399 / 96	227 / 501 / 79	276 / 498 / 30	229 / 607 / 24	341 / 397 / 65	288 / 493 / 52	227 / 432 / 90	225 / 532 / 73	254 / 525 / 27	229 / 659 / 23	320 / 426 / 61	279 / 520 / 48	224 / 460 / 84	227 / 568 / 68																
	2	254 / 544 / 27	204 / 665 / 22	298 / 445 / 56	244 / 557 / 46	219 / 448 / 87	204 / 559 / 71	232 / 573 / 25	195 / 704 / 20	277 / 477 / 52	231 / 585 / 42	203 / 480 / 81	201 / 587 / 65	221 / 624 / 24	193 / 756 / 19	260 / 514 / 49	231 / 635 / 40	203 / 517 / 76	206 / 638 / 62																
	3	210 / 632 / 23	171 / 781 / 19	233 / 578 / 44	190 / 713 / 36	159 / 604 / 63	150 / 754 / 52	199 / 690 / 22	166 / 840 / 18	217 / 620 / 41	181 / 751 / 33	152 / 661 / 60	147 / 788 / 48	182 / 722 / 20	163 / 892 / 16	201 / 654 / 38	178 / 803 / 31	148 / 694 / 55	148 / 839 / 44																
	1	350 / 466 / 35	278 / 566 / 28	432 / 369 / 81	343 / 452 / 64	273 / 399 / 115	251 / 501 / 95	324 / 498 / 32	268 / 607 / 26	400 / 397 / 75	335 / 493 / 61	255 / 432 / 108	247 / 532 / 87	298 / 525 / 30	265 / 659 / 25	375 / 426 / 70	322 / 520 / 56	250 / 460 / 100	248 / 568 / 81																
	2	298 / 544 / 30	240 / 665 / 24	350 / 445 / 66	286 / 557 / 54	246 / 448 / 104	226 / 559 / 85	272 / 573 / 27	228 / 704 / 22	324 / 477 / 61	270 / 585 / 49	228 / 480 / 96	221 / 587 / 78	259 / 624 / 26	223 / 756 / 21	305 / 514 / 57	268 / 635 / 47	226 / 517 / 91	225 / 638 / 74																
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ASCE Group Zone																																			
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ASCE Group Zone																																			
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ASCE Group Zone																																			
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	449 / 173 / 45	364 / 445 / 36	441 / 219 / 82	441 / 344 / 82	392 / 280 / 190	348 / 386 / 169	429 / 374 / 43	345 / 463 / 34	441 / 243 / 82	428 / 368 / 80	392 / 309 / 190	332 / 405 / 161	410 / 392 / 41	332 / 487 / 33	441 / 267 / 82	409 / 386 / 77	392 / 339 / 190	316 / 421 / 153
2		384 / 421 / 38	312 / 524 / 31	441 / 333 / 82	370 / 433 / 69	386 / 346 / 187	310 / 429 / 150	364 / 439 / 36	293 / 539 / 29	434 / 361 / 81	351 / 451 / 66	370 / 365 / 179	299 / 454 / 145	351 / 463 / 35	280 / 563 / 28	415 / 379 / 78	332 / 466 / 62	354 / 382 / 171	283 / 469 / 137	
3		319 / 495 / 32	260 / 615 / 26	351 / 447 / 66	287 / 558 / 54	283 / 477 / 137	229 / 586 / 111	306 / 521 / 31	247 / 640 / 25	338 / 473 / 63	275 / 585 / 52	272 / 503 / 132	218 / 611 / 106	293 / 545 / 29	234 / 662 / 23	319 / 488 / 60	262 / 609 / 49	256 / 516 / 124	207 / 634 / 100	
35		1	479 / 168 / 46	400 / 445 / 38	470 / 213 / 88	470 / 334 / 88	421 / 276 / 214	379 / 386 / 193	472 / 374 / 45	379 / 463 / 36	470 / 235 / 88	470 / 368 / 88	421 / 305 / 214	361 / 405 / 184	450 / 392 / 43	365 / 487 / 35	470 / 259 / 88	449 / 386 / 84	421 / 334 / 214	344 / 421 / 175
		2	422 / 421 / 40	343 / 524 / 33	470 / 323 / 88	407 / 433 / 76	421 / 346 / 214	338 / 429 / 172	400 / 439 / 38	322 / 539 / 31	470 / 356 / 88	386 / 451 / 72	403 / 365 / 205	326 / 454 / 166	386 / 463 / 37	308 / 563 / 29	456 / 379 / 85	365 / 466 / 68	385 / 382 / 196	308 / 469 / 157
		3	350 / 495 / 33	286 / 615 / 27	386 / 447 / 72	316 / 558 / 59	308 / 477 / 157	249 / 586 / 127	336 / 521 / 32	272 / 640 / 26	372 / 473 / 69	302 / 585 / 56	296 / 503 / 151	237 / 611 / 121	322 / 545 / 31	258 / 662 / 25	351 / 488 / 65	288 / 609 / 54	279 / 516 / 142	225 / 634 / 115
40		1	507 / 163 / 46	436 / 445 / 40	497 / 207 / 92	497 / 324 / 92	442 / 269 / 233	410 / 386 / 217	507 / 181 / 46	413 / 463 / 38	497 / 228 / 92	497 / 357 / 92	442 / 296 / 233	391 / 405 / 206	491 / 392 / 45	398 / 487 / 37	497 / 251 / 92	489 / 386 / 91	442 / 325 / 233	372 / 421 / 196
		2	460 / 421 / 42	374 / 524 / 34	497 / 314 / 92	443 / 433 / 82	442 / 337 / 233	365 / 429 / 193	436 / 439 / 40	351 / 539 / 32	497 / 346 / 92	420 / 451 / 78	436 / 365 / 230	353 / 454 / 186	421 / 463 / 39	335 / 563 / 31	497 / 379 / 92	397 / 466 / 74	417 / 382 / 220	333 / 469 / 176
		3	382 / 495 / 35	312 / 615 / 29	420 / 447 / 78	344 / 558 / 64	333 / 477 / 176	269 / 586 / 142	366 / 521 / 34	296 / 640 / 27	405 / 473 / 75	329 / 585 / 61	321 / 503 / 169	257 / 611 / 136	351 / 545 / 32	281 / 662 / 26	382 / 488 / 71	313 / 609 / 58	301 / 516 / 159	244 / 634 / 129
Wind Speed [mph]		110						115												
30	1	390 / 407 / 39	319 / 510 / 32	441 / 292 / 82	389 / 401 / 73	375 / 355 / 182	308 / 443 / 148	377 / 428 / 38	306 / 531 / 31	441 / 318 / 82	377 / 422 / 71	364 / 375 / 177	306 / 464 / 142							
	2	332 / 476 / 33	273 / 598 / 27	396 / 394 / 74	319 / 488 / 60	337 / 398 / 163	275 / 491 / 132	319 / 497 / 32	260 / 617 / 26	383 / 415 / 72	307 / 509 / 58	326 / 418 / 158	272 / 512 / 127							
	3	280 / 566 / 28	228 / 699 / 23	307 / 510 / 58	249 / 630 / 47	245 / 538 / 119	204 / 671 / 98	267 / 586 / 27	221 / 736 / 22	294 / 530 / 55	236 / 648 / 44	239 / 570 / 116	198 / 687 / 92							
	35	1	429 / 407 / 41	350 / 510 / 33	470 / 284 / 88	428 / 401 / 80	409 / 355 / 208	336 / 443 / 169	415 / 428 / 39	336 / 531 / 32	470 / 309 / 88	414 / 422 / 77	397 / 375 / 202	332 / 464 / 163						
		2	365 / 476 / 35	300 / 598 / 29	435 / 394 / 81	351 / 488 / 65	367 / 398 / 187	300 / 491 / 151	350 / 497 / 33	286 / 617 / 27	421 / 415 / 78	337 / 509 / 63	356 / 418 / 181	295 / 512 / 145						
		3	308 / 566 / 29	250 / 699 / 24	337 / 510 / 63	274 / 630 / 51	267 / 538 / 136	222 / 671 / 112	293 / 586 / 28	243 / 736 / 23	323 / 530 / 60	260 / 648 / 49	261 / 570 / 133	215 / 687 / 106						
	40	1	468 / 407 / 43	382 / 510 / 35	497 / 275 / 92	466 / 401 / 86	442 / 355 / 233	363 / 443 / 190	452 / 428 / 41	366 / 531 / 34	497 / 300 / 92	451 / 422 / 84	429 / 375 / 227	358 / 464 / 183						
		2	398 / 476 / 37	327 / 598 / 30	474 / 394 / 88	382 / 488 / 71	397 / 398 / 210	324 / 491 / 169	382 / 497 / 35	312 / 617 / 29	458 / 415 / 85	367 / 509 / 68	385 / 418 / 203	318 / 512 / 163						
		3	335 / 566 / 31	273 / 699 / 25	367 / 510 / 68	298 / 630 / 55	289 / 538 / 152	240 / 671 / 125	320 / 586 / 29	265 / 736 / 25	352 / 530 / 65	283 / 648 / 53	282 / 570 / 149	232 / 687 / 119						
Wind Speed [mph]		120						130												
30	1	364 / 447 / 36	293 / 549 / 29	441 / 346 / 82	364 / 441 / 68	348 / 388 / 169	303 / 483 / 137	377 / 428 / 38	306 / 531 / 31	441 / 318 / 82	377 / 422 / 71	364 / 375 / 177	306 / 464 / 142							
	2	306 / 515 / 31	247 / 634 / 25	364 / 427 / 68	294 / 528 / 55	310 / 430 / 150	268 / 530 / 121	319 / 497 / 32	260 / 617 / 26	383 / 415 / 72	307 / 509 / 58	326 / 418 / 158	272 / 512 / 127							
	3	260 / 617 / 26	208 / 748 / 21	281 / 548 / 53	230 / 681 / 43	229 / 588 / 111	198 / 721 / 90	267 / 586 / 27	221 / 736 / 22	294 / 530 / 55	236 / 648 / 44	239 / 570 / 116	198 / 687 / 92							
	35	1	400 / 447 / 38	322 / 549 / 31	470 / 336 / 88	400 / 441 / 75	379 / 388 / 193	328 / 483 / 157	415 / 428 / 39	336 / 531 / 32	470 / 309 / 88	414 / 422 / 77	397 / 375 / 202	332 / 464 / 163						
		2	336 / 515 / 32	272 / 634 / 26	400 / 427 / 75	323 / 528 / 60	338 / 430 / 172	290 / 530 / 139	350 / 497 / 33	286 / 617 / 27	421 / 415 / 78	337 / 509 / 63	356 / 418 / 181	295 / 512 / 145						
		3	286 / 617 / 27	229 / 748 / 22	309 / 548 / 58	253 / 681 / 47	249 / 588 / 127	215 / 721 / 103	293 / 586 / 28	243 / 736 / 23	323 / 530 / 60	260 / 648 / 49	261 / 570 / 133	215 / 687 / 106						
	40	1	436 / 447 / 40	351 / 549 / 32	497 / 326 / 92	436 / 441 / 81	410 / 388 / 217	353 / 483 / 176	452 / 428 / 41	366 / 531 / 34	497 / 300 / 92	451 / 422 / 84	429 / 375 / 227	358 / 464 / 183						
		2	366 / 515 / 34	296 / 634 / 27	436 / 427 / 81	352 / 528 / 65	365 / 430 / 193	313 / 530 / 156	382 / 497 / 35	312 / 617 / 29	458 / 415 / 85	367 / 509 / 68	385 / 418 / 203	318 / 512 / 163						
		3	312 / 617 / 29	250 / 748 / 23	336 / 548 / 63	275 / 681 / 51	269 / 588 / 142	231 / 721 / 115	320 / 586 / 29	265 / 736 / 25	352 / 530 / 65	283 / 648 / 53	282 / 570 / 149	232 / 687 / 119						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	351 / 466 / 35	280 / 566 / 28	434 / 369 / 81	345 / 452 / 65	332 / 399 / 161	300 / 501 / 132	325 / 498 / 32	269 / 607 / 26	402 / 397 / 75	337 / 493 / 61	310 / 432 / 150	292 / 532 / 121	299 / 525 / 30	266 / 659 / 25	377 / 426 / 71	324 / 520 / 56	301 / 460 / 140	289 / 568 / 114
2		299 / 544 / 30	241 / 665 / 24	351 / 445 / 66	287 / 557 / 54	299 / 448 / 145	270 / 559 / 119	273 / 573 / 27	229 / 704 / 22	326 / 477 / 61	271 / 585 / 49	277 / 480 / 135	260 / 587 / 108	260 / 624 / 26	224 / 756 / 21	307 / 514 / 58	269 / 635 / 47	273 / 517 / 127	263 / 638 / 103	
3		247 / 632 / 25	202 / 781 / 20	275 / 578 / 52	224 / 713 / 42	218 / 604 / 106	198 / 754 / 87	234 / 690 / 23	195 / 840 / 19	256 / 620 / 48	212 / 751 / 39	207 / 661 / 100	191 / 788 / 79	215 / 722 / 22	189 / 892 / 18	236 / 654 / 44	207 / 803 / 36	199 / 694 / 92	189 / 839 / 74	
35		1	386 / 466 / 37	308 / 566 / 29	470 / 363 / 88	379 / 452 / 71	361 / 399 / 184	324 / 501 / 151	357 / 498 / 34	295 / 607 / 27	442 / 397 / 82	369 / 493 / 67	338 / 432 / 172	314 / 532 / 139	329 / 525 / 31	291 / 659 / 26	414 / 426 / 77	353 / 520 / 62	327 / 460 / 160	310 / 568 / 130
		2	329 / 544 / 31	265 / 665 / 25	386 / 445 / 72	316 / 557 / 59	326 / 448 / 166	292 / 559 / 136	300 / 573 / 29	251 / 704 / 23	358 / 477 / 67	297 / 585 / 54	302 / 480 / 154	280 / 587 / 124	286 / 624 / 27	245 / 756 / 22	337 / 514 / 63	293 / 635 / 51	296 / 517 / 145	281 / 638 / 118
		3	272 / 632 / 26	222 / 781 / 21	302 / 578 / 56	246 / 713 / 46	237 / 604 / 121	214 / 754 / 100	258 / 690 / 25	214 / 840 / 20	281 / 620 / 52	232 / 751 / 42	225 / 661 / 115	205 / 788 / 91	236 / 722 / 23	207 / 892 / 19	260 / 654 / 49	226 / 803 / 39	216 / 694 / 106	202 / 839 / 85
40		1	421 / 466 / 39	335 / 566 / 31	497 / 353 / 92	413 / 452 / 77	391 / 399 / 206	348 / 501 / 169	390 / 498 / 36	321 / 607 / 29	481 / 397 / 89	401 / 493 / 72	365 / 432 / 193	337 / 532 / 156	359 / 525 / 33	315 / 659 / 27	451 / 426 / 84	383 / 520 / 67	353 / 460 / 179	331 / 568 / 146
		2	359 / 544 / 33	289 / 665 / 27	420 / 445 / 78	344 / 557 / 64	353 / 448 / 186	313 / 559 / 152	327 / 573 / 30	273 / 704 / 25	390 / 477 / 72	322 / 585 / 58	327 / 480 / 173	300 / 587 / 139	312 / 624 / 29	266 / 756 / 23	367 / 514 / 68	318 / 635 / 55	319 / 517 / 163	300 / 638 / 132
		3	296 / 632 / 27	242 / 781 / 22	329 / 578 / 61	268 / 713 / 50	257 / 604 / 136	230 / 754 / 112	281 / 690 / 26	233 / 840 / 21	306 / 620 / 57	252 / 751 / 46	244 / 661 / 129	220 / 788 / 102	257 / 722 / 24	224 / 892 / 20	283 / 654 / 53	245 / 803 / 43	233 / 694 / 119	216 / 839 / 95
Wind Speed [mph]		170						180												
30	1	286 / 569 / 29	256 / 687 / 23	351 / 452 / 66	317 / 552 / 53	298 / 492 / 132	293 / 613 / 108	272 / 597 / 27	252 / 728 / 22	339 / 482 / 62	316 / 593 / 50	293 / 521 / 124	288 / 639 / 100							
	2	241 / 653 / 24	220 / 801 / 20	287 / 547 / 54	259 / 664 / 43	268 / 549 / 119	257 / 666 / 95	233 / 695 / 23	214 / 840 / 18	274 / 574 / 50	256 / 705 / 41	262 / 577 / 111	257 / 707 / 90							
	3	202 / 767 / 20	183 / 934 / 16	224 / 701 / 42	202 / 847 / 34	197 / 741 / 87	193 / 914 / 71	199 / 834 / 20	183 / 1006 / 16	215 / 743 / 40	203 / 918 / 33	194 / 782 / 82	189 / 950 / 66							
	35	1	315 / 569 / 30	279 / 687 / 24	386 / 452 / 72	344 / 552 / 58	322 / 492 / 151	312 / 613 / 124	299 / 597 / 28	273 / 728 / 23	372 / 482 / 68	342 / 593 / 55	316 / 521 / 142	306 / 639 / 115						
		2	265 / 653 / 25	239 / 801 / 21	316 / 547 / 59	282 / 664 / 47	290 / 549 / 136	274 / 666 / 109	255 / 695 / 24	232 / 840 / 19	300 / 574 / 55	277 / 705 / 45	283 / 577 / 127	274 / 707 / 103						
		3	222 / 767 / 21	199 / 934 / 17	246 / 701 / 46	219 / 847 / 37	213 / 741 / 100	206 / 914 / 82	219 / 834 / 21	199 / 1006 / 17	236 / 743 / 43	220 / 918 / 36	209 / 782 / 94	201 / 950 / 76						
	40	1	343 / 569 / 32	301 / 687 / 25	420 / 452 / 78	372 / 552 / 63	346 / 492 / 169	332 / 613 / 139	325 / 597 / 29	295 / 728 / 24	404 / 482 / 74	368 / 593 / 60	339 / 521 / 159	324 / 639 / 129						
		2	289 / 653 / 27	258 / 801 / 22	344 / 547 / 64	304 / 664 / 51	312 / 549 / 152	292 / 666 / 122	278 / 695 / 25	250 / 840 / 20	327 / 574 / 60	298 / 705 / 48	303 / 577 / 142	290 / 707 / 115						
		3	242 / 767 / 22	215 / 934 / 18	268 / 701 / 50	237 / 847 / 40	229 / 741 / 112	219 / 914 / 92	238 / 834 / 22	214 / 1006 / 17	257 / 743 / 47	237 / 918 / 39	224 / 782 / 105	214 / 950 / 85						
Wind Speed [mph]		190						200												
30	1	268 / 634 / 25	247 / 764 / 20	331 / 508 / 59	306 / 616 / 47	294 / 558 / 119	289 / 676 / 95	263 / 669 / 24	250 / 820 / 20	322 / 531 / 55	304 / 649 / 44	288 / 579 / 111	289 / 709 / 90							
	2	227 / 732 / 22	216 / 904 / 18	270 / 612 / 48	252 / 741 / 39	262 / 614 / 106	257 / 743 / 85	220 / 763 / 20	217 / 966 / 17	266 / 646 / 46	255 / 797 / 37	261 / 648 / 100	264 / 799 / 82							
	3	192 / 869 / 18	184 / 1076 / 15	209 / 779 / 37	197 / 948 / 30	190 / 816 / 77	193 / 1018 / 64	192 / 929 / 18	184 / 1141 / 15	210 / 837 / 36	197 / 1009 / 29	192 / 874 / 74	196 / 1081 / 61							
	35	1	293 / 634 / 27	267 / 764 / 21	362 / 508 / 64	331 / 616 / 51	316 / 558 / 136	306 / 676 / 109	287 / 669 / 25	270 / 820 / 21	350 / 531 / 60	327 / 649 / 49	309 / 579 / 127	305 / 709 / 103						
		2	248 / 732 / 23	233 / 904 / 19	295 / 612 / 52	272 / 741 / 42	281 / 614 / 121	272 / 743 / 97	240 / 763 / 21	234 / 966 / 18	290 / 646 / 50	274 / 797 / 41	279 / 648 / 115	279 / 799 / 94						
		3	211 / 869 / 19	199 / 1076 / 16	229 / 779 / 41	212 / 948 / 33	204 / 816 / 88	204 / 1018 / 73	210 / 929 / 19	198 / 1141 / 15	229 / 837 / 39	212 / 1009 / 32	206 / 874 / 85	207 / 1081 / 70						
	40	1	318 / 634 / 28	287 / 764 / 22	392 / 508 / 70	355 / 616 / 55	338 / 558 / 152	324 / 676 / 122	311 / 669 / 27	289 / 820 / 22	379 / 531 / 65	351 / 649 / 53	329 / 579 / 142	322 / 709 / 115						
		2	269 / 732 / 24	250 / 904 / 20	320 / 612 / 57	292 / 741 / 46	301 / 614 / 136	288 / 743 / 109	261 / 763 / 22	250 / 966 / 19	313 / 646 / 54	294 / 797 / 44	298 / 648 / 129	294 / 799 / 105						
		3	229 / 869 / 20	213 / 1076 / 17	248 / 779 / 44	228 / 948 / 36	218 / 816 / 98	216 / 1018 / 82	227 / 929 / 20	212 / 1141 / 16	248 / 837 / 43	228 / 1009 / 34	219 / 874 / 95	218 / 1081 / 78						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	45	1	546 / 161 / 105	478 / 445 / 92	531 / 203 / 147	531 / 319 / 147	469 / 265 / 262	441 / 386 / 247	546 / 178 / 105	452 / 463 / 87	531 / 225 / 147	531 / 352 / 147	469 / 292 / 262	421 / 405 / 235	537 / 392 / 103	435 / 487 / 84	531 / 247 / 147	531 / 386 / 147	469 / 320 / 262	400 / 421 / 224
2		503 / 421 / 97	409 / 524 / 79	531 / 309 / 147	482 / 433 / 134	469 / 332 / 262	393 / 429 / 220	478 / 439 / 92	384 / 539 / 74	531 / 340 / 147	457 / 451 / 127	469 / 365 / 262	379 / 454 / 212	460 / 463 / 88	367 / 563 / 70	531 / 373 / 147	432 / 466 / 120	448 / 382 / 251	359 / 469 / 201	
3		418 / 495 / 80	341 / 615 / 66	457 / 447 / 127	374 / 558 / 104	359 / 477 / 201	290 / 586 / 162	401 / 521 / 77	324 / 640 / 62	440 / 473 / 122	357 / 585 / 99	345 / 503 / 193	276 / 611 / 154	384 / 545 / 74	307 / 662 / 59	415 / 488 / 115	341 / 609 / 95	324 / 516 / 181	262 / 634 / 147	
50		1	582 / 156 / 109	526 / 445 / 98	576 / 200 / 157	576 / 314 / 157	487 / 257 / 277	472 / 386 / 269	582 / 173 / 109	498 / 463 / 93	576 / 221 / 157	576 / 346 / 157	487 / 283 / 277	450 / 405 / 256	582 / 191 / 109	479 / 487 / 90	576 / 244 / 157	576 / 380 / 157	487 / 311 / 277	428 / 421 / 244
		2	554 / 421 / 103	451 / 524 / 84	576 / 304 / 157	530 / 433 / 145	487 / 322 / 277	421 / 429 / 240	526 / 439 / 98	423 / 539 / 79	576 / 335 / 157	503 / 451 / 137	487 / 354 / 277	406 / 454 / 231	507 / 463 / 95	404 / 563 / 76	576 / 367 / 157	475 / 466 / 130	480 / 382 / 273	384 / 469 / 219
		3	460 / 495 / 86	376 / 615 / 70	503 / 447 / 137	411 / 558 / 113	384 / 477 / 219	310 / 586 / 177	441 / 521 / 83	357 / 640 / 67	485 / 473 / 132	393 / 585 / 108	369 / 503 / 210	295 / 611 / 168	423 / 545 / 79	338 / 662 / 63	457 / 488 / 125	375 / 609 / 103	347 / 516 / 198	281 / 634 / 160
60		1	655 / 148 / 117	622 / 445 / 111	638 / 188 / 171	638 / 294 / 171	541 / 249 / 313	541 / 386 / 313	655 / 165 / 117	589 / 463 / 106	638 / 207 / 171	638 / 324 / 171	541 / 275 / 313	515 / 405 / 299	655 / 182 / 117	567 / 487 / 102	638 / 228 / 171	638 / 355 / 171	541 / 301 / 313	490 / 421 / 284
		2	655 / 421 / 117	533 / 524 / 96	638 / 285 / 171	627 / 433 / 168	541 / 312 / 313	481 / 429 / 279	622 / 439 / 111	500 / 539 / 90	638 / 314 / 171	595 / 451 / 159	541 / 344 / 313	465 / 454 / 269	600 / 463 / 107	478 / 563 / 86	638 / 344 / 171	562 / 466 / 150	541 / 377 / 313	439 / 469 / 255
		3	544 / 495 / 98	445 / 615 / 80	595 / 447 / 159	487 / 558 / 130	439 / 477 / 255	355 / 586 / 206	522 / 521 / 94	422 / 640 / 76	573 / 473 / 153	465 / 585 / 125	422 / 503 / 245	338 / 611 / 196	500 / 545 / 90	400 / 662 / 72	541 / 488 / 145	444 / 609 / 119	397 / 516 / 230	321 / 634 / 186
Wind Speed [mph]		110						115												
45	1	512 / 407 / 98	418 / 510 / 80	531 / 271 / 147	506 / 401 / 140	469 / 350 / 262	390 / 443 / 216	495 / 428 / 95	401 / 531 / 77	531 / 295 / 147	490 / 422 / 136	462 / 375 / 258	384 / 464 / 208							
	2	435 / 476 / 84	358 / 598 / 69	515 / 394 / 143	415 / 488 / 115	428 / 398 / 239	348 / 491 / 193	418 / 497 / 80	341 / 617 / 66	498 / 415 / 138	399 / 509 / 111	414 / 418 / 231	342 / 512 / 185							
	3	367 / 566 / 70	299 / 699 / 57	399 / 510 / 111	324 / 630 / 90	310 / 538 / 174	258 / 671 / 143	350 / 586 / 67	290 / 736 / 56	382 / 530 / 106	307 / 648 / 85	304 / 570 / 170	249 / 687 / 135							
	50	1	563 / 407 / 105	460 / 510 / 86	576 / 267 / 157	558 / 401 / 152	487 / 339 / 277	417 / 443 / 236	545 / 428 / 102	441 / 531 / 83	576 / 291 / 157	539 / 422 / 147	487 / 369 / 277	411 / 464 / 227						
		2	479 / 476 / 90	394 / 598 / 74	567 / 394 / 155	457 / 488 / 125	458 / 398 / 261	372 / 491 / 210	460 / 497 / 86	376 / 617 / 70	548 / 415 / 150	439 / 509 / 120	443 / 418 / 252	365 / 512 / 202						
		3	404 / 566 / 76	329 / 699 / 62	439 / 510 / 120	357 / 630 / 98	332 / 538 / 189	276 / 671 / 156	385 / 586 / 72	319 / 736 / 60	421 / 530 / 115	338 / 648 / 93	325 / 570 / 185	266 / 687 / 147						
	60	1	655 / 199 / 117	544 / 510 / 98	638 / 250 / 171	638 / 388 / 171	541 / 329 / 313	473 / 443 / 274	644 / 428 / 115	522 / 531 / 94	638 / 272 / 171	638 / 422 / 171	541 / 358 / 313	463 / 464 / 265						
		2	567 / 476 / 102	467 / 598 / 84	638 / 375 / 171	541 / 488 / 145	524 / 398 / 304	422 / 491 / 245	544 / 497 / 98	445 / 617 / 80	638 / 408 / 171	519 / 509 / 139	507 / 418 / 294	412 / 512 / 235						
		3	478 / 566 / 86	389 / 699 / 70	519 / 510 / 139	422 / 630 / 113	380 / 538 / 221	313 / 671 / 181	456 / 586 / 82	378 / 736 / 68	498 / 530 / 133	400 / 648 / 107	372 / 570 / 216	300 / 687 / 172						
Wind Speed [mph]		120						130												
45	1	478 / 447 / 92	384 / 549 / 74	531 / 321 / 147	473 / 441 / 131	441 / 388 / 247	379 / 483 / 201	495 / 428 / 95	401 / 531 / 77	531 / 295 / 147	490 / 422 / 136	462 / 375 / 258	384 / 464 / 208							
	2	401 / 515 / 77	324 / 634 / 62	473 / 427 / 131	382 / 528 / 106	393 / 430 / 220	335 / 530 / 178	418 / 497 / 80	341 / 617 / 66	498 / 415 / 138	399 / 509 / 111	414 / 418 / 231	342 / 512 / 185							
	3	341 / 617 / 66	273 / 748 / 53	365 / 548 / 101	299 / 681 / 83	290 / 588 / 162	248 / 721 / 131	350 / 586 / 67	290 / 736 / 56	382 / 530 / 106	307 / 648 / 85	304 / 570 / 170	249 / 687 / 135							
	50	1	526 / 447 / 98	423 / 549 / 79	576 / 316 / 157	521 / 441 / 142	472 / 388 / 269	404 / 483 / 219	545 / 428 / 102	441 / 531 / 83	576 / 291 / 157	539 / 422 / 147	487 / 369 / 277	411 / 464 / 227						
		2	441 / 515 / 83	357 / 634 / 67	521 / 427 / 142	421 / 528 / 115	421 / 430 / 240	357 / 530 / 194	460 / 497 / 86	376 / 617 / 70	548 / 415 / 150	439 / 509 / 120	443 / 418 / 252	365 / 512 / 202						
		3	376 / 617 / 70	301 / 748 / 56	402 / 548 / 110	329 / 681 / 90	310 / 588 / 177	264 / 721 / 143	385 / 586 / 72	319 / 736 / 60	421 / 530 / 115	338 / 648 / 93	325 / 570 / 185	266 / 687 / 147						
	60	1	622 / 447 / 111	500 / 549 / 90	638 / 296 / 171	616 / 441 / 165	541 / 388 / 313	454 / 483 / 255	644 / 428 / 115	522 / 531 / 94	638 / 272 / 171	638 / 422 / 171	541 / 358 / 313	463 / 464 / 265						
		2	522 / 515 / 94	422 / 634 / 76	616 / 427 / 165	498 / 528 / 133	481 / 430 / 279	402 / 530 / 225	544 / 497 / 98	445 / 617 / 80	638 / 408 / 171	519 / 509 / 139	507 / 418 / 294	412 / 512 / 235						
		3	445 / 617 / 80	356 / 748 / 64	476 / 548 / 127	390 / 681 / 104	355 / 588 / 206	297 / 721 / 167	456 / 586 / 82	378 / 736 / 68	498 / 530 / 133	400 / 648 / 107	372 / 570 / 216	300 / 687 / 172						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	460 / 466 / 88	367 / 566 / 70	531 / 347 / 147	448 / 452 / 124	421 / 399 / 235	373 / 501 / 193	426 / 498 / 82	346 / 607 / 66	523 / 397 / 145	433 / 493 / 117	393 / 432 / 220	359 / 532 / 178	392 / 525 / 75	340 / 659 / 62	490 / 426 / 136	412 / 520 / 108	378 / 460 / 205
2		392 / 544 / 75	316 / 665 / 61	457 / 445 / 127	374 / 557 / 104	379 / 448 / 212	335 / 559 / 174	358 / 573 / 69	295 / 704 / 56	424 / 477 / 117	348 / 585 / 95	352 / 480 / 197	320 / 587 / 158	341 / 624 / 66	286 / 756 / 53	399 / 514 / 111	342 / 635 / 90	343 / 517 / 185	319 / 638 / 151
3		324 / 632 / 62	265 / 781 / 51	357 / 578 / 99	291 / 713 / 81	276 / 604 / 154	246 / 754 / 128	307 / 690 / 59	251 / 840 / 48	332 / 620 / 92	272 / 751 / 74	262 / 661 / 147	234 / 788 / 116	282 / 722 / 54	242 / 892 / 44	307 / 654 / 85	263 / 803 / 69	250 / 694 / 135	229 / 839 / 108
50	1	507 / 466 / 95	404 / 566 / 76	576 / 342 / 157	494 / 452 / 135	450 / 399 / 256	397 / 501 / 210	469 / 498 / 88	376 / 607 / 70	576 / 397 / 157	466 / 493 / 128	421 / 432 / 240	381 / 532 / 194	432 / 525 / 81	365 / 659 / 67	539 / 426 / 147	442 / 520 / 118	404 / 460 / 223	373 / 568 / 181
	2	432 / 544 / 81	348 / 665 / 65	503 / 445 / 137	411 / 557 / 113	406 / 448 / 231	357 / 559 / 189	394 / 573 / 74	319 / 704 / 60	466 / 477 / 128	375 / 585 / 103	377 / 480 / 215	340 / 587 / 173	376 / 624 / 70	307 / 756 / 56	439 / 514 / 120	367 / 635 / 98	366 / 517 / 202	338 / 638 / 164
	3	357 / 632 / 67	291 / 781 / 55	393 / 578 / 108	320 / 713 / 88	295 / 604 / 168	262 / 754 / 139	338 / 690 / 63	273 / 840 / 51	366 / 620 / 100	293 / 751 / 80	281 / 661 / 160	249 / 788 / 126	310 / 722 / 58	259 / 892 / 48	338 / 654 / 93	282 / 803 / 75	267 / 694 / 147	243 / 839 / 118
60	1	600 / 466 / 107	478 / 566 / 86	638 / 320 / 171	584 / 452 / 156	515 / 399 / 299	445 / 501 / 245	556 / 498 / 100	445 / 607 / 80	638 / 371 / 171	552 / 493 / 148	481 / 432 / 279	426 / 532 / 225	511 / 525 / 92	422 / 659 / 76	638 / 426 / 171	508 / 520 / 136	456 / 460 / 260	415 / 568 / 211
	2	511 / 544 / 92	411 / 665 / 74	595 / 445 / 159	487 / 557 / 130	465 / 448 / 269	401 / 559 / 221	467 / 573 / 84	378 / 704 / 68	552 / 477 / 148	444 / 585 / 119	431 / 480 / 250	380 / 587 / 201	445 / 624 / 80	356 / 756 / 64	519 / 514 / 139	422 / 635 / 113	413 / 517 / 235	376 / 638 / 191
	3	422 / 632 / 76	345 / 781 / 62	465 / 578 / 125	379 / 713 / 101	338 / 604 / 196	294 / 754 / 162	400 / 690 / 72	322 / 840 / 58	433 / 620 / 116	346 / 751 / 93	321 / 661 / 186	278 / 788 / 147	367 / 722 / 66	300 / 892 / 54	400 / 654 / 107	325 / 803 / 87	301 / 694 / 172	270 / 839 / 137
Wind Speed [mph]		170						180											
45	1	375 / 569 / 72	324 / 687 / 57	457 / 452 / 127	399 / 552 / 101	370 / 492 / 193	352 / 613 / 158	352 / 597 / 67	316 / 728 / 54	437 / 482 / 120	395 / 593 / 97	362 / 521 / 181	343 / 639 / 147						
	2	316 / 653 / 61	278 / 801 / 49	374 / 547 / 104	327 / 664 / 83	333 / 549 / 174	309 / 666 / 139	300 / 695 / 57	268 / 840 / 46	353 / 574 / 97	320 / 705 / 78	323 / 577 / 162	307 / 707 / 131						
	3	265 / 767 / 51	231 / 934 / 41	291 / 701 / 81	254 / 847 / 65	245 / 741 / 128	232 / 914 / 104	258 / 834 / 49	230 / 1006 / 40	278 / 743 / 76	254 / 918 / 62	239 / 782 / 120	226 / 950 / 97						
50	1	413 / 569 / 77	346 / 687 / 62	503 / 452 / 137	427 / 552 / 110	395 / 492 / 210	372 / 613 / 173	385 / 597 / 72	337 / 728 / 58	475 / 482 / 130	421 / 593 / 105	385 / 521 / 198	361 / 639 / 160						
	2	348 / 653 / 65	297 / 801 / 53	411 / 547 / 113	350 / 664 / 90	355 / 549 / 189	327 / 666 / 152	329 / 695 / 62	286 / 840 / 49	384 / 574 / 105	341 / 705 / 85	344 / 577 / 177	323 / 707 / 143						
	3	291 / 767 / 55	248 / 934 / 44	320 / 701 / 88	272 / 847 / 70	261 / 741 / 139	245 / 914 / 114	282 / 834 / 53	245 / 1006 / 42	302 / 743 / 83	271 / 918 / 68	254 / 782 / 131	238 / 950 / 105						
60	1	489 / 569 / 88	392 / 687 / 70	595 / 452 / 159	482 / 552 / 127	443 / 492 / 245	412 / 613 / 201	456 / 597 / 82	380 / 728 / 66	562 / 482 / 150	474 / 593 / 122	430 / 521 / 230	398 / 639 / 186						
	2	411 / 653 / 74	336 / 801 / 60	487 / 547 / 130	395 / 664 / 104	399 / 549 / 221	362 / 666 / 177	389 / 695 / 70	322 / 840 / 56	454 / 574 / 122	384 / 705 / 99	384 / 577 / 206	356 / 707 / 167						
	3	345 / 767 / 62	280 / 934 / 50	379 / 701 / 101	307 / 847 / 81	293 / 741 / 162	272 / 914 / 133	334 / 834 / 60	276 / 1006 / 48	357 / 743 / 96	305 / 918 / 78	284 / 782 / 152	262 / 950 / 123						
Wind Speed [mph]		190						200											
45	1	343 / 634 / 64	307 / 764 / 51	423 / 508 / 113	380 / 616 / 90	360 / 558 / 174	341 / 676 / 139	335 / 669 / 61	308 / 820 / 49	408 / 531 / 106	374 / 649 / 85	349 / 579 / 162	339 / 709 / 131						
	2	291 / 732 / 54	268 / 904 / 44	345 / 612 / 92	312 / 741 / 74	320 / 614 / 154	303 / 743 / 124	281 / 763 / 51	267 / 966 / 43	337 / 646 / 88	313 / 797 / 72	316 / 648 / 147	309 / 799 / 120						
	3	247 / 869 / 46	228 / 1076 / 38	268 / 779 / 72	244 / 948 / 58	232 / 816 / 112	228 / 1018 / 93	244 / 929 / 44	226 / 1141 / 36	266 / 837 / 69	243 / 1009 / 56	233 / 874 / 108	229 / 1081 / 89						
50	1	369 / 634 / 69	327 / 764 / 55	454 / 508 / 123	404 / 616 / 98	382 / 558 / 189	359 / 676 / 152	359 / 669 / 65	328 / 820 / 53	437 / 531 / 115	397 / 649 / 93	370 / 579 / 177	355 / 709 / 143						
	2	312 / 732 / 58	285 / 904 / 48	371 / 612 / 100	332 / 741 / 80	339 / 614 / 168	319 / 743 / 135	301 / 763 / 55	284 / 966 / 46	361 / 646 / 95	333 / 797 / 78	335 / 648 / 160	324 / 799 / 131						
	3	265 / 869 / 49	243 / 1076 / 41	287 / 779 / 78	259 / 948 / 63	246 / 816 / 122	239 / 1018 / 101	262 / 929 / 48	240 / 1141 / 39	285 / 837 / 75	258 / 1009 / 60	247 / 874 / 118	240 / 1081 / 97						
60	1	433 / 634 / 78	367 / 764 / 62	530 / 508 / 142	453 / 616 / 113	426 / 558 / 221	394 / 676 / 177	411 / 669 / 74	366 / 820 / 60	498 / 531 / 133	443 / 649 / 107	411 / 579 / 206	388 / 709 / 167						
	2	367 / 732 / 66	320 / 904 / 54	433 / 612 / 116	372 / 741 / 93	378 / 614 / 196	350 / 743 / 157	345 / 763 / 62	318 / 966 / 52	411 / 646 / 110	372 / 797 / 90	372 / 648 / 186	354 / 799 / 152						
	3	311 / 869 / 56	273 / 1076 / 46	336 / 779 / 90	291 / 948 / 73	274 / 816 / 142	263 / 1018 / 118	300 / 929 / 54	269 / 1141 / 44	325 / 837 / 87	288 / 1009 / 70	274 / 874 / 137	263 / 1081 / 113						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		95						100						105																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	70	1	706 / 138 / 122	706 / 220 / 122	699 / 178 / 184	699 / 280 / 184	604 / 241 / 349	604 / 374 / 349	706 / 153 / 122	680 / 463 / 118	699 / 197 / 184	699 / 308 / 184	604 / 266 / 349	594 / 405 / 343	706 / 169 / 122	654 / 487 / 114	699 / 217 / 184	699 / 337 / 184	604 / 292 / 349	565 / 421 / 326															
2		706 / 392 / 122	616 / 524 / 107	699 / 270 / 184	699 / 418 / 184	604 / 303 / 349	555 / 429 / 321	706 / 431 / 122	578 / 539 / 100	699 / 298 / 184	687 / 451 / 181	604 / 333 / 349	536 / 454 / 310	693 / 463 / 120	552 / 563 / 96	699 / 326 / 184	650 / 466 / 171	604 / 365 / 349	507 / 469 / 293																
3		629 / 495 / 109	513 / 615 / 89	687 / 447 / 181	562 / 558 / 148	507 / 477 / 293	409 / 586 / 237	603 / 521 / 105	488 / 640 / 85	662 / 473 / 174	537 / 585 / 141	487 / 503 / 281	390 / 611 / 225	578 / 545 / 100	462 / 662 / 80	625 / 488 / 164	512 / 609 / 135	458 / 516 / 265	370 / 634 / 214																
80		1	757 / 131 / 128	757 / 208 / 128	737 / 165 / 191	737 / 260 / 191	651 / 230 / 376	651 / 356 / 376	757 / 145 / 128	757 / 229 / 128	737 / 183 / 191	737 / 286 / 191	651 / 253 / 376	651 / 391 / 376	757 / 160 / 128	742 / 487 / 126	737 / 201 / 191	737 / 313 / 191	651 / 278 / 376	640 / 421 / 370															
		2	757 / 371 / 128	699 / 524 / 118	737 / 251 / 191	737 / 388 / 191	651 / 288 / 376	629 / 429 / 363	757 / 407 / 128	655 / 539 / 111	737 / 277 / 191	737 / 426 / 191	651 / 317 / 376	607 / 454 / 351	757 / 446 / 128	626 / 563 / 106	737 / 303 / 191	737 / 466 / 191	651 / 347 / 376	574 / 469 / 332															
		3	713 / 495 / 121	582 / 615 / 99	737 / 422 / 191	638 / 558 / 166	574 / 477 / 332	464 / 586 / 268	684 / 521 / 116	553 / 640 / 94	737 / 464 / 191	609 / 585 / 158	552 / 503 / 319	442 / 611 / 255	655 / 545 / 111	524 / 662 / 89	708 / 488 / 184	581 / 609 / 151	519 / 516 / 300	420 / 634 / 242															
90		1	798 / 123 / 132	798 / 196 / 132	776 / 156 / 200	776 / 245 / 200	691 / 218 / 399	691 / 338 / 399	798 / 137 / 132	798 / 216 / 132	776 / 172 / 200	776 / 269 / 200	691 / 240 / 399	691 / 371 / 399	798 / 151 / 132	798 / 237 / 132	776 / 190 / 200	776 / 295 / 200	691 / 264 / 399	691 / 406 / 399															
		2	798 / 349 / 132	781 / 524 / 130	776 / 237 / 200	776 / 366 / 200	691 / 273 / 399	691 / 421 / 399	798 / 384 / 132	733 / 539 / 121	776 / 261 / 200	776 / 402 / 200	691 / 301 / 399	678 / 454 / 392	798 / 420 / 132	700 / 563 / 116	776 / 286 / 200	776 / 439 / 200	691 / 330 / 399	641 / 469 / 370															
		3	798 / 495 / 132	651 / 615 / 108	776 / 398 / 200	713 / 558 / 183	641 / 477 / 370	518 / 586 / 299	765 / 521 / 127	619 / 640 / 103	776 / 437 / 200	681 / 585 / 175	617 / 503 / 356	493 / 611 / 285	733 / 545 / 121	586 / 662 / 97	776 / 478 / 200	650 / 609 / 167	580 / 516 / 335	469 / 634 / 271															
Wind Speed [mph]		110						115																											
70	1	706 / 186 / 122	629 / 510 / 109	699 / 237 / 184	699 / 368 / 184	604 / 319 / 349	546 / 443 / 315	706 / 203 / 122	603 / 531 / 105	699 / 259 / 184	699 / 400 / 184	604 / 347 / 349	526 / 464 / 304	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	654 / 476 / 114	539 / 598 / 94	699 / 356 / 184	625 / 488 / 164	604 / 398 / 349	487 / 491 / 281	629 / 497 / 109	513 / 617 / 89	699 / 387 / 184	600 / 509 / 158	584 / 418 / 338	468 / 512 / 270																							
3	552 / 566 / 96	449 / 699 / 78	600 / 510 / 158	487 / 630 / 128	438 / 538 / 253	361 / 671 / 208	526 / 586 / 91	436 / 736 / 76	575 / 530 / 151	462 / 648 / 122	429 / 570 / 248	341 / 687 / 197																							
80	1	757 / 176 / 128	713 / 510 / 121	737 / 220 / 191	737 / 342 / 191	651 / 303 / 376	618 / 443 / 357	757 / 192 / 128	684 / 531 / 116	737 / 240 / 191	737 / 372 / 191	651 / 330 / 376	596 / 464 / 344																						
	2	742 / 476 / 126	611 / 598 / 104	737 / 331 / 191	708 / 488 / 184	651 / 379 / 376	552 / 491 / 319	713 / 497 / 121	582 / 617 / 99	737 / 360 / 191	680 / 509 / 177	651 / 411 / 376	530 / 512 / 306																						
	3	626 / 566 / 106	510 / 699 / 86	680 / 510 / 177	553 / 630 / 144	497 / 538 / 287	409 / 671 / 236	597 / 586 / 101	495 / 736 / 84	652 / 530 / 169	524 / 648 / 136	486 / 570 / 281	386 / 687 / 223																						
90	1	798 / 166 / 132	798 / 259 / 132	776 / 208 / 200	776 / 322 / 200	691 / 288 / 399	691 / 443 / 399	798 / 181 / 132	765 / 531 / 127	776 / 226 / 200	776 / 350 / 200	691 / 313 / 399	666 / 464 / 385																						
	2	798 / 458 / 132	684 / 598 / 113	776 / 312 / 200	776 / 479 / 200	691 / 359 / 399	617 / 491 / 356	798 / 497 / 132	651 / 617 / 108	776 / 339 / 200	760 / 509 / 196	691 / 391 / 399	592 / 512 / 342																						
	3	700 / 566 / 116	570 / 699 / 95	760 / 510 / 196	618 / 630 / 159	555 / 538 / 321	456 / 671 / 264	667 / 586 / 111	554 / 736 / 92	729 / 530 / 187	586 / 648 / 151	543 / 570 / 314	432 / 687 / 250																						
Wind Speed [mph]		120						130																											
70	1	706 / 221 / 122	578 / 549 / 100	699 / 281 / 184	699 / 434 / 184	604 / 376 / 349	507 / 483 / 293	706 / 203 / 122	603 / 531 / 105	699 / 259 / 184	699 / 400 / 184	604 / 347 / 349	526 / 464 / 304																						
	2	603 / 515 / 105	488 / 634 / 85	699 / 420 / 184	575 / 528 / 151	555 / 430 / 321	448 / 530 / 259	629 / 497 / 109	513 / 617 / 89	699 / 387 / 184	600 / 509 / 158	584 / 418 / 338	468 / 512 / 270																						
	3	513 / 617 / 89	411 / 748 / 71	550 / 548 / 145	450 / 681 / 118	409 / 588 / 237	331 / 721 / 192	526 / 586 / 91	436 / 736 / 76	575 / 530 / 151	462 / 648 / 122	429 / 570 / 248	341 / 687 / 197																						
	80	1	757 / 209 / 128	655 / 549 / 111	737 / 261 / 191	737 / 403 / 191	651 / 358 / 376	574 / 483 / 332	757 / 192 / 128	684 / 531 / 116	737 / 240 / 191	737 / 372 / 191	651 / 330 / 376	596 / 464 / 344																					
		2	684 / 515 / 116	553 / 634 / 94	737 / 390 / 191	652 / 528 / 169	629 / 430 / 363	508 / 530 / 293	713 / 497 / 121	582 / 617 / 99	737 / 360 / 191	680 / 509 / 177	651 / 411 / 376	530 / 512 / 306																					
		3	582 / 617 / 99	466 / 748 / 79	623 / 548 / 162	510 / 681 / 133	464 / 588 / 268	375 / 721 / 217	597 / 586 / 101	495 / 736 / 84	652 / 530 / 169	524 / 648 / 136	486 / 570 / 281	386 / 687 / 223																					
	90	1	798 / 197 / 132	733 / 549 / 121	776 / 246 / 200	776 / 380 / 200	691 / 339 / 399	641 / 483 / 370	798 / 181 / 132	765 / 531 / 127	776 / 226 / 200	776 / 350 / 200	691 / 313 / 399	666 / 464 / 385																					
		2	765 / 515 / 127	619 / 634 / 103	776 / 367 / 200	729 / 528 / 187	691 / 423 / 399	567 / 530 / 328	798 / 497 / 132	651 / 617 / 108	776 / 339 / 200	760 / 509 / 196	691 / 391 / 399	592 / 512 / 342																					
		3	651 / 617 / 108	521 / 748 / 87	697 / 548 / 179	570 / 681 / 147	518 / 588 / 299	419 / 721 / 242	667 / 586 / 111	554 / 736 / 92	729 / 530 / 187	586 / 648 / 151	543 / 570 / 314	432 / 687 / 250																					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	70	1	693 / 466 / 120	552 / 566 / 96	699 / 304 / 184	674 / 452 / 177	594 / 399 / 343	494 / 501 / 281	642 / 498 / 111	513 / 607 / 89	699 / 353 / 184	637 / 493 / 168	555 / 432 / 321	471 / 532 / 259	590 / 525 / 102	488 / 659 / 85	699 / 405 / 184	587 / 520 / 155	516 / 460 / 298	456 / 568 / 242
2		590 / 544 / 102	475 / 665 / 83	687 / 445 / 181	562 / 557 / 148	536 / 448 / 310	445 / 559 / 253	539 / 573 / 94	436 / 704 / 76	637 / 477 / 168	512 / 585 / 135	497 / 480 / 287	420 / 587 / 231	513 / 624 / 89	411 / 756 / 71	600 / 514 / 158	487 / 635 / 128	468 / 517 / 270	414 / 638 / 220	
3		488 / 632 / 85	398 / 781 / 69	537 / 578 / 141	437 / 713 / 115	390 / 604 / 225	326 / 754 / 186	462 / 690 / 80	372 / 840 / 65	500 / 620 / 132	400 / 751 / 105	370 / 661 / 214	307 / 788 / 169	424 / 722 / 74	347 / 892 / 60	462 / 654 / 122	375 / 803 / 99	341 / 694 / 197	297 / 839 / 158	
80		1	757 / 226 / 128	626 / 566 / 106	737 / 282 / 191	737 / 435 / 191	651 / 386 / 376	552 / 501 / 319	728 / 498 / 123	582 / 607 / 99	737 / 327 / 191	722 / 493 / 188	629 / 432 / 363	515 / 532 / 293	670 / 525 / 113	553 / 659 / 94	737 / 376 / 191	666 / 520 / 173	585 / 460 / 338	498 / 568 / 274
		2	670 / 544 / 113	539 / 665 / 91	737 / 421 / 191	638 / 557 / 166	607 / 448 / 351	497 / 559 / 287	611 / 573 / 104	495 / 704 / 84	722 / 477 / 188	581 / 585 / 151	563 / 480 / 325	460 / 587 / 262	582 / 624 / 99	466 / 756 / 79	680 / 514 / 177	553 / 635 / 144	530 / 517 / 306	452 / 638 / 249
		3	553 / 632 / 94	451 / 781 / 77	609 / 578 / 158	496 / 713 / 129	442 / 604 / 255	364 / 754 / 211	524 / 690 / 89	422 / 840 / 72	567 / 620 / 147	453 / 751 / 118	420 / 661 / 242	336 / 788 / 192	480 / 722 / 81	393 / 892 / 67	524 / 654 / 136	425 / 803 / 111	386 / 694 / 223	325 / 839 / 179
90		1	798 / 213 / 132	700 / 566 / 116	776 / 266 / 200	776 / 410 / 200	691 / 367 / 399	617 / 501 / 356	798 / 248 / 132	651 / 607 / 108	776 / 309 / 200	776 / 474 / 200	691 / 424 / 399	567 / 532 / 328	749 / 525 / 124	619 / 659 / 103	776 / 354 / 200	745 / 520 / 192	654 / 460 / 378	540 / 568 / 306
		2	749 / 544 / 124	602 / 665 / 100	776 / 397 / 200	713 / 557 / 183	678 / 448 / 392	555 / 559 / 321	684 / 573 / 113	554 / 704 / 92	776 / 459 / 200	650 / 585 / 167	629 / 480 / 363	506 / 587 / 292	651 / 624 / 108	521 / 756 / 87	760 / 514 / 196	618 / 635 / 159	592 / 517 / 342	490 / 638 / 278
		3	619 / 632 / 103	505 / 781 / 84	681 / 578 / 175	555 / 713 / 143	493 / 604 / 285	407 / 754 / 235	586 / 690 / 97	472 / 840 / 78	634 / 620 / 163	507 / 751 / 131	469 / 661 / 271	370 / 788 / 214	537 / 722 / 89	440 / 892 / 73	586 / 654 / 151	475 / 803 / 122	432 / 694 / 250	352 / 839 / 200
Wind Speed [mph]		170						180												
70	1	565 / 569 / 98	449 / 687 / 78	687 / 452 / 181	550 / 552 / 145	492 / 492 / 281	452 / 613 / 231	526 / 597 / 91	424 / 728 / 74	650 / 482 / 171	527 / 593 / 138	476 / 521 / 265	435 / 639 / 214							
	2	475 / 653 / 83	385 / 801 / 67	562 / 547 / 148	450 / 664 / 118	443 / 549 / 253	397 / 666 / 203	449 / 695 / 78	360 / 840 / 63	525 / 574 / 138	427 / 705 / 112	425 / 577 / 237	389 / 707 / 192							
	3	398 / 767 / 69	321 / 934 / 56	437 / 701 / 115	350 / 847 / 92	325 / 741 / 186	298 / 914 / 152	385 / 834 / 67	308 / 1006 / 54	412 / 743 / 109	339 / 918 / 89	314 / 782 / 175	286 / 950 / 141							
	80	1	640 / 569 / 108	510 / 687 / 86	737 / 427 / 191	623 / 552 / 162	552 / 492 / 319	492 / 613 / 262	597 / 597 / 101	480 / 728 / 81	737 / 482 / 191	595 / 593 / 155	522 / 521 / 300	472 / 639 / 242						
		2	539 / 653 / 91	437 / 801 / 74	638 / 547 / 166	510 / 664 / 133	497 / 549 / 287	432 / 666 / 230	510 / 695 / 86	408 / 840 / 69	595 / 574 / 155	482 / 705 / 125	466 / 577 / 268	422 / 707 / 217						
		3	451 / 767 / 77	364 / 934 / 62	496 / 701 / 129	397 / 847 / 103	364 / 741 / 211	324 / 914 / 172	437 / 834 / 74	350 / 1006 / 59	468 / 743 / 122	383 / 918 / 100	344 / 782 / 198	311 / 950 / 160						
	90	1	716 / 569 / 119	570 / 687 / 95	776 / 403 / 200	697 / 552 / 179	617 / 492 / 356	532 / 613 / 292	667 / 597 / 111	537 / 728 / 89	776 / 454 / 200	665 / 593 / 171	580 / 521 / 335	509 / 639 / 271						
		2	602 / 653 / 100	489 / 801 / 81	713 / 547 / 183	570 / 664 / 147	555 / 549 / 321	467 / 666 / 257	570 / 695 / 95	456 / 840 / 76	665 / 574 / 171	539 / 705 / 139	518 / 577 / 299	455 / 707 / 242						
		3	505 / 767 / 84	407 / 934 / 68	555 / 701 / 143	444 / 847 / 114	407 / 741 / 235	350 / 914 / 193	489 / 834 / 81	391 / 1006 / 65	523 / 743 / 135	428 / 918 / 110	382 / 782 / 221	335 / 950 / 178						
Wind Speed [mph]		190						200												
70	1	501 / 634 / 87	407 / 764 / 69	612 / 508 / 161	502 / 616 / 128	469 / 558 / 253	429 / 676 / 203	475 / 669 / 83	405 / 820 / 67	575 / 531 / 151	490 / 649 / 122	451 / 579 / 237	421 / 709 / 192							
	2	424 / 732 / 74	355 / 904 / 60	500 / 612 / 132	412 / 741 / 105	417 / 614 / 225	381 / 743 / 180	398 / 763 / 69	351 / 966 / 58	475 / 646 / 125	411 / 797 / 102	408 / 648 / 214	384 / 799 / 175							
	3	360 / 869 / 63	302 / 1076 / 51	387 / 779 / 102	322 / 948 / 82	303 / 816 / 163	286 / 1018 / 135	347 / 929 / 60	297 / 1141 / 49	375 / 837 / 99	318 / 1009 / 79	301 / 874 / 158	285 / 1081 / 130							
	80	1	568 / 634 / 96	451 / 764 / 77	694 / 508 / 180	553 / 616 / 144	513 / 558 / 287	464 / 676 / 230	539 / 669 / 91	444 / 820 / 74	652 / 531 / 169	536 / 649 / 136	492 / 579 / 268	454 / 709 / 217						
		2	480 / 732 / 81	393 / 904 / 67	567 / 612 / 147	453 / 741 / 118	456 / 614 / 255	412 / 743 / 204	451 / 763 / 77	385 / 966 / 64	538 / 646 / 140	450 / 797 / 114	445 / 648 / 242	414 / 799 / 198						
		3	408 / 869 / 69	335 / 1076 / 57	439 / 779 / 114	354 / 948 / 92	331 / 816 / 185	309 / 1018 / 153	393 / 929 / 67	326 / 1141 / 54	425 / 837 / 111	348 / 1009 / 89	328 / 874 / 179	307 / 1081 / 147						
	90	1	635 / 634 / 105	505 / 764 / 84	776 / 508 / 200	618 / 616 / 159	557 / 558 / 321	499 / 676 / 257	602 / 669 / 100	489 / 820 / 81	729 / 531 / 187	586 / 649 / 151	533 / 579 / 299	487 / 709 / 242						
		2	537 / 732 / 89	440 / 904 / 73	634 / 612 / 163	507 / 741 / 131	495 / 614 / 285	443 / 743 / 228	505 / 763 / 84	423 / 966 / 70	602 / 646 / 155	491 / 797 / 126	482 / 648 / 271	444 / 799 / 221						
		3	456 / 869 / 76	375 / 1076 / 62	491 / 779 / 126	396 / 948 / 102	359 / 816 / 207	333 / 1018 / 171	440 / 929 / 73	358 / 1141 / 60	475 / 837 / 122	380 / 1009 / 98	355 / 874 / 200	330 / 1081 / 164						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																	
100	1	828 / 116 / 135	828 / 184 / 135	823 / 149 / 210	823 / 235 / 210	722 / 206 / 417	722 / 320 / 417	828 / 128 / 135	828 / 203 / 135	823 / 165 / 210	823 / 258 / 210	722 / 227 / 417	722 / 352 / 417	828 / 142 / 135	828 / 223 / 135	823 / 182 / 210	823 / 283 / 210	722 / 250 / 417	722 / 385 / 417	
	2	828 / 328 / 135	828 / 502 / 135	823 / 227 / 210	823 / 351 / 210	722 / 259 / 417	722 / 399 / 417	828 / 360 / 135	810 / 539 / 132	823 / 250 / 210	823 / 385 / 210	722 / 285 / 417	722 / 438 / 417	828 / 394 / 135	774 / 563 / 126	823 / 274 / 210	823 / 422 / 210	722 / 312 / 417	709 / 469 / 409	
	3	828 / 464 / 135	720 / 615 / 117	823 / 382 / 210	788 / 558 / 201	709 / 477 / 409	572 / 586 / 331	828 / 510 / 135	684 / 640 / 112	823 / 419 / 210	753 / 585 / 192	681 / 503 / 394	545 / 611 / 315	810 / 545 / 132	648 / 662 / 106	823 / 458 / 210	718 / 609 / 183	641 / 516 / 370	518 / 634 / 299	
100	1	828 / 155 / 135	828 / 244 / 135	823 / 199 / 210	823 / 309 / 210	722 / 273 / 417	722 / 419 / 417	828 / 170 / 135	828 / 265 / 135	823 / 217 / 210	823 / 336 / 210	722 / 296 / 417	722 / 455 / 417							
	2	828 / 430 / 135	756 / 598 / 123	823 / 299 / 210	823 / 459 / 210	722 / 340 / 417	681 / 491 / 394	828 / 466 / 135	720 / 617 / 117	823 / 325 / 210	823 / 498 / 210	722 / 370 / 417	654 / 512 / 378							
	3	774 / 566 / 126	630 / 699 / 103	823 / 499 / 210	683 / 630 / 174	613 / 538 / 354	504 / 671 / 291	738 / 586 / 120	612 / 736 / 100	806 / 530 / 206	648 / 648 / 165	600 / 570 / 346	477 / 687 / 276							
100	1	828 / 185 / 135	810 / 549 / 132	823 / 236 / 210	823 / 364 / 210	722 / 321 / 417	709 / 483 / 409	828 / 170 / 135	828 / 265 / 135	823 / 217 / 210	823 / 336 / 210	722 / 296 / 417	722 / 455 / 417							
	2	828 / 504 / 135	684 / 634 / 112	823 / 352 / 210	806 / 528 / 206	722 / 400 / 417	627 / 530 / 362	828 / 466 / 135	720 / 617 / 117	823 / 325 / 210	823 / 498 / 210	722 / 370 / 417	654 / 512 / 378							
	3	720 / 617 / 117	576 / 748 / 94	771 / 548 / 197	631 / 681 / 161	572 / 588 / 331	463 / 721 / 268	738 / 586 / 120	612 / 736 / 100	806 / 530 / 206	648 / 648 / 165	600 / 570 / 346	477 / 687 / 276							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]		140						150						160					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	828 / 200 / 135	774 / 566 / 126	823 / 255 / 210	823 / 393 / 210	722 / 347 / 417	681 / 501 / 394	828 / 233 / 135	720 / 607 / 117	823 / 296 / 210	823 / 454 / 210	722 / 402 / 417	627 / 532 / 362	828 / 268 / 135	684 / 659 / 112	823 / 340 / 210	823 / 520 / 210	722 / 460 / 417	586 / 568 / 339	
	2	828 / 544 / 135	666 / 665 / 109	823 / 381 / 210	788 / 557 / 201	722 / 432 / 417	613 / 559 / 354	756 / 573 / 123	612 / 704 / 100	823 / 440 / 210	718 / 585 / 183	695 / 480 / 401	559 / 587 / 323	720 / 624 / 117	576 / 756 / 94	823 / 503 / 210	683 / 635 / 174	654 / 517 / 378	532 / 638 / 307	
	3	684 / 632 / 112	558 / 781 / 91	753 / 578 / 192	613 / 713 / 157	545 / 604 / 315	450 / 754 / 260	648 / 690 / 106	522 / 840 / 85	701 / 620 / 179	561 / 751 / 143	518 / 661 / 299	409 / 788 / 236	594 / 722 / 97	486 / 892 / 79	648 / 654 / 165	526 / 803 / 134	477 / 694 / 276	382 / 839 / 221	
100	1	792 / 569 / 129	630 / 687 / 103	823 / 386 / 210	771 / 552 / 197	681 / 492 / 394	571 / 613 / 323	738 / 597 / 120	594 / 728 / 97	823 / 435 / 210	736 / 593 / 188	641 / 521 / 370	546 / 639 / 299							
	2	666 / 653 / 109	540 / 801 / 88	788 / 547 / 201	631 / 664 / 161	613 / 549 / 354	502 / 666 / 284	630 / 695 / 103	504 / 840 / 82	736 / 574 / 188	596 / 705 / 152	572 / 577 / 331	488 / 707 / 268							
	3	558 / 767 / 91	450 / 934 / 74	613 / 701 / 157	491 / 847 / 125	450 / 741 / 260	376 / 914 / 213	540 / 834 / 88	432 / 1006 / 71	578 / 743 / 148	473 / 918 / 121	423 / 782 / 244	359 / 950 / 197							
100	1	702 / 634 / 115	558 / 764 / 91	823 / 487 / 210	683 / 616 / 174	613 / 558 / 354	533 / 676 / 284	666 / 669 / 109	540 / 820 / 88	806 / 531 / 206	648 / 649 / 165	574 / 579 / 331	520 / 709 / 268							
	2	594 / 732 / 97	486 / 904 / 79	701 / 612 / 179	561 / 741 / 143	545 / 614 / 315	474 / 743 / 252	558 / 763 / 91	468 / 966 / 77	666 / 646 / 170	543 / 797 / 139	519 / 648 / 299	474 / 799 / 244							
	3	504 / 869 / 82	414 / 1076 / 68	543 / 779 / 139	438 / 948 / 112	395 / 816 / 229	356 / 1018 / 189	486 / 929 / 79	396 / 1141 / 65	526 / 837 / 134	421 / 1009 / 107	383 / 874 / 221	352 / 1081 / 181							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
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 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	253 / 285 / 44	214 / 376 / 38	262 / 179 / 53	255 / 279 / 52	258 / 225 / 69	232 / 319 / 63	243 / 302 / 43	204 / 395 / 36	262 / 199 / 53	246 / 297 / 50	258 / 249 / 69	223 / 338 / 60	237 / 323 / 42	195 / 413 / 34	262 / 220 / 53	239 / 318 / 49	251 / 267 / 68
2		227 / 357 / 40	182 / 441 / 32	259 / 273 / 52	220 / 364 / 45	248 / 274 / 67	214 / 367 / 57	214 / 371 / 38	172 / 459 / 30	249 / 291 / 50	210 / 383 / 43	242 / 295 / 65	204 / 386 / 55	204 / 388 / 36	166 / 483 / 29	242 / 311 / 49	200 / 400 / 41	232 / 311 / 63	195 / 403 / 52
3		188 / 422 / 33	153 / 524 / 27	210 / 379 / 43	168 / 467 / 34	192 / 403 / 52	154 / 496 / 42	182 / 448 / 32	146 / 550 / 26	200 / 398 / 41	162 / 492 / 33	182 / 421 / 49	148 / 521 / 40	172 / 463 / 30	140 / 574 / 25	191 / 415 / 39	155 / 517 / 32	176 / 445 / 47	142 / 545 / 38
5	1	280 / 285 / 44	237 / 376 / 38	288 / 179 / 56	280 / 279 / 55	258 / 225 / 86	232 / 319 / 77	269 / 302 / 43	226 / 395 / 36	288 / 199 / 56	270 / 297 / 53	258 / 249 / 86	223 / 338 / 74	262 / 323 / 42	215 / 413 / 34	288 / 220 / 56	263 / 318 / 51	251 / 267 / 84	217 / 360 / 72
	2	251 / 357 / 40	201 / 441 / 32	284 / 273 / 55	241 / 364 / 47	248 / 274 / 83	214 / 367 / 71	237 / 371 / 38	190 / 459 / 30	273 / 291 / 53	231 / 383 / 45	242 / 295 / 81	204 / 386 / 68	226 / 388 / 36	183 / 483 / 29	266 / 311 / 52	220 / 400 / 43	232 / 311 / 77	195 / 403 / 65
	3	208 / 422 / 33	169 / 524 / 27	231 / 379 / 45	185 / 467 / 36	192 / 403 / 64	154 / 496 / 51	201 / 448 / 32	162 / 550 / 26	220 / 398 / 43	178 / 492 / 35	182 / 421 / 61	148 / 521 / 49	190 / 463 / 30	154 / 574 / 25	210 / 415 / 41	171 / 517 / 33	176 / 445 / 59	142 / 545 / 47
10	1	346 / 153 / 43	300 / 376 / 38	341 / 168 / 65	341 / 269 / 65	293 / 222 / 110	268 / 319 / 101	341 / 302 / 43	287 / 395 / 36	341 / 187 / 65	341 / 297 / 65	293 / 246 / 110	257 / 338 / 97	332 / 323 / 42	273 / 413 / 34	341 / 206 / 65	332 / 318 / 63	289 / 267 / 109	250 / 360 / 94
	2	318 / 357 / 40	255 / 441 / 32	341 / 260 / 65	305 / 364 / 58	286 / 274 / 108	246 / 367 / 93	300 / 371 / 38	241 / 459 / 30	341 / 287 / 65	292 / 383 / 56	278 / 295 / 105	235 / 386 / 89	287 / 388 / 36	232 / 483 / 29	336 / 311 / 64	278 / 400 / 53	268 / 311 / 101	224 / 403 / 85
	3	264 / 422 / 33	214 / 524 / 27	292 / 379 / 56	233 / 467 / 45	221 / 403 / 83	177 / 496 / 67	255 / 448 / 32	205 / 550 / 26	278 / 398 / 53	224 / 492 / 43	210 / 421 / 79	170 / 521 / 64	241 / 463 / 30	196 / 574 / 25	265 / 415 / 51	215 / 517 / 41	203 / 445 / 76	163 / 545 / 62
Wind Speed [mph]		110						115											
0	1	230 / 344 / 40	185 / 427 / 33	262 / 241 / 53	233 / 338 / 47	245 / 286 / 66	207 / 375 / 56	224 / 364 / 39	179 / 448 / 31	262 / 264 / 53	226 / 358 / 46	239 / 303 / 64	198 / 390 / 53						
	2	198 / 410 / 35	159 / 505 / 28	233 / 327 / 47	191 / 415 / 39	226 / 331 / 61	185 / 418 / 50	188 / 424 / 33	153 / 526 / 27	226 / 346 / 46	184 / 436 / 37	220 / 350 / 59	179 / 439 / 48						
	3	166 / 486 / 29	133 / 595 / 24	184 / 437 / 37	149 / 539 / 30	167 / 459 / 45	135 / 567 / 37	159 / 507 / 28	127 / 614 / 22	175 / 450 / 36	142 / 559 / 29	160 / 479 / 43	129 / 586 / 35						
5	1	255 / 344 / 40	205 / 427 / 33	288 / 241 / 56	256 / 338 / 50	245 / 286 / 82	207 / 375 / 69	248 / 364 / 39	197 / 448 / 31	288 / 264 / 56	249 / 358 / 48	239 / 303 / 80	198 / 390 / 66						
	2	219 / 410 / 35	176 / 505 / 28	256 / 327 / 50	210 / 415 / 41	226 / 331 / 75	185 / 418 / 62	208 / 424 / 33	169 / 526 / 27	249 / 346 / 48	202 / 436 / 40	220 / 350 / 73	179 / 439 / 60						
	3	183 / 486 / 29	147 / 595 / 24	202 / 437 / 40	164 / 539 / 32	167 / 459 / 56	135 / 567 / 45	176 / 507 / 28	140 / 614 / 22	192 / 450 / 37	156 / 559 / 31	160 / 479 / 54	129 / 586 / 43						
10	1	323 / 344 / 40	259 / 427 / 33	341 / 227 / 65	323 / 338 / 62	282 / 286 / 106	239 / 375 / 90	314 / 364 / 39	250 / 448 / 31	341 / 248 / 65	314 / 358 / 60	275 / 303 / 104	228 / 390 / 86						
	2	278 / 410 / 35	223 / 505 / 28	323 / 327 / 62	265 / 415 / 51	260 / 331 / 98	214 / 418 / 80	264 / 424 / 33	214 / 526 / 27	314 / 346 / 60	256 / 436 / 49	253 / 350 / 95	206 / 439 / 78						
	3	232 / 486 / 29	187 / 595 / 24	256 / 437 / 49	206 / 539 / 40	192 / 459 / 72	156 / 567 / 59	223 / 507 / 28	178 / 614 / 22	242 / 450 / 46	198 / 559 / 38	185 / 479 / 70	149 / 586 / 56						
Wind Speed [mph]		120						130											
0	1	214 / 378 / 38	172 / 468 / 30	255 / 281 / 52	217 / 372 / 44	232 / 321 / 63	192 / 409 / 52	224 / 364 / 39	179 / 448 / 31	262 / 264 / 53	226 / 358 / 46	239 / 303 / 64	198 / 390 / 53						
	2	182 / 443 / 32	146 / 544 / 26	220 / 365 / 45	178 / 456 / 36	214 / 369 / 57	170 / 450 / 46	188 / 424 / 33	153 / 526 / 27	226 / 346 / 46	184 / 436 / 37	220 / 350 / 59	179 / 439 / 48						
	3	153 / 526 / 27	123 / 646 / 22	168 / 469 / 34	136 / 577 / 28	154 / 498 / 42	126 / 617 / 34	159 / 507 / 28	127 / 614 / 22	175 / 450 / 36	142 / 559 / 29	160 / 479 / 43	129 / 586 / 35						
5	1	237 / 378 / 38	190 / 468 / 30	280 / 281 / 55	238 / 372 / 46	232 / 321 / 77	192 / 409 / 64	248 / 364 / 39	197 / 448 / 31	288 / 264 / 56	249 / 358 / 48	239 / 303 / 80	198 / 390 / 66						
	2	201 / 443 / 32	162 / 544 / 26	241 / 365 / 47	195 / 456 / 38	214 / 369 / 71	170 / 450 / 57	208 / 424 / 33	169 / 526 / 27	249 / 346 / 48	202 / 436 / 40	220 / 350 / 73	179 / 439 / 60						
	3	169 / 526 / 27	137 / 646 / 22	185 / 469 / 36	149 / 577 / 29	154 / 498 / 51	126 / 617 / 42	176 / 507 / 28	140 / 614 / 22	192 / 450 / 37	156 / 559 / 31	160 / 479 / 54	129 / 586 / 43						
10	1	300 / 378 / 38	241 / 468 / 30	341 / 270 / 65	301 / 372 / 57	268 / 321 / 101	221 / 409 / 83	314 / 364 / 39	250 / 448 / 31	341 / 248 / 65	314 / 358 / 60	275 / 303 / 104	228 / 390 / 86						
	2	255 / 443 / 32	205 / 544 / 26	305 / 365 / 58	247 / 456 / 47	246 / 369 / 93	195 / 450 / 74	264 / 424 / 33	214 / 526 / 27	314 / 346 / 60	256 / 436 / 49	253 / 350 / 95	206 / 439 / 78						
	3	214 / 526 / 27	173 / 646 / 22	233 / 469 / 45	189 / 577 / 36	177 / 498 / 67	145 / 617 / 55	223 / 507 / 28	178 / 614 / 22	242 / 450 / 46	198 / 559 / 38	185 / 479 / 70	149 / 586 / 56						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																																			
	140						150						160																							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																			
Ground Snow	Panel Angle	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																												
0	0	1	204 / 390 / 36	166 / 486 / 29	249 / 297 / 50	207 / 384 / 42	226 / 338 / 61	182 / 420 / 49	191 / 424 / 34	153 / 517 / 27	236 / 328 / 48	194 / 418 / 39	210 / 365 / 57	182 / 452 / 46	179 / 453 / 31	143 / 554 / 25	223 / 357 / 45	181 / 447 / 37	198 / 394 / 53	191 / 488 / 43																
		2	175 / 461 / 31	140 / 561 / 25	210 / 378 / 43	171 / 474 / 35	204 / 381 / 55	163 / 468 / 44	162 / 494 / 29	130 / 602 / 23	197 / 411 / 40	159 / 506 / 32	189 / 408 / 51	165 / 509 / 42	153 / 531 / 27	123 / 653 / 22	184 / 441 / 37	149 / 544 / 30	176 / 436 / 47	172 / 546 / 39																
		3	146 / 543 / 26	120 / 678 / 21	162 / 486 / 33	133 / 607 / 27	148 / 515 / 40	120 / 632 / 32	136 / 585 / 24	111 / 718 / 20	152 / 528 / 31	123 / 649 / 25	138 / 556 / 37	122 / 689 / 31	127 / 620 / 22	104 / 771 / 18	142 / 565 / 29	113 / 682 / 23	129 / 592 / 35	124 / 721 / 28																
	5	1	226 / 390 / 36	183 / 486 / 29	273 / 297 / 53	227 / 384 / 44	226 / 338 / 75	182 / 420 / 61	212 / 424 / 34	169 / 517 / 27	259 / 328 / 50	213 / 418 / 42	210 / 365 / 70	182 / 452 / 57	197 / 453 / 31	158 / 554 / 25	245 / 357 / 48	199 / 447 / 39	198 / 394 / 66	191 / 488 / 54																
		2	194 / 461 / 31	154 / 561 / 25	231 / 378 / 45	188 / 474 / 37	204 / 381 / 68	163 / 468 / 55	180 / 494 / 29	144 / 602 / 23	217 / 411 / 42	174 / 506 / 34	189 / 408 / 63	165 / 509 / 51	169 / 531 / 27	137 / 653 / 22	202 / 441 / 40	164 / 544 / 32	176 / 436 / 59	172 / 546 / 48																
		3	162 / 543 / 26	133 / 678 / 21	178 / 486 / 35	146 / 607 / 29	148 / 515 / 49	120 / 632 / 40	151 / 585 / 24	122 / 718 / 20	167 / 528 / 33	135 / 649 / 27	138 / 556 / 46	122 / 689 / 38	140 / 620 / 22	115 / 771 / 18	156 / 565 / 31	125 / 682 / 24	129 / 592 / 43	124 / 721 / 35																
	10	1	287 / 390 / 36	232 / 486 / 29	341 / 293 / 65	287 / 384 / 55	260 / 338 / 98	210 / 420 / 79	268 / 424 / 34	214 / 517 / 27	327 / 328 / 63	269 / 418 / 51	242 / 365 / 91	205 / 452 / 74	250 / 453 / 31	200 / 554 / 25	309 / 357 / 59	251 / 447 / 48	228 / 394 / 86	208 / 488 / 70																
		2	246 / 461 / 31	196 / 561 / 25	292 / 378 / 56	238 / 474 / 46	235 / 381 / 89	188 / 468 / 71	228 / 494 / 29	182 / 602 / 23	274 / 411 / 52	220 / 506 / 42	217 / 408 / 82	186 / 509 / 67	214 / 531 / 27	173 / 653 / 22	256 / 441 / 49	206 / 544 / 40	203 / 436 / 76	187 / 546 / 63																
		3	205 / 543 / 26	169 / 678 / 21	224 / 486 / 43	184 / 607 / 35	170 / 515 / 64	138 / 632 / 52	191 / 585 / 24	155 / 718 / 20	211 / 528 / 40	171 / 649 / 33	159 / 556 / 60	137 / 689 / 49	178 / 620 / 22	146 / 771 / 18	198 / 565 / 38	157 / 682 / 30	149 / 592 / 56	134 / 721 / 45																
5	0	1	166 / 477 / 29	142 / 599 / 24	210 / 383 / 43	175 / 472 / 34	185 / 419 / 50	199 / 521 / 41	156 / 506 / 27	144 / 626 / 22	197 / 407 / 40	180 / 501 / 32	183 / 449 / 47	205 / 550 / 38	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panel Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	143 / 564 / 25	118 / 681 / 20	171 / 466 / 35	145 / 576 / 28	167 / 468 / 45	178 / 579 / 37	133 / 591 / 24	122 / 722 / 19	162 / 495 / 33	147 / 603 / 26	163 / 498 / 42	182 / 605 / 34																								
3	120 / 666 / 21	101 / 817 / 17	133 / 597 / 27	111 / 728 / 22	123 / 637 / 33	128 / 766 / 26	114 / 709 / 20	104 / 857 / 16	126 / 639 / 26	114 / 768 / 21	121 / 680 / 32	137 / 832 / 26																								
5	1	183 / 477 / 29	155 / 599 / 24	231 / 383 / 45	190 / 472 / 36	185 / 419 / 62	199 / 521 / 50	172 / 506 / 27	153 / 626 / 22	217 / 407 / 42	190 / 501 / 34	183 / 449 / 59	205 / 550 / 47																							
	2	158 / 564 / 25	129 / 681 / 20	188 / 466 / 37	157 / 576 / 30	167 / 468 / 56	178 / 579 / 45	147 / 591 / 24	130 / 722 / 19	178 / 495 / 35	156 / 603 / 28	163 / 498 / 53	182 / 605 / 42																							
	3	133 / 666 / 21	111 / 817 / 17	146 / 597 / 29	121 / 728 / 23	123 / 637 / 41	128 / 766 / 33	126 / 709 / 20	110 / 857 / 16	139 / 639 / 27	121 / 768 / 22	121 / 680 / 39	137 / 832 / 32																							
10	1	232 / 477 / 29	195 / 599 / 24	292 / 383 / 56	238 / 472 / 45	214 / 419 / 80	210 / 521 / 66	218 / 506 / 27	191 / 626 / 22	274 / 407 / 52	236 / 501 / 42	208 / 449 / 76	211 / 550 / 62																							
	2	200 / 564 / 25	163 / 681 / 20	238 / 466 / 46	197 / 576 / 37	192 / 468 / 72	188 / 579 / 59	187 / 591 / 24	161 / 722 / 19	224 / 495 / 43	193 / 603 / 34	186 / 498 / 68	187 / 605 / 55																							
	3	169 / 666 / 21	140 / 817 / 17	184 / 597 / 35	151 / 728 / 29	141 / 637 / 53	136 / 766 / 43	159 / 709 / 20	137 / 857 / 16	175 / 639 / 34	150 / 768 / 27	137 / 680 / 51	141 / 832 / 41																							
0	0	1	149 / 543 / 26	149 / 663 / 21	188 / 434 / 38	185 / 526 / 30	185 / 467 / 44	210 / 574 / 36	140 / 564 / 25	153 / 697 / 20	175 / 450 / 36	192 / 560 / 29	194 / 499 / 42	219 / 607 / 34	<p>Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows</p> <table border="1"> <tr> <td>x ≥ 72"</td> <td>64" to 71"</td> <td>48" to 63"</td> <td>x ≤ 47"</td> </tr> </table> <p>Notation (ASCE 7-22) a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the e edges shall not include any overhang distances. B = Horizontal dimension of building measured normal to wind direction, in ft (m). h = Mean roof height, in ft (m). Θ = Angle of roof from horizontal, in degrees</p>						x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"												
		x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"																															
		2	127 / 629 / 22	129 / 781 / 18	152 / 521 / 31	153 / 640 / 25	167 / 524 / 40	190 / 642 / 32	120 / 663 / 21	131 / 813 / 17	146 / 555 / 30	157 / 674 / 24	174 / 557 / 38	197 / 676 / 31																						
	3	107 / 746 / 19	109 / 922 / 16	120 / 677 / 25	121 / 830 / 20	125 / 718 / 30	140 / 867 / 24	101 / 778 / 18	110 / 947 / 15	113 / 711 / 23	122 / 860 / 19	128 / 751 / 28	148 / 927 / 23																							
	5	1	165 / 543 / 26	155 / 663 / 21	206 / 434 / 40	190 / 526 / 32	185 / 467 / 55	210 / 574 / 44	154 / 564 / 25	155 / 697 / 20	192 / 450 / 37	194 / 560 / 31	194 / 499 / 53	219 / 607 / 42																						
		2	140 / 629 / 22	134 / 781 / 18	167 / 521 / 33	157 / 640 / 27	167 / 524 / 49	190 / 642 / 40	133 / 663 / 21	133 / 813 / 17	160 / 555 / 31	158 / 674 / 25	174 / 557 / 47	197 / 676 / 38																						
		3	119 / 746 / 19	113 / 922 / 16	132 / 677 / 26	124 / 830 / 21	125 / 718 / 37	140 / 867 / 30	112 / 778 / 18	111 / 947 / 15	125 / 711 / 24	123 / 860 / 20	128 / 751 / 35	148 / 927 / 29																						
	10	1	209 / 543 / 26	190 / 663 / 21	260 / 434 / 50	233 / 526 / 40	204 / 467 / 71	211 / 574 / 57	196 / 564 / 25	189 / 697 / 20	242 / 450 / 46	235 / 560 / 38	208 / 499 / 68	219 / 607 / 55																						
		2	178 / 629 / 22	164 / 781 / 18	211 / 521 / 40	193 / 640 / 33	185 / 524 / 64	191 / 642 / 52	169 / 663 / 21	162 / 813 / 17	202 / 555 / 39	192 / 674 / 31	187 / 557 / 62	197 / 676 / 49																						
3		150 / 746 / 19	139 / 922 / 16	166 / 677 / 32	152 / 830 / 26	138 / 718 / 48	141 / 867 / 38	141 / 778 / 18	135 / 947 / 15	157 / 711 / 30	150 / 860 / 24	138 / 751 / 45	148 / 927 / 37																							

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	397 / 145 / 42	364 / 376 / 39	390 / 159 / 74	390 / 255 / 74	325 / 214 / 131	308 / 319 / 124	397 / 145 / 42	347 / 395 / 37	390 / 177 / 74	390 / 281 / 74	325 / 237 / 131	296 / 338 / 119	397 / 153 / 42	331 / 413 / 35	390 / 195 / 74	390 / 309 / 74	325 / 261 / 131	287 / 360 / 116
2		386 / 357 / 41	309 / 441 / 33	390 / 246 / 74	369 / 364 / 69	325 / 271 / 131	283 / 367 / 114	364 / 371 / 39	292 / 459 / 31	390 / 272 / 74	352 / 383 / 66	321 / 295 / 129	271 / 386 / 109	347 / 388 / 37	281 / 483 / 30	390 / 299 / 74	336 / 400 / 63	308 / 311 / 124	258 / 403 / 104	
3		320 / 422 / 34	259 / 524 / 28	352 / 379 / 66	282 / 467 / 53	254 / 403 / 102	204 / 496 / 82	309 / 448 / 33	248 / 550 / 27	336 / 398 / 63	271 / 492 / 51	242 / 421 / 97	196 / 521 / 79	292 / 463 / 31	237 / 574 / 26	320 / 415 / 60	260 / 517 / 49	233 / 445 / 94	188 / 545 / 76	
20		1	446 / 139 / 44	427 / 376 / 42	438 / 152 / 82	438 / 244 / 82	353 / 206 / 156	349 / 319 / 154	446 / 139 / 44	408 / 395 / 40	438 / 169 / 82	438 / 270 / 82	353 / 228 / 156	334 / 338 / 147	446 / 147 / 44	388 / 413 / 38	438 / 187 / 82	438 / 296 / 82	353 / 251 / 156	325 / 360 / 143
		2	446 / 352 / 44	362 / 441 / 36	438 / 236 / 82	432 / 364 / 81	353 / 260 / 156	320 / 367 / 141	427 / 371 / 42	343 / 459 / 34	438 / 261 / 82	413 / 383 / 77	353 / 287 / 156	306 / 386 / 135	408 / 388 / 40	330 / 483 / 33	438 / 286 / 82	394 / 400 / 74	349 / 311 / 154	292 / 403 / 129
		3	375 / 422 / 37	304 / 524 / 30	413 / 379 / 77	331 / 467 / 62	287 / 403 / 127	231 / 496 / 102	362 / 448 / 36	291 / 550 / 29	394 / 398 / 74	318 / 492 / 59	273 / 421 / 120	222 / 521 / 98	343 / 463 / 34	278 / 574 / 28	375 / 415 / 70	305 / 517 / 57	264 / 445 / 116	212 / 545 / 94
25		1	446 / 139 / 44	427 / 376 / 42	438 / 152 / 82	438 / 244 / 82	384 / 200 / 182	384 / 315 / 182	446 / 139 / 44	408 / 395 / 40	438 / 169 / 82	438 / 270 / 82	384 / 222 / 182	373 / 338 / 177	446 / 147 / 44	388 / 413 / 38	438 / 187 / 82	438 / 296 / 82	384 / 244 / 182	363 / 360 / 172
		2	446 / 352 / 44	362 / 441 / 36	438 / 236 / 82	432 / 364 / 81	384 / 253 / 182	357 / 367 / 170	427 / 371 / 42	343 / 459 / 34	438 / 261 / 82	413 / 383 / 77	384 / 280 / 182	342 / 386 / 162	408 / 388 / 40	330 / 483 / 33	438 / 286 / 82	394 / 400 / 74	384 / 307 / 182	326 / 403 / 155
		3	375 / 422 / 37	304 / 524 / 30	413 / 379 / 77	331 / 467 / 62	321 / 403 / 152	258 / 496 / 122	362 / 448 / 36	291 / 550 / 29	394 / 398 / 74	318 / 492 / 59	305 / 421 / 145	247 / 521 / 117	343 / 463 / 34	278 / 574 / 28	375 / 415 / 70	305 / 517 / 57	294 / 445 / 140	237 / 545 / 112
Wind Speed [mph]		110						115												
15	1	391 / 344 / 42	314 / 427 / 34	390 / 215 / 74	390 / 338 / 74	325 / 286 / 131	275 / 375 / 111	380 / 364 / 41	303 / 448 / 33	390 / 235 / 74	379 / 358 / 72	316 / 303 / 128	262 / 390 / 106							
	2	336 / 410 / 36	270 / 505 / 29	390 / 327 / 74	320 / 415 / 60	300 / 331 / 121	246 / 418 / 99	320 / 424 / 34	259 / 526 / 28	379 / 346 / 72	309 / 436 / 58	291 / 350 / 117	237 / 439 / 96							
	3	281 / 486 / 30	226 / 595 / 24	309 / 437 / 58	249 / 539 / 47	221 / 459 / 89	179 / 567 / 72	270 / 507 / 29	215 / 614 / 23	293 / 450 / 55	239 / 559 / 45	212 / 479 / 86	171 / 586 / 69							
	20	1	446 / 162 / 44	369 / 427 / 37	438 / 206 / 82	438 / 324 / 82	353 / 275 / 156	311 / 375 / 137	446 / 178 / 44	356 / 448 / 35	438 / 225 / 82	438 / 353 / 82	353 / 299 / 156	297 / 390 / 131						
		2	395 / 410 / 39	317 / 505 / 32	438 / 313 / 82	375 / 415 / 70	339 / 331 / 149	278 / 418 / 122	375 / 424 / 37	304 / 526 / 30	438 / 341 / 82	362 / 436 / 68	330 / 350 / 145	269 / 439 / 118						
		3	330 / 486 / 33	265 / 595 / 26	362 / 437 / 68	292 / 539 / 55	250 / 459 / 110	203 / 567 / 89	317 / 507 / 32	253 / 614 / 25	343 / 450 / 64	280 / 559 / 52	240 / 479 / 106	193 / 586 / 85						
	25	1	446 / 162 / 44	369 / 427 / 37	438 / 206 / 82	438 / 324 / 82	384 / 267 / 182	347 / 375 / 165	446 / 178 / 44	356 / 448 / 35	438 / 225 / 82	438 / 353 / 82	384 / 291 / 182	331 / 390 / 157						
		2	395 / 410 / 39	317 / 505 / 32	438 / 313 / 82	375 / 415 / 70	378 / 331 / 180	310 / 418 / 147	375 / 424 / 37	304 / 526 / 30	438 / 341 / 82	362 / 436 / 68	368 / 350 / 175	300 / 439 / 142						
		3	330 / 486 / 33	265 / 595 / 26	362 / 437 / 68	292 / 539 / 55	279 / 459 / 132	226 / 567 / 107	317 / 507 / 32	253 / 614 / 25	343 / 450 / 64	280 / 559 / 52	268 / 479 / 127	216 / 586 / 103						
Wind Speed [mph]		120						130												
15	1	364 / 378 / 39	292 / 468 / 31	390 / 256 / 74	363 / 372 / 68	308 / 321 / 124	254 / 409 / 102	380 / 364 / 41	303 / 448 / 33	390 / 235 / 74	379 / 358 / 72	316 / 303 / 128	262 / 390 / 106							
	2	309 / 443 / 33	248 / 544 / 27	369 / 365 / 69	298 / 456 / 56	283 / 369 / 114	225 / 450 / 91	320 / 424 / 34	259 / 526 / 28	379 / 346 / 72	309 / 436 / 58	291 / 350 / 117	237 / 439 / 96							
	3	259 / 526 / 28	210 / 646 / 23	282 / 469 / 53	228 / 577 / 43	204 / 498 / 82	167 / 617 / 67	270 / 507 / 29	215 / 614 / 23	293 / 450 / 55	239 / 559 / 45	212 / 479 / 86	171 / 586 / 69							
	20	1	427 / 378 / 42	343 / 468 / 34	438 / 245 / 82	426 / 372 / 79	349 / 321 / 154	287 / 409 / 127	446 / 178 / 44	356 / 448 / 35	438 / 225 / 82	438 / 353 / 82	353 / 299 / 156	297 / 390 / 131						
		2	362 / 443 / 36	291 / 544 / 29	432 / 365 / 81	350 / 456 / 65	320 / 369 / 141	254 / 450 / 112	375 / 424 / 37	304 / 526 / 30	438 / 341 / 82	362 / 436 / 68	330 / 350 / 145	269 / 439 / 118						
		3	304 / 526 / 30	246 / 646 / 25	331 / 469 / 62	267 / 577 / 50	231 / 498 / 102	189 / 617 / 83	317 / 507 / 32	253 / 614 / 25	343 / 450 / 64	280 / 559 / 52	240 / 479 / 106	193 / 586 / 85						
	25	1	427 / 378 / 42	343 / 468 / 34	438 / 245 / 82	426 / 372 / 79	384 / 316 / 182	321 / 409 / 152	446 / 178 / 44	356 / 448 / 35	438 / 225 / 82	438 / 353 / 82	384 / 291 / 182	331 / 390 / 157						
		2	362 / 443 / 36	291 / 544 / 29	432 / 365 / 81	350 / 456 / 65	357 / 369 / 170	284 / 450 / 135	375 / 424 / 37	304 / 526 / 30	438 / 341 / 82	362 / 436 / 68	368 / 350 / 175	300 / 439 / 142						
		3	304 / 526 / 30	246 / 646 / 25	331 / 469 / 62	267 / 577 / 50	258 / 498 / 122	210 / 617 / 100	317 / 507 / 32	253 / 614 / 25	343 / 450 / 64	280 / 559 / 52	268 / 479 / 127	216 / 586 / 103						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	347 / 390 / 37	281 / 486 / 30	390 / 278 / 74	347 / 384 / 65	300 / 338 / 121	242 / 420 / 97	325 / 424 / 35	259 / 517 / 28	390 / 323 / 74	325 / 418 / 61	279 / 365 / 112	234 / 452 / 91	303 / 453 / 33	243 / 554 / 26	374 / 357 / 70	304 / 447 / 57	262 / 394 / 106	235 / 488 / 86
2		298 / 461 / 32	237 / 561 / 26	352 / 378 / 66	287 / 474 / 54	271 / 381 / 109	217 / 468 / 87	276 / 494 / 30	221 / 602 / 24	331 / 411 / 62	266 / 506 / 50	250 / 408 / 101	213 / 509 / 82	259 / 531 / 28	210 / 653 / 23	309 / 441 / 58	249 / 544 / 47	233 / 436 / 94	212 / 546 / 77	
3		248 / 543 / 27	204 / 678 / 22	271 / 486 / 51	222 / 607 / 42	196 / 515 / 79	158 / 632 / 64	232 / 585 / 25	188 / 718 / 20	255 / 528 / 48	206 / 649 / 39	183 / 556 / 74	156 / 689 / 61	215 / 620 / 23	177 / 771 / 19	239 / 565 / 45	190 / 682 / 36	171 / 592 / 69	152 / 721 / 56	
20		1	408 / 390 / 40	330 / 486 / 33	438 / 266 / 82	407 / 384 / 76	339 / 338 / 149	273 / 420 / 120	382 / 424 / 38	304 / 517 / 30	438 / 310 / 82	381 / 418 / 71	316 / 365 / 139	264 / 452 / 112	356 / 453 / 35	285 / 554 / 28	438 / 357 / 82	356 / 447 / 67	297 / 394 / 131	263 / 488 / 106
		2	350 / 461 / 35	278 / 561 / 28	413 / 378 / 77	337 / 474 / 63	306 / 381 / 135	245 / 468 / 108	324 / 494 / 32	259 / 602 / 26	388 / 411 / 72	312 / 506 / 58	283 / 408 / 125	239 / 509 / 102	304 / 531 / 30	246 / 653 / 25	362 / 441 / 68	292 / 544 / 55	264 / 436 / 116	238 / 546 / 96
		3	291 / 543 / 29	240 / 678 / 24	318 / 486 / 59	261 / 607 / 49	222 / 515 / 98	179 / 632 / 79	272 / 585 / 27	220 / 718 / 22	299 / 528 / 56	242 / 649 / 45	207 / 556 / 91	176 / 689 / 75	253 / 620 / 25	207 / 771 / 21	280 / 565 / 52	223 / 682 / 42	193 / 592 / 85	171 / 721 / 69
25		1	408 / 390 / 40	330 / 486 / 33	438 / 266 / 82	407 / 384 / 76	378 / 338 / 180	305 / 420 / 145	382 / 424 / 38	304 / 517 / 30	438 / 310 / 82	381 / 418 / 71	352 / 365 / 167	293 / 452 / 135	356 / 453 / 35	285 / 554 / 28	438 / 357 / 82	356 / 447 / 67	331 / 394 / 157	291 / 488 / 127
		2	350 / 461 / 35	278 / 561 / 28	413 / 378 / 77	337 / 474 / 63	342 / 381 / 162	273 / 468 / 130	324 / 494 / 32	259 / 602 / 26	388 / 411 / 72	312 / 506 / 58	315 / 408 / 150	266 / 509 / 122	304 / 531 / 30	246 / 653 / 25	362 / 441 / 68	292 / 544 / 55	294 / 436 / 140	263 / 546 / 115
		3	291 / 543 / 29	240 / 678 / 24	318 / 486 / 59	261 / 607 / 49	247 / 515 / 117	200 / 632 / 95	272 / 585 / 27	220 / 718 / 22	299 / 528 / 56	242 / 649 / 45	231 / 556 / 110	196 / 689 / 90	253 / 620 / 25	207 / 771 / 21	280 / 565 / 52	223 / 682 / 42	216 / 592 / 103	189 / 721 / 83
15	1	281 / 477 / 30	236 / 599 / 25	352 / 383 / 66	287 / 472 / 53	246 / 419 / 99	236 / 521 / 81	265 / 506 / 28	228 / 626 / 23	331 / 407 / 62	282 / 501 / 50	238 / 449 / 94	235 / 550 / 76							
	2	243 / 564 / 26	196 / 681 / 21	287 / 466 / 54	237 / 576 / 44	221 / 468 / 89	211 / 579 / 72	226 / 591 / 24	193 / 722 / 20	271 / 495 / 51	230 / 603 / 41	213 / 498 / 84	209 / 605 / 67							
	3	204 / 666 / 22	168 / 817 / 18	222 / 597 / 42	182 / 728 / 34	163 / 637 / 66	152 / 766 / 52	193 / 709 / 21	164 / 857 / 17	212 / 639 / 40	179 / 768 / 32	158 / 680 / 62	157 / 832 / 51							
	20	1	330 / 477 / 33	276 / 599 / 27	413 / 383 / 77	336 / 472 / 62	278 / 419 / 122	262 / 521 / 100	311 / 506 / 31	266 / 626 / 25	388 / 407 / 72	328 / 501 / 58	269 / 449 / 116	260 / 550 / 94						
		2	285 / 564 / 28	230 / 681 / 23	337 / 466 / 63	278 / 576 / 51	250 / 468 / 110	235 / 579 / 89	265 / 591 / 26	225 / 722 / 21	318 / 495 / 59	268 / 603 / 48	240 / 498 / 104	231 / 605 / 83						
		3	240 / 666 / 24	197 / 817 / 19	261 / 597 / 49	213 / 728 / 39	184 / 637 / 81	169 / 766 / 65	227 / 709 / 23	191 / 857 / 18	248 / 639 / 46	208 / 768 / 37	178 / 680 / 77	173 / 832 / 63						
	25	1	330 / 477 / 33	276 / 599 / 27	413 / 383 / 77	336 / 472 / 62	310 / 419 / 147	288 / 521 / 120	311 / 506 / 31	266 / 626 / 25	388 / 407 / 72	328 / 501 / 58	300 / 449 / 140	284 / 550 / 112						
		2	285 / 564 / 28	230 / 681 / 23	337 / 466 / 63	278 / 576 / 51	279 / 468 / 132	258 / 579 / 107	265 / 591 / 26	225 / 722 / 21	318 / 495 / 59	268 / 603 / 48	267 / 498 / 125	253 / 605 / 100						
		3	240 / 666 / 24	197 / 817 / 19	261 / 597 / 49	213 / 728 / 39	205 / 637 / 98	186 / 766 / 78	227 / 709 / 23	191 / 857 / 18	248 / 639 / 46	208 / 768 / 37	198 / 680 / 93	190 / 832 / 75						
15	1	254 / 543 / 27	226 / 663 / 22	314 / 434 / 59	276 / 526 / 47	233 / 467 / 87	234 / 574 / 71	237 / 564 / 26	223 / 697 / 21	293 / 450 / 55	276 / 560 / 45	236 / 499 / 84	236 / 607 / 67							
	2	215 / 629 / 23	195 / 781 / 19	255 / 521 / 48	228 / 640 / 39	211 / 524 / 79	211 / 642 / 64	204 / 663 / 22	191 / 813 / 18	244 / 555 / 46	226 / 674 / 37	212 / 557 / 76	213 / 676 / 61							
	3	182 / 746 / 20	165 / 922 / 16	201 / 677 / 38	180 / 830 / 31	157 / 718 / 59	156 / 867 / 47	171 / 778 / 19	159 / 947 / 15	190 / 711 / 36	176 / 860 / 29	156 / 751 / 56	160 / 927 / 46							
	20	1	298 / 543 / 30	261 / 663 / 24	369 / 434 / 69	319 / 526 / 55	261 / 467 / 108	257 / 574 / 87	278 / 564 / 28	256 / 697 / 23	343 / 450 / 64	317 / 560 / 52	263 / 499 / 104	258 / 607 / 83						
		2	253 / 629 / 25	226 / 781 / 21	299 / 521 / 56	264 / 640 / 45	236 / 524 / 98	232 / 642 / 79	240 / 663 / 24	220 / 813 / 19	286 / 555 / 54	259 / 674 / 43	237 / 557 / 94	233 / 676 / 75						
		3	214 / 746 / 21	191 / 922 / 18	235 / 677 / 44	208 / 830 / 36	176 / 718 / 73	171 / 867 / 58	201 / 778 / 20	183 / 947 / 16	223 / 711 / 42	202 / 860 / 34	174 / 751 / 69	175 / 927 / 56						
	25	1	298 / 543 / 30	261 / 663 / 24	369 / 434 / 69	319 / 526 / 55	290 / 467 / 130	279 / 574 / 105	278 / 564 / 28	256 / 697 / 23	343 / 450 / 64	317 / 560 / 52	290 / 499 / 125	280 / 607 / 100						
		2	253 / 629 / 25	226 / 781 / 21	299 / 521 / 56	264 / 640 / 45	262 / 524 / 117	253 / 642 / 95	240 / 663 / 24	220 / 813 / 19	286 / 555 / 54	259 / 674 / 43	261 / 557 / 112	252 / 676 / 90						
		3	214 / 746 / 21	191 / 922 / 18	235 / 677 / 44	208 / 830 / 36	195 / 718 / 88	186 / 867 / 70	201 / 778 / 20	183 / 947 / 16	223 / 711 / 42	202 / 860 / 34	192 / 751 / 83	189 / 927 / 68						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	468 / 135 / 45	461 / 376 / 44	466 / 150 / 87	466 / 241 / 87	412 / 195 / 207	412 / 306 / 207	468 / 135 / 45	440 / 395 / 42	466 / 167 / 87	466 / 266 / 87	412 / 216 / 207	412 / 338 / 207	468 / 143 / 45	419 / 413 / 40	466 / 185 / 87	466 / 292 / 87	412 / 237 / 207	400 / 360 / 201
2		468 / 342 / 45	391 / 441 / 37	466 / 232 / 87	466 / 364 / 87	412 / 246 / 207	395 / 367 / 198	461 / 371 / 44	370 / 459 / 35	466 / 257 / 87	446 / 383 / 83	412 / 272 / 207	377 / 386 / 190	440 / 388 / 42	356 / 483 / 34	466 / 282 / 87	425 / 400 / 79	412 / 299 / 207	360 / 403 / 181	
3		405 / 422 / 39	328 / 524 / 32	446 / 379 / 83	357 / 467 / 66	354 / 403 / 178	284 / 496 / 143	391 / 448 / 37	315 / 550 / 30	425 / 398 / 79	343 / 492 / 64	337 / 421 / 169	273 / 521 / 137	370 / 463 / 35	301 / 574 / 29	405 / 415 / 75	329 / 517 / 61	325 / 445 / 163	261 / 545 / 131	
35		1	501 / 131 / 46	501 / 182 / 46	499 / 146 / 92	499 / 233 / 92	438 / 190 / 230	438 / 298 / 230	501 / 131 / 46	486 / 395 / 44	499 / 162 / 92	499 / 258 / 92	438 / 210 / 230	438 / 328 / 230	501 / 139 / 46	463 / 413 / 42	499 / 179 / 92	499 / 283 / 92	438 / 231 / 230	438 / 360 / 230
		2	501 / 332 / 46	432 / 441 / 40	499 / 225 / 92	499 / 353 / 92	438 / 240 / 230	432 / 367 / 227	501 / 365 / 46	409 / 459 / 38	499 / 249 / 92	492 / 383 / 91	438 / 264 / 230	413 / 386 / 217	486 / 388 / 44	393 / 483 / 36	499 / 274 / 92	469 / 400 / 87	438 / 290 / 230	394 / 403 / 207
		3	447 / 422 / 41	363 / 524 / 33	492 / 379 / 91	393 / 467 / 73	387 / 403 / 204	311 / 496 / 164	432 / 448 / 40	347 / 550 / 32	469 / 398 / 87	378 / 492 / 70	368 / 421 / 194	299 / 521 / 157	409 / 463 / 38	332 / 574 / 31	446 / 415 / 83	363 / 517 / 67	356 / 445 / 187	286 / 545 / 150
40		1	546 / 129 / 104	546 / 180 / 104	531 / 141 / 147	531 / 226 / 147	469 / 187 / 262	469 / 294 / 262	546 / 129 / 104	537 / 395 / 102	531 / 157 / 147	531 / 250 / 147	469 / 207 / 262	469 / 323 / 262	546 / 136 / 104	512 / 413 / 97	531 / 174 / 147	531 / 275 / 147	469 / 227 / 262	469 / 354 / 262
		2	546 / 326 / 104	478 / 441 / 91	531 / 219 / 147	531 / 342 / 147	469 / 236 / 262	469 / 367 / 262	546 / 360 / 104	452 / 459 / 86	531 / 242 / 147	531 / 377 / 147	469 / 260 / 262	448 / 386 / 250	537 / 388 / 102	435 / 483 / 83	531 / 266 / 147	515 / 400 / 142	469 / 286 / 262	428 / 403 / 239
		3	495 / 422 / 94	401 / 524 / 76	531 / 373 / 147	432 / 467 / 119	421 / 403 / 235	338 / 496 / 189	478 / 448 / 91	384 / 550 / 73	515 / 398 / 142	415 / 492 / 115	400 / 421 / 223	324 / 521 / 181	452 / 463 / 86	367 / 574 / 70	490 / 415 / 135	399 / 517 / 110	386 / 445 / 216	310 / 545 / 173
30	1	468 / 158 / 45	398 / 427 / 38	466 / 203 / 87	466 / 319 / 87	412 / 260 / 207	383 / 375 / 192	468 / 173 / 45	384 / 448 / 37	466 / 222 / 87	466 / 348 / 87	412 / 283 / 207	366 / 390 / 184							
	2	426 / 410 / 41	342 / 505 / 33	466 / 309 / 87	405 / 415 / 75	412 / 326 / 207	342 / 418 / 172	405 / 424 / 39	328 / 526 / 32	466 / 337 / 87	391 / 436 / 73	406 / 350 / 204	331 / 439 / 166							
	3	356 / 486 / 34	287 / 595 / 28	391 / 437 / 73	316 / 539 / 59	308 / 459 / 155	250 / 567 / 126	342 / 507 / 33	273 / 614 / 26	370 / 450 / 69	302 / 559 / 56	296 / 479 / 149	238 / 586 / 120							
	35	1	501 / 153 / 46	440 / 427 / 40	499 / 197 / 92	499 / 310 / 92	438 / 253 / 230	419 / 375 / 220	501 / 168 / 46	424 / 448 / 39	499 / 215 / 92	499 / 338 / 92	438 / 275 / 230	400 / 390 / 210						
		2	470 / 410 / 43	378 / 505 / 35	499 / 300 / 92	446 / 415 / 83	438 / 317 / 230	375 / 418 / 197	447 / 424 / 41	363 / 526 / 33	499 / 327 / 92	431 / 436 / 80	438 / 345 / 230	362 / 439 / 190						
		3	393 / 486 / 36	316 / 595 / 29	431 / 437 / 80	348 / 539 / 65	337 / 459 / 177	273 / 567 / 144	378 / 507 / 35	301 / 614 / 28	408 / 450 / 76	333 / 559 / 62	324 / 479 / 170	261 / 586 / 137						
	40	1	546 / 151 / 104	486 / 427 / 92	531 / 191 / 147	531 / 301 / 147	469 / 249 / 262	455 / 375 / 254	546 / 165 / 104	469 / 448 / 89	531 / 209 / 147	531 / 328 / 147	469 / 271 / 262	434 / 390 / 242						
		2	520 / 410 / 99	418 / 505 / 80	531 / 291 / 147	490 / 415 / 135	469 / 313 / 262	407 / 418 / 227	495 / 424 / 94	401 / 526 / 76	531 / 317 / 147	473 / 436 / 131	469 / 340 / 262	393 / 439 / 219						
		3	435 / 486 / 83	350 / 595 / 67	473 / 437 / 131	382 / 539 / 106	366 / 459 / 204	297 / 567 / 166	418 / 507 / 80	333 / 614 / 63	448 / 450 / 124	365 / 559 / 101	352 / 479 / 196	283 / 586 / 158						
30	1	461 / 378 / 44	370 / 468 / 35	466 / 242 / 87	459 / 372 / 85	412 / 308 / 207	354 / 409 / 178	468 / 173 / 45	384 / 448 / 37	466 / 222 / 87	466 / 348 / 87	412 / 283 / 207	366 / 390 / 184							
	2	391 / 443 / 37	315 / 544 / 30	466 / 365 / 87	377 / 456 / 70	395 / 369 / 198	313 / 450 / 158	405 / 424 / 39	328 / 526 / 32	466 / 337 / 87	391 / 436 / 73	406 / 350 / 204	331 / 439 / 166							
	3	328 / 526 / 32	266 / 646 / 26	357 / 469 / 66	288 / 577 / 54	284 / 498 / 143	232 / 617 / 117	342 / 507 / 33	273 / 614 / 26	370 / 450 / 69	302 / 559 / 56	296 / 479 / 149	238 / 586 / 120							
	35	1	501 / 183 / 46	409 / 468 / 38	499 / 235 / 92	499 / 367 / 92	438 / 299 / 230	387 / 409 / 204	501 / 168 / 46	424 / 448 / 39	499 / 215 / 92	499 / 338 / 92	438 / 275 / 230	400 / 390 / 210						
		2	432 / 443 / 40	347 / 544 / 32	499 / 355 / 92	416 / 456 / 77	432 / 369 / 227	343 / 450 / 180	447 / 424 / 41	363 / 526 / 33	499 / 327 / 92	431 / 436 / 80	438 / 345 / 230	362 / 439 / 190						
		3	363 / 526 / 33	293 / 646 / 27	393 / 469 / 73	318 / 577 / 59	311 / 498 / 164	254 / 617 / 134	378 / 507 / 35	301 / 614 / 28	408 / 450 / 76	333 / 559 / 62	324 / 479 / 170	261 / 586 / 137						
	40	1	546 / 180 / 104	452 / 468 / 86	531 / 227 / 147	531 / 355 / 147	469 / 295 / 262	421 / 409 / 235	546 / 165 / 104	469 / 448 / 89	531 / 209 / 147	531 / 328 / 147	469 / 271 / 262	434 / 390 / 242						
		2	478 / 443 / 91	384 / 544 / 73	531 / 344 / 147	457 / 456 / 126	469 / 369 / 262	372 / 450 / 208	495 / 424 / 94	401 / 526 / 76	531 / 317 / 147	473 / 436 / 131	469 / 340 / 262	393 / 439 / 219						
		3	401 / 526 / 76	324 / 646 / 62	432 / 469 / 119	349 / 577 / 96	338 / 498 / 189	276 / 617 / 154	418 / 507 / 80	333 / 614 / 63	448 / 450 / 124	365 / 559 / 101	352 / 479 / 196	283 / 586 / 158						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	440 / 390 / 42	356 / 486 / 34	466 / 262 / 87	439 / 384 / 82	412 / 333 / 207	337 / 420 / 169	412 / 424 / 39	328 / 517 / 32	466 / 305 / 87	411 / 418 / 77	389 / 365 / 195	323 / 452 / 158	384 / 453 / 37	308 / 554 / 30	466 / 352 / 87	384 / 447 / 71	366 / 394 / 184	319 / 488 / 149
2		377 / 461 / 36	301 / 561 / 29	446 / 378 / 83	363 / 474 / 68	377 / 381 / 190	302 / 468 / 152	349 / 494 / 34	280 / 602 / 27	418 / 411 / 78	336 / 506 / 63	348 / 408 / 175	293 / 509 / 143	328 / 531 / 32	266 / 653 / 26	391 / 441 / 73	316 / 544 / 59	325 / 436 / 163	288 / 546 / 134	
3		315 / 543 / 30	259 / 678 / 25	343 / 486 / 64	281 / 607 / 52	273 / 515 / 137	221 / 632 / 111	294 / 585 / 28	238 / 718 / 23	322 / 528 / 60	261 / 649 / 49	256 / 556 / 128	215 / 689 / 105	273 / 620 / 26	224 / 771 / 22	302 / 565 / 56	240 / 682 / 45	238 / 592 / 120	207 / 721 / 96	
35		1	486 / 390 / 44	393 / 486 / 36	499 / 254 / 92	484 / 384 / 90	438 / 324 / 230	368 / 420 / 194	455 / 424 / 42	363 / 517 / 33	499 / 296 / 92	454 / 418 / 84	425 / 365 / 224	352 / 452 / 180	424 / 453 / 39	340 / 554 / 31	499 / 341 / 92	424 / 447 / 78	400 / 394 / 210	347 / 488 / 170
		2	417 / 461 / 38	332 / 561 / 31	492 / 378 / 91	401 / 474 / 74	413 / 381 / 217	330 / 468 / 174	386 / 494 / 35	309 / 602 / 28	461 / 411 / 85	371 / 506 / 69	381 / 408 / 200	320 / 509 / 164	363 / 531 / 33	293 / 653 / 27	431 / 441 / 80	348 / 544 / 65	356 / 436 / 187	313 / 546 / 154
		3	347 / 543 / 32	286 / 678 / 26	378 / 486 / 70	310 / 607 / 58	299 / 515 / 157	241 / 632 / 127	324 / 585 / 30	262 / 718 / 24	356 / 528 / 66	288 / 649 / 53	280 / 556 / 147	235 / 689 / 120	301 / 620 / 28	247 / 771 / 23	333 / 565 / 62	265 / 682 / 49	261 / 592 / 137	225 / 721 / 110
40		1	537 / 390 / 102	435 / 486 / 83	531 / 247 / 147	531 / 384 / 147	469 / 319 / 262	400 / 420 / 223	503 / 424 / 96	401 / 517 / 76	531 / 288 / 147	498 / 418 / 137	462 / 365 / 258	382 / 452 / 208	469 / 453 / 89	375 / 554 / 71	531 / 331 / 147	465 / 447 / 128	434 / 394 / 242	375 / 488 / 196
		2	460 / 461 / 88	367 / 561 / 70	531 / 372 / 147	440 / 474 / 122	448 / 381 / 250	359 / 468 / 200	426 / 494 / 81	341 / 602 / 65	506 / 411 / 140	407 / 506 / 112	414 / 408 / 231	346 / 509 / 189	401 / 531 / 76	324 / 653 / 62	473 / 441 / 131	382 / 544 / 106	386 / 436 / 216	338 / 546 / 177
		3	384 / 543 / 73	316 / 678 / 60	415 / 486 / 115	341 / 607 / 94	324 / 515 / 181	262 / 632 / 146	358 / 585 / 68	290 / 718 / 55	390 / 528 / 108	316 / 649 / 87	304 / 556 / 170	255 / 689 / 139	333 / 620 / 63	273 / 771 / 52	365 / 565 / 101	291 / 682 / 80	283 / 592 / 158	243 / 721 / 127
30	1	356 / 477 / 34	298 / 599 / 28	446 / 383 / 83	362 / 472 / 66	342 / 419 / 172	314 / 521 / 140	335 / 506 / 32	286 / 626 / 26	418 / 407 / 78	352 / 501 / 63	330 / 449 / 163	309 / 550 / 131							
	2	308 / 564 / 30	248 / 681 / 24	363 / 466 / 68	299 / 576 / 55	308 / 468 / 155	282 / 579 / 126	287 / 591 / 28	242 / 722 / 22	343 / 495 / 64	288 / 603 / 51	295 / 498 / 146	275 / 605 / 117							
	3	259 / 666 / 25	213 / 817 / 20	281 / 597 / 52	230 / 728 / 42	227 / 637 / 114	203 / 766 / 91	245 / 709 / 24	205 / 857 / 19	268 / 639 / 50	223 / 768 / 40	218 / 680 / 108	206 / 832 / 88							
	35	1	393 / 477 / 36	328 / 599 / 30	492 / 383 / 91	398 / 472 / 73	375 / 419 / 197	341 / 521 / 160	370 / 506 / 34	314 / 626 / 28	461 / 407 / 85	387 / 501 / 69	361 / 449 / 187	334 / 550 / 150						
		2	340 / 564 / 31	274 / 681 / 25	401 / 466 / 74	330 / 576 / 60	337 / 468 / 177	305 / 579 / 144	316 / 591 / 29	266 / 722 / 24	378 / 495 / 70	316 / 603 / 56	322 / 498 / 167	297 / 605 / 134						
		3	286 / 666 / 26	235 / 817 / 21	310 / 597 / 58	253 / 728 / 46	248 / 637 / 130	220 / 766 / 104	270 / 709 / 25	226 / 857 / 20	295 / 639 / 55	245 / 768 / 44	238 / 680 / 124	223 / 832 / 100						
	40	1	435 / 477 / 83	359 / 599 / 68	531 / 377 / 147	435 / 472 / 119	407 / 419 / 227	367 / 521 / 185	409 / 506 / 78	342 / 626 / 63	506 / 407 / 140	422 / 501 / 112	391 / 449 / 216	358 / 550 / 173						
		2	375 / 564 / 71	299 / 681 / 57	440 / 466 / 122	360 / 576 / 99	366 / 468 / 204	329 / 579 / 166	350 / 591 / 67	290 / 722 / 54	415 / 495 / 115	344 / 603 / 92	349 / 498 / 193	318 / 605 / 154						
		3	316 / 666 / 60	256 / 817 / 49	341 / 597 / 94	276 / 728 / 76	269 / 637 / 150	237 / 766 / 120	299 / 709 / 57	246 / 857 / 46	324 / 639 / 90	267 / 768 / 71	259 / 680 / 143	239 / 832 / 116						
30	1	322 / 543 / 31	280 / 663 / 25	398 / 434 / 74	342 / 526 / 59	318 / 467 / 152	302 / 574 / 123	301 / 564 / 29	274 / 697 / 24	370 / 450 / 69	339 / 560 / 56	318 / 499 / 146	302 / 607 / 117							
	2	273 / 629 / 26	242 / 781 / 22	322 / 521 / 60	283 / 640 / 49	288 / 524 / 137	274 / 642 / 111	259 / 663 / 25	235 / 813 / 20	309 / 555 / 58	277 / 674 / 46	286 / 557 / 131	272 / 676 / 105							
	3	231 / 746 / 22	205 / 922 / 18	254 / 677 / 47	223 / 830 / 39	214 / 718 / 102	202 / 867 / 82	217 / 778 / 21	196 / 947 / 17	240 / 711 / 45	216 / 860 / 36	210 / 751 / 96	204 / 927 / 79							
	35	1	355 / 543 / 33	307 / 663 / 26	439 / 434 / 81	375 / 526 / 65	346 / 467 / 174	325 / 574 / 140	332 / 564 / 31	300 / 697 / 25	408 / 450 / 76	370 / 560 / 62	345 / 499 / 167	324 / 607 / 134						
		2	301 / 629 / 28	266 / 781 / 23	356 / 521 / 66	310 / 640 / 53	313 / 524 / 157	294 / 642 / 127	286 / 663 / 26	257 / 813 / 21	340 / 555 / 63	303 / 674 / 51	310 / 557 / 150	292 / 676 / 120						
		3	255 / 746 / 24	224 / 922 / 19	280 / 677 / 52	245 / 830 / 42	233 / 718 / 117	217 / 867 / 94	239 / 778 / 22	214 / 947 / 18	265 / 711 / 49	236 / 860 / 39	228 / 751 / 110	219 / 927 / 90						
	40	1	392 / 543 / 75	334 / 663 / 60	482 / 434 / 133	407 / 526 / 106	375 / 467 / 200	348 / 574 / 162	367 / 564 / 70	325 / 697 / 57	448 / 450 / 124	401 / 560 / 101	372 / 499 / 193	346 / 607 / 154						
		2	333 / 629 / 63	289 / 781 / 52	390 / 521 / 108	337 / 640 / 87	339 / 524 / 181	315 / 642 / 146	316 / 663 / 60	279 / 813 / 49	374 / 555 / 103	328 / 674 / 83	335 / 557 / 173	311 / 676 / 139						
		3	282 / 746 / 54	244 / 922 / 44	307 / 677 / 85	266 / 830 / 69	252 / 718 / 135	232 / 867 / 108	265 / 778 / 51	232 / 947 / 41	291 / 711 / 80	255 / 860 / 64	246 / 751 / 127	234 / 927 / 104						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof

30-60ft

74in x 41.2in

Exposure Category : B	Wind Speed [mph]		95						100						105																					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																													
Ground Snow	45	1	589 / 125 / 109	589 / 174 / 109	573 / 137 / 156	573 / 219 / 156	491 / 181 / 280	491 / 285 / 280	589 / 125 / 109	589 / 193 / 109	573 / 152 / 156	573 / 242 / 156	491 / 201 / 280	491 / 314 / 280	589 / 132 / 109	570 / 413 / 105	573 / 168 / 156	573 / 266 / 156	491 / 221 / 280	491 / 344 / 280																
		2	589 / 316 / 109	532 / 441 / 98	573 / 212 / 156	573 / 332 / 156	491 / 229 / 280	491 / 357 / 280	589 / 348 / 109	503 / 459 / 93	573 / 234 / 156	573 / 365 / 156	491 / 253 / 280	484 / 386 / 275	589 / 382 / 109	484 / 483 / 89	573 / 257 / 156	573 / 400 / 156	491 / 278 / 280	461 / 403 / 263																
		3	551 / 422 / 102	446 / 524 / 83	573 / 362 / 156	481 / 467 / 131	454 / 403 / 259	365 / 496 / 208	532 / 448 / 98	427 / 550 / 79	573 / 398 / 156	462 / 492 / 126	432 / 421 / 246	350 / 521 / 199	503 / 463 / 93	408 / 574 / 76	545 / 415 / 148	444 / 517 / 121	417 / 445 / 237	335 / 545 / 191																
	50	1	628 / 121 / 113	628 / 168 / 113	621 / 135 / 167	621 / 216 / 167	519 / 179 / 301	519 / 281 / 301	628 / 121 / 113	628 / 187 / 113	621 / 150 / 167	621 / 238 / 167	519 / 198 / 301	519 / 309 / 301	628 / 128 / 113	628 / 206 / 113	621 / 166 / 167	621 / 262 / 167	519 / 217 / 301	519 / 339 / 301																
		2	628 / 306 / 113	586 / 441 / 106	621 / 208 / 167	621 / 326 / 167	519 / 226 / 301	519 / 351 / 301	628 / 337 / 113	555 / 459 / 100	621 / 230 / 167	621 / 359 / 167	519 / 249 / 301	519 / 386 / 301	628 / 369 / 113	534 / 483 / 96	621 / 253 / 167	621 / 394 / 167	519 / 273 / 301	495 / 403 / 287																
		3	607 / 422 / 109	492 / 524 / 89	621 / 356 / 167	530 / 467 / 142	487 / 403 / 282	392 / 496 / 227	586 / 448 / 106	471 / 550 / 85	621 / 391 / 167	509 / 492 / 137	463 / 421 / 268	376 / 521 / 218	555 / 463 / 100	450 / 574 / 81	601 / 415 / 161	489 / 517 / 131	447 / 445 / 259	360 / 545 / 208																
	60	1	694 / 113 / 120	694 / 157 / 120	688 / 126 / 181	688 / 202 / 181	584 / 170 / 337	584 / 268 / 337	694 / 113 / 120	694 / 174 / 120	688 / 140 / 181	688 / 223 / 181	584 / 188 / 337	584 / 295 / 337	694 / 119 / 120	694 / 192 / 120	688 / 155 / 181	688 / 245 / 181	584 / 207 / 337	584 / 323 / 337																
		2	694 / 286 / 120	694 / 441 / 120	688 / 195 / 181	688 / 305 / 181	584 / 215 / 337	584 / 335 / 337	694 / 315 / 120	657 / 459 / 114	688 / 215 / 181	688 / 336 / 181	584 / 238 / 337	584 / 368 / 337	694 / 345 / 120	633 / 483 / 110	688 / 237 / 181	688 / 368 / 181	584 / 261 / 337	584 / 403 / 337																
		3	694 / 407 / 120	583 / 524 / 101	688 / 332 / 181	628 / 467 / 165	574 / 403 / 332	462 / 496 / 267	694 / 448 / 120	558 / 550 / 97	688 / 366 / 181	604 / 492 / 159	546 / 421 / 316	443 / 521 / 256	657 / 463 / 114	533 / 574 / 92	688 / 401 / 181	580 / 517 / 152	527 / 445 / 305	424 / 545 / 245																
110	45	1	589 / 146 / 109	541 / 427 / 100	573 / 185 / 156	573 / 291 / 156	491 / 242 / 280	491 / 375 / 280	589 / 160 / 109	522 / 448 / 96	573 / 202 / 156	573 / 317 / 156	491 / 263 / 280	469 / 390 / 267	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	579 / 410 / 107	465 / 505 / 86	573 / 282 / 156	545 / 415 / 148	491 / 303 / 280	439 / 418 / 250	551 / 424 / 102	446 / 526 / 83	573 / 307 / 156	527 / 436 / 143	491 / 330 / 280	424 / 439 / 242																								
3	484 / 486 / 89	389 / 595 / 72	527 / 437 / 143	425 / 539 / 116	395 / 459 / 225	320 / 567 / 182	465 / 507 / 86	370 / 614 / 69	499 / 450 / 136	407 / 559 / 111	380 / 479 / 216	305 / 586 / 174																								
50	1	628 / 141 / 113	596 / 427 / 107	621 / 182 / 167	621 / 287 / 167	519 / 238 / 301	519 / 370 / 301	628 / 155 / 113	576 / 448 / 104	621 / 199 / 167	621 / 312 / 167	519 / 260 / 301	503 / 390 / 292																							
	2	628 / 403 / 113	513 / 505 / 92	621 / 277 / 167	601 / 415 / 161	519 / 299 / 301	471 / 418 / 273	607 / 424 / 109	492 / 526 / 89	621 / 302 / 167	581 / 436 / 156	519 / 325 / 301	455 / 439 / 264																							
	3	534 / 486 / 96	429 / 595 / 77	581 / 437 / 156	469 / 539 / 126	423 / 459 / 245	344 / 567 / 199	513 / 507 / 92	408 / 614 / 74	550 / 450 / 148	448 / 559 / 120	408 / 479 / 236	328 / 586 / 190																							
60	1	694 / 132 / 120	694 / 210 / 120	688 / 170 / 181	688 / 268 / 181	584 / 227 / 337	584 / 353 / 337	694 / 145 / 120	682 / 448 / 118	688 / 186 / 181	688 / 292 / 181	584 / 248 / 337	584 / 383 / 337																							
	2	694 / 376 / 120	608 / 505 / 105	688 / 259 / 181	688 / 401 / 181	584 / 285 / 337	556 / 418 / 321	694 / 409 / 120	583 / 526 / 101	688 / 282 / 181	688 / 436 / 181	584 / 310 / 337	537 / 439 / 310																							
	3	633 / 486 / 110	509 / 595 / 88	688 / 437 / 181	555 / 539 / 146	499 / 459 / 288	405 / 567 / 234	608 / 507 / 105	484 / 614 / 84	652 / 450 / 171	531 / 559 / 140	480 / 479 / 278	386 / 586 / 223																							
120	45	1	589 / 175 / 109	503 / 468 / 93	573 / 220 / 156	573 / 344 / 156	491 / 286 / 280	454 / 409 / 259	589 / 160 / 109	522 / 448 / 96	573 / 202 / 156	573 / 317 / 156	491 / 263 / 280	469 / 390 / 267																						
		2	532 / 443 / 98	427 / 544 / 79	573 / 333 / 156	509 / 456 / 138	491 / 358 / 280	402 / 450 / 229	551 / 424 / 102	446 / 526 / 83	573 / 307 / 156	527 / 436 / 143	491 / 330 / 280	424 / 439 / 242																						
		3	446 / 526 / 83	361 / 646 / 67	481 / 469 / 131	388 / 577 / 106	365 / 498 / 208	298 / 617 / 170	465 / 507 / 86	370 / 614 / 69	499 / 450 / 136	407 / 559 / 111	380 / 479 / 216	305 / 586 / 174																						
	50	1	628 / 169 / 113	555 / 468 / 100	621 / 217 / 167	621 / 339 / 167	519 / 282 / 301	487 / 409 / 282	628 / 155 / 113	576 / 448 / 104	621 / 199 / 167	621 / 312 / 167	519 / 260 / 301	503 / 390 / 292																						
		2	586 / 443 / 106	471 / 544 / 85	621 / 328 / 167	560 / 456 / 150	519 / 353 / 301	431 / 450 / 250	607 / 424 / 109	492 / 526 / 89	621 / 302 / 167	581 / 436 / 156	519 / 325 / 301	455 / 439 / 264																						
		3	492 / 526 / 89	398 / 646 / 72	530 / 469 / 142	428 / 577 / 115	392 / 498 / 227	320 / 617 / 185	513 / 507 / 92	408 / 614 / 74	550 / 450 / 148	448 / 559 / 120	408 / 479 / 236	328 / 586 / 190																						
	60	1	694 / 158 / 120	657 / 468 / 114	688 / 203 / 181	688 / 317 / 181	584 / 269 / 337	574 / 409 / 332	694 / 145 / 120	682 / 448 / 118	688 / 186 / 181	688 / 292 / 181	584 / 248 / 337	584 / 383 / 337																						
		2	694 / 443 / 120	558 / 544 / 97	688 / 306 / 181	664 / 456 / 175	584 / 337 / 337	509 / 450 / 294	694 / 409 / 120	583 / 526 / 101	688 / 282 / 181	688 / 436 / 181	584 / 310 / 337	537 / 439 / 310																						
		3	583 / 526 / 101	471 / 646 / 82	628 / 469 / 165	507 / 577 / 133	462 / 498 / 267	377 / 617 / 218	608 / 507 / 105	484 / 614 / 84	652 / 450 / 171	531 / 559 / 140	480 / 479 / 278	386 / 586 / 223																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	45	1	589 / 190 / 109	484 / 486 / 89	573 / 239 / 156	573 / 372 / 156	491 / 310 / 280	432 / 420 / 246	560 / 424 / 103	446 / 517 / 83	573 / 279 / 156	555 / 418 / 151	491 / 359 / 280	411 / 452 / 229	522 / 453 / 96	418 / 554 / 77	573 / 321 / 156	518 / 447 / 141	469 / 394 / 267	403 / 488 / 216
2		513 / 461 / 95	408 / 561 / 76	573 / 360 / 156	490 / 474 / 133	484 / 381 / 275	387 / 468 / 220	475 / 494 / 88	380 / 602 / 70	564 / 411 / 153	453 / 506 / 123	447 / 408 / 254	373 / 509 / 208	446 / 531 / 83	361 / 653 / 67	527 / 441 / 143	425 / 544 / 116	417 / 436 / 237	363 / 546 / 195	
3		427 / 543 / 79	352 / 678 / 65	462 / 486 / 126	379 / 607 / 103	350 / 515 / 199	283 / 632 / 161	399 / 585 / 74	323 / 718 / 60	435 / 528 / 118	351 / 649 / 96	328 / 556 / 187	274 / 689 / 153	370 / 620 / 69	304 / 771 / 56	407 / 565 / 111	324 / 682 / 88	305 / 592 / 174	261 / 721 / 140	
50		1	628 / 184 / 113	534 / 486 / 96	621 / 235 / 167	621 / 366 / 167	519 / 305 / 301	463 / 420 / 268	617 / 424 / 111	492 / 517 / 89	621 / 274 / 167	611 / 418 / 164	519 / 354 / 301	441 / 452 / 250	576 / 453 / 104	461 / 554 / 83	621 / 316 / 167	571 / 447 / 153	503 / 394 / 292	430 / 488 / 236
		2	565 / 461 / 102	450 / 561 / 81	621 / 355 / 167	540 / 474 / 145	519 / 381 / 301	416 / 468 / 241	523 / 494 / 94	419 / 602 / 76	621 / 411 / 167	499 / 506 / 134	479 / 408 / 278	400 / 509 / 227	492 / 531 / 89	398 / 653 / 72	581 / 441 / 156	469 / 544 / 126	447 / 436 / 259	388 / 546 / 213
		3	471 / 543 / 85	387 / 678 / 70	509 / 486 / 137	418 / 607 / 112	376 / 515 / 218	304 / 632 / 176	440 / 585 / 79	356 / 718 / 64	479 / 528 / 129	387 / 649 / 104	352 / 556 / 204	294 / 689 / 167	408 / 620 / 74	335 / 771 / 61	448 / 565 / 120	357 / 682 / 96	328 / 592 / 190	279 / 721 / 153
60		1	694 / 172 / 120	633 / 486 / 110	688 / 220 / 181	688 / 342 / 181	584 / 291 / 337	546 / 420 / 316	694 / 201 / 120	583 / 517 / 101	688 / 256 / 181	688 / 397 / 181	584 / 338 / 337	509 / 452 / 294	682 / 453 / 118	546 / 554 / 95	688 / 295 / 181	676 / 447 / 178	584 / 388 / 337	486 / 488 / 278
		2	670 / 461 / 116	533 / 561 / 92	688 / 331 / 181	640 / 474 / 168	584 / 364 / 337	490 / 468 / 283	620 / 494 / 107	496 / 602 / 86	688 / 384 / 181	592 / 506 / 156	565 / 408 / 326	462 / 509 / 267	583 / 531 / 101	471 / 653 / 82	688 / 441 / 181	555 / 544 / 146	527 / 436 / 305	439 / 546 / 250
		3	558 / 543 / 97	459 / 678 / 80	604 / 486 / 159	495 / 607 / 130	443 / 515 / 256	358 / 632 / 207	521 / 585 / 90	422 / 718 / 73	567 / 528 / 149	459 / 649 / 121	414 / 556 / 240	339 / 689 / 196	484 / 620 / 84	397 / 771 / 69	531 / 565 / 140	423 / 682 / 111	386 / 592 / 223	315 / 721 / 180
Wind Speed [mph]		170						180												
45	1	484 / 477 / 89	399 / 599 / 74	573 / 366 / 156	481 / 472 / 131	439 / 419 / 250	393 / 521 / 204	456 / 506 / 84	371 / 626 / 69	564 / 407 / 153	456 / 501 / 123	422 / 449 / 237	383 / 550 / 191							
	2	418 / 564 / 77	333 / 681 / 62	490 / 466 / 133	398 / 576 / 108	395 / 468 / 225	352 / 579 / 182	389 / 591 / 72	314 / 722 / 58	462 / 495 / 126	373 / 603 / 101	377 / 498 / 212	340 / 605 / 170							
	3	352 / 666 / 65	285 / 817 / 53	379 / 597 / 103	305 / 728 / 83	290 / 637 / 165	254 / 766 / 132	333 / 709 / 62	266 / 857 / 49	361 / 639 / 98	289 / 768 / 78	279 / 680 / 157	255 / 832 / 127							
	50	1	534 / 477 / 96	440 / 599 / 79	621 / 360 / 167	530 / 472 / 142	471 / 419 / 273	419 / 521 / 222	502 / 506 / 91	408 / 626 / 74	621 / 407 / 167	499 / 501 / 134	452 / 449 / 259	407 / 550 / 208						
		2	461 / 564 / 83	366 / 681 / 66	540 / 466 / 145	438 / 576 / 118	423 / 468 / 245	376 / 579 / 199	429 / 591 / 77	346 / 722 / 62	509 / 495 / 137	408 / 603 / 109	404 / 498 / 232	362 / 605 / 185						
		3	387 / 666 / 70	314 / 817 / 57	418 / 597 / 112	336 / 728 / 90	312 / 637 / 181	271 / 766 / 144	366 / 709 / 66	293 / 857 / 53	397 / 639 / 107	316 / 768 / 85	299 / 680 / 171	272 / 832 / 139						
	60	1	633 / 477 / 110	521 / 599 / 90	688 / 336 / 181	628 / 472 / 165	556 / 419 / 321	472 / 521 / 261	595 / 506 / 103	484 / 626 / 84	688 / 380 / 181	592 / 501 / 156	527 / 449 / 305	457 / 550 / 245						
		2	546 / 564 / 95	434 / 681 / 75	640 / 466 / 168	519 / 576 / 137	499 / 468 / 288	423 / 579 / 234	509 / 591 / 88	409 / 722 / 71	604 / 495 / 159	483 / 603 / 127	471 / 498 / 272	406 / 605 / 218						
		3	459 / 666 / 80	372 / 817 / 65	495 / 597 / 130	399 / 728 / 105	367 / 637 / 212	305 / 766 / 169	434 / 709 / 75	347 / 857 / 60	471 / 639 / 124	374 / 768 / 99	349 / 680 / 201	305 / 832 / 163						
Wind Speed [mph]		190						200												
45	1	437 / 543 / 81	361 / 663 / 65	536 / 434 / 146	440 / 526 / 116	403 / 467 / 220	371 / 574 / 178	408 / 564 / 76	351 / 697 / 62	499 / 450 / 136	432 / 560 / 111	399 / 499 / 212	368 / 607 / 170							
	2	370 / 629 / 69	312 / 781 / 56	435 / 521 / 118	363 / 640 / 96	365 / 524 / 199	336 / 642 / 161	352 / 663 / 65	301 / 813 / 53	416 / 555 / 113	354 / 674 / 91	360 / 557 / 191	331 / 676 / 153							
	3	314 / 746 / 58	263 / 922 / 48	342 / 677 / 93	287 / 830 / 76	272 / 718 / 149	248 / 867 / 119	295 / 778 / 55	251 / 947 / 44	324 / 711 / 88	275 / 860 / 71	264 / 751 / 140	248 / 927 / 115							
	50	1	481 / 543 / 87	388 / 663 / 70	591 / 434 / 158	472 / 526 / 126	432 / 467 / 241	394 / 574 / 195	450 / 564 / 81	376 / 697 / 66	550 / 450 / 148	463 / 560 / 120	427 / 499 / 232	389 / 607 / 185						
		2	408 / 629 / 74	335 / 781 / 61	479 / 521 / 129	390 / 640 / 104	390 / 524 / 218	357 / 642 / 176	387 / 663 / 70	322 / 813 / 57	459 / 555 / 123	379 / 674 / 99	384 / 557 / 208	351 / 676 / 167						
		3	346 / 746 / 62	283 / 922 / 51	377 / 677 / 101	308 / 830 / 82	291 / 718 / 162	263 / 867 / 130	325 / 778 / 59	269 / 947 / 47	357 / 711 / 96	295 / 860 / 77	282 / 751 / 153	263 / 927 / 125						
	60	1	571 / 543 / 99	459 / 663 / 80	688 / 426 / 181	555 / 526 / 146	490 / 467 / 283	440 / 574 / 229	533 / 564 / 92	434 / 697 / 75	652 / 450 / 171	531 / 560 / 140	481 / 499 / 272	433 / 607 / 218						
		2	484 / 629 / 84	397 / 781 / 69	567 / 521 / 149	459 / 640 / 121	443 / 524 / 256	398 / 642 / 207	459 / 663 / 80	372 / 813 / 65	543 / 555 / 143	435 / 674 / 114	433 / 557 / 245	390 / 676 / 196						
		3	409 / 746 / 71	335 / 922 / 58	447 / 677 / 118	362 / 830 / 95	330 / 718 / 191	294 / 867 / 153	385 / 778 / 67	310 / 947 / 54	423 / 711 / 111	338 / 860 / 89	318 / 751 / 180	293 / 927 / 147						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Exposure Category : B	Wind Speed [mph]	95						100						105											
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
	70	1	746 / 105 / 125	746 / 146 / 125	740 / 117 / 192	740 / 188 / 192	642 / 162 / 371	642 / 255 / 371	746 / 105 / 125	746 / 162 / 125	740 / 130 / 192	740 / 207 / 192	642 / 179 / 371	642 / 281 / 371	746 / 111 / 125	746 / 178 / 125	740 / 144 / 192	740 / 228 / 192	642 / 197 / 371	642 / 308 / 371					
		2	746 / 265 / 125	746 / 410 / 125	740 / 181 / 192	740 / 284 / 192	642 / 205 / 371	642 / 319 / 371	746 / 292 / 125	746 / 450 / 125	740 / 200 / 192	740 / 312 / 192	642 / 226 / 371	642 / 351 / 371	746 / 320 / 125	731 / 483 / 123	740 / 220 / 192	740 / 342 / 192	642 / 248 / 371	642 / 384 / 371					
		3	746 / 378 / 125	674 / 524 / 113	740 / 309 / 192	726 / 467 / 188	642 / 390 / 371	533 / 496 / 308	746 / 416 / 125	645 / 550 / 109	740 / 340 / 192	698 / 492 / 181	631 / 421 / 364	511 / 521 / 295	746 / 455 / 125	617 / 574 / 104	740 / 372 / 192	670 / 517 / 174	609 / 445 / 352	489 / 545 / 283					
	80	1	798 / 99 / 131	798 / 138 / 131	776 / 108 / 199	776 / 173 / 199	691 / 154 / 399	691 / 242 / 399	798 / 99 / 131	798 / 152 / 131	776 / 120 / 199	776 / 192 / 199	691 / 170 / 399	691 / 266 / 399	798 / 105 / 131	798 / 168 / 131	776 / 133 / 199	776 / 211 / 199	691 / 187 / 399	691 / 292 / 399					
		2	798 / 250 / 131	798 / 386 / 131	776 / 168 / 199	776 / 262 / 199	691 / 194 / 399	691 / 303 / 399	798 / 275 / 131	798 / 424 / 131	776 / 185 / 199	776 / 289 / 199	691 / 215 / 399	691 / 333 / 399	798 / 302 / 131	798 / 464 / 131	776 / 204 / 199	776 / 316 / 199	691 / 236 / 399	691 / 364 / 399					
		3	798 / 357 / 131	765 / 524 / 126	776 / 286 / 199	776 / 440 / 199	691 / 370 / 399	604 / 496 / 349	798 / 392 / 131	733 / 550 / 120	776 / 314 / 199	776 / 483 / 199	691 / 407 / 399	580 / 521 / 335	798 / 429 / 131	700 / 574 / 115	776 / 344 / 199	760 / 517 / 195	691 / 445 / 399	555 / 545 / 321					
	90	1	838 / 93 / 135	838 / 129 / 135	833 / 104 / 211	833 / 166 / 211	731 / 146 / 422	731 / 229 / 422	838 / 93 / 135	838 / 143 / 135	833 / 116 / 211	833 / 184 / 211	731 / 161 / 422	731 / 252 / 422	838 / 98 / 135	838 / 158 / 135	833 / 128 / 211	833 / 202 / 211	731 / 177 / 422	731 / 276 / 422					
		2	838 / 235 / 135	838 / 363 / 135	833 / 161 / 211	833 / 252 / 211	731 / 184 / 422	731 / 286 / 422	838 / 259 / 135	838 / 398 / 135	833 / 178 / 211	833 / 277 / 211	731 / 203 / 422	731 / 315 / 422	838 / 283 / 135	838 / 435 / 135	833 / 195 / 211	833 / 303 / 211	731 / 223 / 422	731 / 345 / 422					
		3	838 / 335 / 135	838 / 513 / 135	833 / 274 / 211	833 / 422 / 211	731 / 350 / 422	676 / 496 / 390	838 / 368 / 135	820 / 550 / 132	833 / 302 / 211	833 / 463 / 211	731 / 385 / 422	648 / 521 / 374	838 / 402 / 135	783 / 574 / 126	833 / 330 / 211	833 / 506 / 211	731 / 421 / 422	621 / 545 / 359					
		Wind Speed [mph]	110						115																
	70	1	746 / 122 / 125	746 / 195 / 125	740 / 158 / 192	740 / 249 / 192	642 / 216 / 371	642 / 336 / 371	746 / 134 / 125	746 / 213 / 125	740 / 173 / 192	740 / 271 / 192	642 / 236 / 371	642 / 365 / 371	ASCE Group Zone										
		2	746 / 349 / 125	703 / 505 / 118	740 / 241 / 192	740 / 373 / 192	642 / 271 / 371	642 / 418 / 371	746 / 380 / 125	674 / 526 / 113	740 / 262 / 192	740 / 405 / 192	642 / 295 / 371	620 / 439 / 358											
		3	731 / 486 / 123	588 / 595 / 99	740 / 406 / 192	642 / 539 / 166	576 / 459 / 333	468 / 567 / 270	703 / 507 / 118	559 / 614 / 94	740 / 441 / 192	614 / 559 / 159	555 / 479 / 320	446 / 586 / 258											
	80	1	798 / 115 / 131	798 / 184 / 131	776 / 146 / 199	776 / 230 / 199	691 / 205 / 399	691 / 319 / 399	798 / 127 / 131	798 / 201 / 131	776 / 160 / 199	776 / 251 / 199	691 / 224 / 399	691 / 346 / 399											
		2	798 / 329 / 131	798 / 505 / 131	776 / 223 / 199	776 / 345 / 199	691 / 258 / 399	691 / 397 / 399	798 / 358 / 131	765 / 526 / 126	776 / 243 / 199	776 / 375 / 199	691 / 280 / 399	691 / 431 / 399											
		3	798 / 467 / 131	667 / 595 / 110	776 / 376 / 199	729 / 539 / 187	654 / 459 / 378	530 / 567 / 306	798 / 507 / 131	635 / 614 / 104	776 / 408 / 199	697 / 559 / 179	629 / 479 / 363	506 / 586 / 292											
90	1	838 / 108 / 135	838 / 173 / 135	833 / 140 / 211	833 / 221 / 211	731 / 194 / 422	731 / 302 / 422	838 / 119 / 135	838 / 189 / 135	833 / 153 / 211	833 / 241 / 211	731 / 212 / 422	731 / 328 / 422												
	2	838 / 309 / 135	838 / 474 / 135	833 / 214 / 211	833 / 331 / 211	731 / 244 / 422	731 / 376 / 422	838 / 336 / 135	838 / 515 / 135	833 / 233 / 211	833 / 360 / 211	731 / 265 / 422	731 / 408 / 422												
	3	838 / 438 / 135	747 / 595 / 121	833 / 360 / 211	815 / 539 / 207	731 / 459 / 422	593 / 567 / 343	838 / 476 / 135	710 / 614 / 115	833 / 391 / 211	780 / 559 / 198	703 / 479 / 406	565 / 586 / 327												
	Wind Speed [mph]	120						130																	
70	1	746 / 147 / 125	746 / 232 / 125	740 / 188 / 192	740 / 294 / 192	642 / 256 / 371	642 / 395 / 371	746 / 134 / 125	746 / 213 / 125	740 / 173 / 192	740 / 271 / 192	642 / 236 / 371	642 / 365 / 371												
	2	746 / 412 / 125	645 / 544 / 109	740 / 285 / 192	740 / 439 / 192	642 / 320 / 371	587 / 450 / 339	746 / 380 / 125	674 / 526 / 113	740 / 262 / 192	740 / 405 / 192	642 / 295 / 371	620 / 439 / 358												
	3	674 / 526 / 113	545 / 646 / 92	726 / 469 / 188	586 / 577 / 152	533 / 498 / 308	435 / 617 / 251	703 / 507 / 118	559 / 614 / 94	740 / 441 / 192	614 / 559 / 159	555 / 479 / 320	446 / 586 / 258												
80	1	798 / 138 / 131	798 / 219 / 131	776 / 174 / 199	776 / 272 / 199	691 / 243 / 399	691 / 375 / 399	798 / 127 / 131	798 / 201 / 131	776 / 160 / 199	776 / 251 / 199	691 / 224 / 399	691 / 346 / 399												
	2	798 / 388 / 131	733 / 544 / 120	776 / 263 / 199	776 / 406 / 199	691 / 304 / 399	666 / 450 / 385	798 / 358 / 131	765 / 526 / 126	776 / 243 / 199	776 / 375 / 199	691 / 280 / 399	691 / 431 / 399												
	3	765 / 526 / 126	619 / 646 / 102	776 / 442 / 199	665 / 577 / 170	604 / 498 / 349	493 / 617 / 285	798 / 507 / 131	635 / 614 / 104	776 / 408 / 199	697 / 559 / 179	629 / 479 / 363	506 / 586 / 292												
90	1	838 / 130 / 135	838 / 205 / 135	833 / 167 / 211	833 / 261 / 211	731 / 230 / 422	731 / 355 / 422	838 / 119 / 135	838 / 189 / 135	833 / 153 / 211	833 / 241 / 211	731 / 212 / 422	731 / 328 / 422												
	2	838 / 364 / 135	820 / 544 / 132	833 / 253 / 211	833 / 389 / 211	731 / 288 / 422	731 / 442 / 422	838 / 336 / 135	838 / 515 / 135	833 / 233 / 211	833 / 360 / 211	731 / 265 / 422	731 / 408 / 422												
	3	838 / 515 / 135	692 / 646 / 112	833 / 424 / 211	745 / 577 / 189	676 / 498 / 390	552 / 617 / 319	838 / 476 / 135	710 / 614 / 115	833 / 391 / 211	780 / 559 / 198	703 / 479 / 406	565 / 586 / 327												

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	70	1	746 / 160 / 125	731 / 486 / 123	740 / 204 / 192	740 / 318 / 192	642 / 277 / 371	631 / 420 / 364	746 / 187 / 125	674 / 517 / 113	740 / 238 / 192	740 / 369 / 192	642 / 321 / 371	587 / 452 / 339	746 / 216 / 125	631 / 554 / 106	740 / 274 / 192	740 / 423 / 192	642 / 369 / 371	555 / 488 / 320															
2		746 / 444 / 125	617 / 561 / 104	740 / 308 / 192	740 / 474 / 192	642 / 346 / 371	566 / 468 / 327	717 / 494 / 121	574 / 602 / 97	740 / 357 / 192	684 / 506 / 177	642 / 401 / 371	533 / 509 / 308	674 / 531 / 113	545 / 653 / 92	740 / 410 / 192	642 / 544 / 166	609 / 436 / 352	500 / 546 / 289																
3		645 / 543 / 109	531 / 678 / 89	698 / 486 / 181	572 / 607 / 148	511 / 515 / 295	413 / 632 / 239	602 / 585 / 101	488 / 718 / 82	656 / 528 / 170	530 / 649 / 138	479 / 556 / 277	392 / 689 / 226	559 / 620 / 94	459 / 771 / 77	614 / 565 / 159	489 / 682 / 127	446 / 592 / 258	359 / 721 / 208																
80		1	798 / 150 / 131	798 / 237 / 131	776 / 189 / 199	776 / 294 / 199	691 / 263 / 399	691 / 405 / 399	798 / 176 / 131	765 / 517 / 126	776 / 220 / 199	776 / 341 / 199	691 / 305 / 399	666 / 452 / 385	798 / 203 / 131	716 / 554 / 118	776 / 254 / 199	776 / 391 / 199	691 / 350 / 399	629 / 488 / 363															
		2	798 / 419 / 131	700 / 561 / 115	776 / 285 / 199	776 / 438 / 199	691 / 329 / 399	641 / 468 / 370	798 / 484 / 131	651 / 602 / 107	776 / 330 / 199	776 / 506 / 199	691 / 380 / 399	604 / 509 / 349	765 / 531 / 126	619 / 653 / 102	776 / 379 / 199	729 / 544 / 187	691 / 436 / 399	567 / 546 / 328															
		3	733 / 543 / 120	602 / 678 / 99	776 / 477 / 199	650 / 607 / 166	580 / 515 / 335	469 / 632 / 271	684 / 585 / 112	554 / 718 / 91	745 / 528 / 191	602 / 649 / 154	543 / 556 / 314	444 / 689 / 257	635 / 620 / 104	521 / 771 / 86	697 / 565 / 179	555 / 682 / 142	506 / 592 / 292	407 / 721 / 235															
90		1	838 / 141 / 135	838 / 222 / 135	833 / 181 / 211	833 / 282 / 211	731 / 249 / 422	731 / 384 / 422	838 / 165 / 135	838 / 258 / 135	833 / 211 / 211	833 / 327 / 211	731 / 289 / 422	731 / 443 / 422	838 / 191 / 135	801 / 554 / 129	833 / 243 / 211	833 / 375 / 211	731 / 331 / 422	703 / 488 / 406															
		2	838 / 393 / 135	783 / 561 / 126	833 / 273 / 211	833 / 420 / 211	731 / 311 / 422	717 / 468 / 414	838 / 454 / 135	729 / 602 / 118	833 / 317 / 211	833 / 486 / 211	731 / 360 / 422	676 / 509 / 390	838 / 520 / 135	692 / 653 / 112	833 / 363 / 211	815 / 544 / 207	731 / 413 / 422	634 / 546 / 366															
		3	820 / 543 / 132	674 / 678 / 109	833 / 457 / 211	727 / 607 / 184	648 / 515 / 374	524 / 632 / 303	765 / 585 / 123	619 / 718 / 100	833 / 528 / 211	674 / 649 / 171	607 / 556 / 351	497 / 689 / 287	710 / 620 / 115	583 / 771 / 94	780 / 565 / 198	621 / 682 / 158	565 / 592 / 327	455 / 721 / 263															
Wind Speed [mph]		170						180																											
70	1	731 / 477 / 123	602 / 599 / 101	740 / 313 / 192	726 / 472 / 188	642 / 419 / 371	524 / 521 / 302	688 / 506 / 116	559 / 626 / 94	740 / 353 / 192	684 / 501 / 177	609 / 449 / 352	506 / 550 / 283	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
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	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	631 / 564 / 106	502 / 681 / 85	740 / 466 / 192	600 / 576 / 156	576 / 468 / 333	470 / 579 / 270	588 / 591 / 99	473 / 722 / 80	698 / 495 / 181	558 / 603 / 145	544 / 498 / 314	450 / 605 / 251																							
3	531 / 666 / 89	430 / 817 / 73	572 / 597 / 148	461 / 728 / 119	424 / 637 / 245	339 / 766 / 195	502 / 709 / 85	402 / 857 / 68	544 / 639 / 141	433 / 768 / 112	403 / 680 / 233	337 / 832 / 189																							
80	1	798 / 232 / 131	684 / 599 / 112	776 / 289 / 199	776 / 445 / 199	691 / 398 / 399	592 / 521 / 342	781 / 506 / 128	635 / 626 / 104	776 / 327 / 199	776 / 501 / 199	691 / 449 / 399	555 / 550 / 321																						
	2	716 / 564 / 118	570 / 681 / 94	776 / 430 / 199	681 / 576 / 174	654 / 468 / 378	530 / 579 / 306	667 / 591 / 110	537 / 722 / 88	776 / 485 / 199	634 / 603 / 162	617 / 498 / 356	493 / 605 / 285																						
	3	602 / 666 / 99	489 / 817 / 80	650 / 597 / 166	523 / 728 / 134	481 / 637 / 278	382 / 766 / 221	570 / 709 / 94	456 / 857 / 75	618 / 639 / 158	491 / 768 / 126	456 / 680 / 264	370 / 832 / 214																						
90	1	838 / 218 / 135	765 / 599 / 123	833 / 277 / 211	833 / 426 / 211	731 / 377 / 422	662 / 521 / 382	838 / 247 / 135	710 / 626 / 115	833 / 313 / 211	833 / 481 / 211	731 / 425 / 422	621 / 550 / 359																						
	2	801 / 564 / 129	638 / 681 / 103	833 / 413 / 211	762 / 576 / 193	731 / 468 / 422	593 / 579 / 343	747 / 591 / 121	601 / 722 / 97	833 / 465 / 211	709 / 603 / 180	689 / 498 / 398	552 / 605 / 319																						
	3	674 / 666 / 109	547 / 817 / 88	727 / 597 / 184	585 / 728 / 149	538 / 637 / 311	428 / 766 / 247	638 / 709 / 103	510 / 857 / 82	691 / 639 / 175	550 / 768 / 140	510 / 680 / 295	414 / 832 / 239																						
Wind Speed [mph]		190						200																											
70	1	660 / 543 / 111	531 / 663 / 89	740 / 396 / 192	642 / 526 / 166	566 / 467 / 327	486 / 574 / 264	617 / 564 / 104	502 / 697 / 85	740 / 442 / 192	614 / 560 / 159	544 / 499 / 314	477 / 607 / 251																						
	2	559 / 629 / 94	459 / 781 / 77	656 / 521 / 170	530 / 640 / 138	511 / 524 / 295	440 / 642 / 239	531 / 663 / 89	430 / 813 / 73	628 / 555 / 163	503 / 674 / 130	489 / 557 / 283	429 / 676 / 226																						
	3	473 / 746 / 80	387 / 922 / 65	517 / 677 / 134	419 / 830 / 109	381 / 718 / 220	324 / 867 / 176	445 / 778 / 75	359 / 947 / 61	489 / 711 / 127	391 / 860 / 101	359 / 751 / 208	322 / 927 / 170																						
	80	1	749 / 543 / 123	602 / 663 / 99	776 / 367 / 199	729 / 526 / 187	641 / 467 / 370	532 / 574 / 299	700 / 564 / 115	570 / 697 / 94	776 / 409 / 199	697 / 560 / 179	617 / 499 / 356	521 / 607 / 285																					
		2	635 / 629 / 104	521 / 781 / 86	745 / 521 / 191	602 / 640 / 154	580 / 524 / 335	481 / 642 / 271	602 / 663 / 99	489 / 813 / 80	713 / 555 / 183	570 / 674 / 146	555 / 557 / 321	469 / 676 / 257																					
		3	537 / 746 / 88	440 / 922 / 72	586 / 677 / 150	475 / 830 / 122	432 / 718 / 250	355 / 867 / 200	505 / 778 / 83	407 / 947 / 67	555 / 711 / 142	444 / 860 / 114	407 / 751 / 235	352 / 927 / 193																					
	90	1	838 / 278 / 135	674 / 663 / 109	833 / 352 / 211	815 / 526 / 207	717 / 467 / 414	579 / 574 / 335	783 / 564 / 126	638 / 697 / 103	833 / 392 / 211	780 / 560 / 198	689 / 499 / 398	564 / 607 / 319																					
		2	710 / 629 / 115	583 / 781 / 94	833 / 521 / 211	674 / 640 / 171	648 / 524 / 374	524 / 642 / 303	674 / 663 / 109	547 / 813 / 88	798 / 555 / 202	638 / 674 / 162	621 / 557 / 359	508 / 676 / 287																					
		3	601 / 746 / 97	492 / 922 / 80	656 / 677 / 167	532 / 830 / 135	483 / 718 / 279	386 / 867 / 223	565 / 778 / 91	456 / 947 / 74	621 / 711 / 158	497 / 860 / 126	455 / 751 / 263	381 / 927 / 215																					

Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]	95						100						105					
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																
100	1	887 / 89 / 141	887 / 124 / 141	863 / 97 / 217	863 / 156 / 217	762 / 137 / 440	762 / 216 / 440	887 / 89 / 141	887 / 137 / 141	863 / 108 / 217	863 / 172 / 217	762 / 152 / 440	762 / 238 / 440	887 / 94 / 141	887 / 151 / 141	863 / 120 / 217	863 / 189 / 217	762 / 167 / 440	762 / 261 / 440
	2	887 / 225 / 141	887 / 347 / 141	863 / 150 / 217	863 / 236 / 217	762 / 174 / 440	762 / 270 / 440	887 / 247 / 141	887 / 381 / 141	863 / 166 / 217	863 / 259 / 217	762 / 192 / 440	762 / 297 / 440	887 / 271 / 141	887 / 416 / 141	863 / 183 / 217	863 / 284 / 217	762 / 210 / 440	762 / 325 / 440
	3	887 / 320 / 141	887 / 490 / 141	863 / 257 / 217	863 / 395 / 217	762 / 331 / 440	747 / 496 / 432	887 / 352 / 141	887 / 538 / 141	863 / 282 / 217	863 / 433 / 217	762 / 363 / 440	717 / 521 / 414	887 / 385 / 141	867 / 574 / 138	863 / 309 / 217	863 / 474 / 217	762 / 397 / 440	686 / 545 / 396
100	1	887 / 104 / 141	887 / 165 / 141	863 / 131 / 217	863 / 207 / 217	762 / 183 / 440	762 / 285 / 440	887 / 114 / 141	887 / 181 / 141	863 / 144 / 217	863 / 225 / 217	762 / 200 / 440	762 / 309 / 440						
	2	887 / 296 / 141	887 / 454 / 141	863 / 200 / 217	863 / 310 / 217	762 / 230 / 440	762 / 355 / 440	887 / 322 / 141	887 / 492 / 141	863 / 218 / 217	863 / 337 / 217	762 / 250 / 440	762 / 385 / 440						
	3	887 / 419 / 141	826 / 595 / 131	863 / 337 / 217	863 / 516 / 217	762 / 433 / 440	656 / 567 / 379	887 / 455 / 141	786 / 614 / 125	863 / 366 / 217	863 / 559 / 217	762 / 470 / 440	625 / 586 / 361						
100	1	887 / 124 / 141	887 / 196 / 141	863 / 157 / 217	863 / 245 / 217	762 / 217 / 440	762 / 335 / 440	887 / 114 / 141	887 / 181 / 141	863 / 144 / 217	863 / 225 / 217	762 / 200 / 440	762 / 309 / 440						
	2	887 / 348 / 141	887 / 532 / 141	863 / 237 / 217	863 / 365 / 217	762 / 271 / 440	762 / 417 / 440	887 / 322 / 141	887 / 492 / 141	863 / 218 / 217	863 / 337 / 217	762 / 250 / 440	762 / 385 / 440						
	3	887 / 492 / 141	766 / 646 / 122	863 / 397 / 217	824 / 577 / 207	747 / 498 / 432	610 / 617 / 352	887 / 455 / 141	786 / 614 / 125	863 / 366 / 217	863 / 559 / 217	762 / 470 / 440	625 / 586 / 361						

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																			
	95						100						105							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	227 / 354 / 40	182 / 437 / 32	262 / 252 / 53	230 / 348 / 47	242 / 294 / 65	204 / 385 / 55	217 / 373 / 38	175 / 463 / 31	255 / 272 / 52	220 / 367 / 45	232 / 311 / 63	195 / 404 / 52	208 / 390 / 36	166 / 478 / 29	249 / 292 / 50	210 / 384 / 43	226 / 332 / 61	185 / 420 / 50	
	2	191 / 413 / 34	156 / 515 / 27	230 / 336 / 47	188 / 425 / 38	223 / 340 / 60	182 / 428 / 49	185 / 438 / 33	149 / 541 / 26	223 / 360 / 45	178 / 443 / 36	217 / 364 / 58	173 / 446 / 47	175 / 454 / 31	143 / 565 / 25	213 / 378 / 43	171 / 467 / 35	207 / 381 / 56	167 / 470 / 45	
	3	162 / 496 / 29	130 / 604 / 23	181 / 447 / 37	146 / 548 / 30	163 / 468 / 44	132 / 575 / 36	156 / 522 / 27	123 / 629 / 22	171 / 464 / 35	139 / 575 / 28	157 / 494 / 42	126 / 601 / 34	149 / 547 / 26	120 / 668 / 21	165 / 488 / 34	133 / 598 / 27	151 / 518 / 41	123 / 639 / 33	
	5	1	251 / 354 / 40	201 / 437 / 32	288 / 252 / 56	252 / 348 / 49	242 / 294 / 81	204 / 385 / 68	240 / 373 / 38	194 / 463 / 31	280 / 272 / 55	241 / 367 / 47	232 / 311 / 77	195 / 404 / 65	230 / 390 / 36	183 / 478 / 29	273 / 292 / 53	231 / 384 / 45	226 / 332 / 75	185 / 420 / 62
	2	212 / 413 / 34	172 / 515 / 27	252 / 336 / 49	206 / 425 / 40	223 / 340 / 74	182 / 428 / 61	205 / 438 / 33	165 / 541 / 26	245 / 360 / 48	195 / 443 / 38	217 / 364 / 72	173 / 446 / 58	194 / 454 / 31	158 / 565 / 25	234 / 378 / 46	188 / 467 / 37	207 / 381 / 69	167 / 470 / 56	
	3	180 / 496 / 29	144 / 604 / 23	199 / 447 / 39	160 / 548 / 31	163 / 468 / 55	132 / 575 / 44	172 / 522 / 27	137 / 629 / 22	188 / 464 / 37	153 / 575 / 30	157 / 494 / 53	126 / 601 / 42	165 / 547 / 26	133 / 668 / 21	181 / 488 / 35	146 / 598 / 29	151 / 518 / 50	123 / 639 / 41	
	10	1	318 / 354 / 40	255 / 437 / 32	341 / 237 / 65	318 / 348 / 61	278 / 294 / 105	235 / 385 / 89	305 / 373 / 38	246 / 463 / 31	341 / 262 / 65	305 / 367 / 58	268 / 311 / 101	224 / 404 / 85	291 / 390 / 36	232 / 478 / 29	341 / 288 / 65	292 / 384 / 56	260 / 332 / 98	214 / 420 / 80
	2	268 / 413 / 34	218 / 515 / 27	318 / 336 / 61	260 / 425 / 50	257 / 340 / 97	210 / 428 / 79	259 / 438 / 33	209 / 541 / 26	309 / 360 / 59	247 / 443 / 47	250 / 364 / 94	199 / 446 / 75	246 / 454 / 31	200 / 565 / 25	296 / 378 / 57	238 / 467 / 46	239 / 381 / 90	192 / 470 / 72	
	3	228 / 496 / 29	182 / 604 / 23	251 / 447 / 48	202 / 548 / 39	188 / 468 / 71	152 / 575 / 57	218 / 522 / 27	173 / 629 / 22	238 / 464 / 46	193 / 575 / 37	181 / 494 / 68	145 / 601 / 55	209 / 547 / 26	169 / 668 / 21	229 / 488 / 44	184 / 598 / 35	174 / 518 / 66	141 / 639 / 53	
5	1	198 / 406 / 35	159 / 501 / 28	242 / 311 / 49	200 / 400 / 41	220 / 353 / 59	178 / 435 / 47	188 / 420 / 33	153 / 521 / 27	233 / 326 / 47	191 / 414 / 39	210 / 368 / 57	183 / 455 / 46							
	2	169 / 477 / 30	136 / 587 / 24	204 / 393 / 41	165 / 489 / 34	198 / 397 / 53	163 / 492 / 43	162 / 498 / 29	130 / 606 / 23	194 / 407 / 39	159 / 510 / 32	189 / 411 / 51	166 / 513 / 42							
	3	143 / 569 / 25	114 / 687 / 20	159 / 511 / 32	126 / 619 / 26	145 / 540 / 39	118 / 659 / 32	136 / 589 / 24	111 / 723 / 20	152 / 532 / 31	123 / 654 / 25	138 / 560 / 37	122 / 695 / 31							
	5	1	219 / 406 / 35	176 / 501 / 28	266 / 311 / 52	220 / 400 / 43	220 / 353 / 73	178 / 435 / 59	208 / 420 / 33	169 / 521 / 27	256 / 326 / 50	210 / 414 / 41	210 / 368 / 70	183 / 455 / 57						
	2	187 / 477 / 30	151 / 587 / 24	224 / 393 / 44	181 / 489 / 35	198 / 397 / 66	163 / 492 / 54	180 / 498 / 29	144 / 606 / 23	213 / 407 / 42	174 / 510 / 34	189 / 411 / 63	166 / 513 / 51							
	3	158 / 569 / 25	126 / 687 / 20	174 / 511 / 34	139 / 619 / 27	145 / 540 / 48	118 / 659 / 39	151 / 589 / 24	122 / 723 / 20	167 / 532 / 33	135 / 654 / 27	138 / 560 / 46	122 / 695 / 38							
	10	1	278 / 406 / 35	223 / 501 / 28	336 / 311 / 64	278 / 400 / 53	253 / 353 / 95	204 / 435 / 76	264 / 420 / 33	214 / 521 / 27	323 / 326 / 62	265 / 414 / 51	242 / 368 / 91	205 / 455 / 74						
	2	237 / 477 / 30	191 / 587 / 24	283 / 393 / 54	229 / 489 / 44	228 / 397 / 86	186 / 492 / 70	228 / 498 / 29	182 / 606 / 23	269 / 407 / 51	220 / 510 / 42	217 / 411 / 82	187 / 513 / 67							
	3	200 / 569 / 25	159 / 687 / 20	220 / 511 / 42	175 / 619 / 34	167 / 540 / 63	135 / 659 / 51	191 / 589 / 24	155 / 723 / 20	211 / 532 / 40	171 / 654 / 33	159 / 560 / 60	137 / 695 / 49							
10	1	182 / 439 / 32	146 / 540 / 26	230 / 349 / 47	184 / 433 / 37	204 / 387 / 55	187 / 474 / 44	188 / 420 / 33	153 / 521 / 27	233 / 326 / 47	191 / 414 / 39	210 / 368 / 57	183 / 455 / 46							
	2	156 / 517 / 27	127 / 639 / 22	188 / 427 / 38	152 / 529 / 31	182 / 430 / 49	169 / 532 / 40	162 / 498 / 29	130 / 606 / 23	194 / 407 / 39	159 / 510 / 32	189 / 411 / 51	166 / 513 / 42							
	3	130 / 607 / 23	107 / 758 / 19	146 / 551 / 30	117 / 669 / 24	132 / 578 / 36	123 / 708 / 29	136 / 589 / 24	111 / 723 / 20	152 / 532 / 31	123 / 654 / 25	138 / 560 / 37	122 / 695 / 31							
	5	1	201 / 439 / 32	162 / 540 / 26	252 / 349 / 49	202 / 433 / 40	204 / 387 / 68	187 / 474 / 55	208 / 420 / 33	169 / 521 / 27	256 / 326 / 50	210 / 414 / 41	210 / 368 / 70	183 / 455 / 57						
	2	172 / 517 / 27	140 / 639 / 22	206 / 427 / 40	167 / 529 / 33	182 / 430 / 61	169 / 532 / 49	180 / 498 / 29	144 / 606 / 23	213 / 407 / 42	174 / 510 / 34	189 / 411 / 63	166 / 513 / 51							
	3	144 / 607 / 23	119 / 758 / 19	160 / 551 / 31	128 / 669 / 25	132 / 578 / 44	123 / 708 / 36	151 / 589 / 24	122 / 723 / 20	167 / 532 / 33	135 / 654 / 27	138 / 560 / 46	122 / 695 / 38							
	10	1	255 / 439 / 32	205 / 540 / 26	318 / 349 / 61	256 / 433 / 49	235 / 387 / 89	206 / 474 / 71	264 / 420 / 33	214 / 521 / 27	323 / 326 / 62	265 / 414 / 51	242 / 368 / 91	205 / 455 / 74						
	2	218 / 517 / 27	178 / 639 / 22	260 / 427 / 50	211 / 529 / 40	210 / 430 / 79	186 / 532 / 64	228 / 498 / 29	182 / 606 / 23	269 / 407 / 51	220 / 510 / 42	217 / 411 / 82	187 / 513 / 67							
	3	182 / 607 / 23	150 / 758 / 19	202 / 551 / 39	162 / 669 / 31	152 / 578 / 57	135 / 708 / 47	191 / 589 / 24	155 / 723 / 20	211 / 532 / 40	171 / 654 / 33	159 / 560 / 60	137 / 695 / 49							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	175 / 457 / 31	143 / 569 / 25	220 / 362 / 45	178 / 452 / 36	195 / 399 / 52	191 / 492 / 42	162 / 489 / 29	143 / 611 / 24	204 / 389 / 41	177 / 484 / 34	182 / 431 / 49	202 / 534 / 40	153 / 526 / 27	147 / 647 / 22	191 / 418 / 39	185 / 521 / 32	185 / 460 / 46	211 / 571 / 37	
	2	149 / 534 / 26	120 / 653 / 21	181 / 445 / 37	146 / 547 / 30	176 / 448 / 47	172 / 549 / 38	140 / 576 / 25	122 / 712 / 20	168 / 478 / 34	146 / 589 / 28	163 / 481 / 44	180 / 591 / 36	130 / 613 / 23	124 / 742 / 18	155 / 505 / 32	150 / 624 / 26	164 / 508 / 41	187 / 626 / 33	
	3	127 / 637 / 22	101 / 767 / 18	139 / 568 / 28	113 / 701 / 23	129 / 608 / 35	126 / 740 / 28	117 / 678 / 21	101 / 826 / 17	130 / 609 / 26	115 / 761 / 22	120 / 649 / 32	133 / 800 / 26	111 / 730 / 20	105 / 876 / 16	123 / 660 / 25	116 / 789 / 20	120 / 682 / 30	139 / 853 / 25	
	5	1	194 / 457 / 31	158 / 569 / 25	241 / 362 / 47	195 / 452 / 38	195 / 399 / 65	191 / 492 / 53	180 / 489 / 29	155 / 611 / 24	224 / 389 / 44	191 / 484 / 35	182 / 431 / 61	202 / 534 / 49	169 / 526 / 27	154 / 647 / 22	210 / 418 / 41	193 / 521 / 33	185 / 460 / 57	211 / 571 / 46
	2	165 / 534 / 26	133 / 653 / 21	199 / 445 / 39	160 / 547 / 31	176 / 448 / 59	172 / 549 / 47	154 / 576 / 25	132 / 712 / 20	185 / 478 / 36	157 / 589 / 29	163 / 481 / 55	180 / 591 / 44	144 / 613 / 23	130 / 742 / 18	171 / 505 / 33	157 / 624 / 27	164 / 508 / 50	187 / 626 / 41	
	3	140 / 637 / 22	112 / 767 / 18	153 / 568 / 30	125 / 701 / 24	129 / 608 / 43	126 / 740 / 35	129 / 678 / 21	110 / 826 / 17	142 / 609 / 28	123 / 761 / 23	120 / 649 / 40	133 / 800 / 33	122 / 730 / 20	110 / 876 / 16	135 / 660 / 27	121 / 789 / 21	120 / 682 / 37	139 / 853 / 31	
	10	1	246 / 457 / 31	200 / 569 / 25	305 / 362 / 58	247 / 452 / 47	224 / 399 / 85	207 / 492 / 68	228 / 489 / 29	194 / 611 / 24	283 / 389 / 54	238 / 484 / 44	210 / 431 / 79	211 / 534 / 64	214 / 526 / 27	191 / 647 / 22	265 / 418 / 51	238 / 521 / 41	207 / 460 / 74	214 / 571 / 60
	2	209 / 534 / 26	169 / 653 / 21	251 / 445 / 48	202 / 547 / 39	203 / 448 / 76	186 / 549 / 62	196 / 576 / 25	166 / 712 / 20	233 / 478 / 45	196 / 589 / 36	188 / 481 / 71	188 / 591 / 57	182 / 613 / 23	161 / 742 / 18	215 / 505 / 41	193 / 624 / 34	184 / 508 / 66	189 / 626 / 53	
	3	178 / 637 / 22	141 / 767 / 18	193 / 568 / 37	157 / 701 / 30	149 / 608 / 56	137 / 740 / 45	164 / 678 / 21	138 / 826 / 17	180 / 609 / 34	154 / 761 / 29	138 / 649 / 52	139 / 800 / 43	155 / 730 / 20	136 / 876 / 16	171 / 660 / 33	149 / 789 / 26	134 / 682 / 48	141 / 853 / 40	
5	Wind Speed [mph]																			
	170						180													
	0	1	143 / 559 / 25	154 / 694 / 21	178 / 444 / 36	191 / 554 / 30	192 / 493 / 43	218 / 603 / 35	139 / 586 / 24	159 / 737 / 20	175 / 473 / 34	196 / 582 / 28	199 / 523 / 41	229 / 645 / 33						
	2	123 / 659 / 22	128 / 787 / 17	146 / 537 / 30	157 / 671 / 25	170 / 540 / 38	197 / 673 / 32	119 / 683 / 20	136 / 855 / 17	145 / 578 / 28	164 / 713 / 23	178 / 580 / 37	206 / 715 / 30							
	3	104 / 778 / 18	111 / 954 / 15	113 / 689 / 23	123 / 862 / 19	125 / 728 / 28	144 / 898 / 23	102 / 819 / 17	113 / 989 / 14	111 / 730 / 22	126 / 902 / 18	129 / 768 / 26	147 / 934 / 21							
	5	1	158 / 559 / 25	157 / 694 / 21	195 / 444 / 38	194 / 554 / 31	192 / 493 / 54	218 / 603 / 43	151 / 586 / 24	159 / 737 / 20	190 / 473 / 36	196 / 582 / 29	199 / 523 / 50	229 / 645 / 41						
	2	137 / 659 / 22	131 / 787 / 17	160 / 537 / 31	160 / 671 / 26	170 / 540 / 47	197 / 673 / 39	129 / 683 / 20	136 / 855 / 17	157 / 578 / 30	164 / 713 / 24	178 / 580 / 45	206 / 715 / 37							
	3	115 / 778 / 18	113 / 954 / 15	125 / 689 / 24	125 / 862 / 20	125 / 728 / 35	144 / 898 / 29	111 / 819 / 17	113 / 989 / 14	121 / 730 / 23	126 / 902 / 19	129 / 768 / 33	147 / 934 / 27							
	10	1	200 / 559 / 25	191 / 694 / 21	247 / 444 / 47	236 / 554 / 39	209 / 493 / 70	218 / 603 / 56	191 / 586 / 24	192 / 737 / 20	239 / 473 / 45	234 / 582 / 36	210 / 523 / 66	229 / 645 / 53						
2	173 / 659 / 22	160 / 787 / 17	202 / 537 / 39	194 / 671 / 32	184 / 540 / 62	197 / 673 / 51	163 / 683 / 20	163 / 855 / 17	197 / 578 / 37	195 / 713 / 30	188 / 580 / 59	206 / 715 / 48								
3	146 / 778 / 18	138 / 954 / 15	157 / 689 / 30	152 / 862 / 25	135 / 728 / 45	144 / 898 / 37	140 / 819 / 17	135 / 989 / 14	152 / 730 / 29	150 / 902 / 23	136 / 768 / 43	147 / 934 / 34								
10	Wind Speed [mph]																			
	190						200													
	0	1	144 / 623 / 22	164 / 774 / 18	180 / 499 / 32	205 / 620 / 26	204 / 548 / 38	233 / 664 / 31	148 / 657 / 21	168 / 806 / 17	187 / 533 / 31	212 / 655 / 25	213 / 582 / 37	249 / 717 / 30						
	2	122 / 719 / 19	139 / 888 / 16	147 / 601 / 26	169 / 751 / 22	182 / 603 / 34	214 / 753 / 28	128 / 774 / 18	146 / 949 / 15	151 / 634 / 25	173 / 783 / 21	189 / 636 / 32	220 / 785 / 26							
	3	103 / 853 / 16	118 / 1057 / 13	114 / 765 / 21	128 / 931 / 17	136 / 829 / 26	156 / 1000 / 21	108 / 913 / 16	123 / 1121 / 13	120 / 822 / 20	134 / 992 / 16	139 / 859 / 24	164 / 1063 / 20							
	5	1	153 / 623 / 22	164 / 774 / 18	190 / 499 / 34	205 / 620 / 28	204 / 548 / 47	233 / 664 / 38	154 / 657 / 21	168 / 806 / 17	193 / 533 / 33	212 / 655 / 27	213 / 582 / 45	249 / 717 / 37						
	2	129 / 719 / 19	139 / 888 / 16	155 / 601 / 28	169 / 751 / 23	182 / 603 / 42	214 / 753 / 35	133 / 774 / 18	146 / 949 / 15	156 / 634 / 27	173 / 783 / 22	189 / 636 / 40	220 / 785 / 33							
	3	110 / 853 / 16	118 / 1057 / 13	120 / 765 / 22	128 / 931 / 18	136 / 829 / 32	156 / 1000 / 25	112 / 913 / 16	123 / 1121 / 13	124 / 822 / 21	134 / 992 / 17	139 / 859 / 30	164 / 1063 / 24							
	10	1	190 / 623 / 22	191 / 774 / 18	236 / 499 / 42	236 / 620 / 34	210 / 548 / 62	233 / 664 / 49	189 / 657 / 21	190 / 806 / 17	237 / 533 / 40	238 / 655 / 33	214 / 582 / 59	249 / 717 / 48						
2	161 / 719 / 19	161 / 888 / 16	193 / 601 / 34	195 / 751 / 29	187 / 603 / 55	214 / 753 / 45	164 / 774 / 18	164 / 949 / 15	192 / 634 / 33	194 / 783 / 27	189 / 636 / 52	220 / 785 / 43								
3	137 / 853 / 16	137 / 1057 / 13	149 / 765 / 27	148 / 931 / 22	140 / 829 / 41	156 / 1000 / 33	138 / 913 / 16	139 / 1121 / 13	152 / 822 / 26	150 / 992 / 21	140 / 859 / 38	164 / 1063 / 32								

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		15	1	386 / 354 / 41	309 / 437 / 33	390 / 224 / 74	385 / 348 / 73	321 / 294 / 129	271 / 385 / 109	369 / 373 / 40	298 / 463 / 32	390 / 248 / 74	369 / 367 / 69	308 / 311 / 124	258 / 404 / 104	353 / 390 / 38	281 / 478 / 30	390 / 273 / 74	352 / 384 / 66	300 / 332 / 121	246 / 420 / 99				
15	2	325 / 413 / 35	265 / 515 / 28	385 / 336 / 73	314 / 425 / 59	296 / 340 / 119	242 / 428 / 97	314 / 438 / 34	254 / 541 / 27	374 / 360 / 70	298 / 443 / 56	287 / 364 / 116	229 / 446 / 92	298 / 454 / 32	243 / 565 / 26	358 / 378 / 67	287 / 467 / 54	275 / 381 / 111	221 / 470 / 89						
15	3	276 / 496 / 30	221 / 604 / 24	304 / 447 / 57	244 / 548 / 46	217 / 468 / 87	175 / 575 / 71	265 / 522 / 28	210 / 629 / 23	287 / 464 / 54	233 / 575 / 44	208 / 494 / 84	167 / 601 / 67	254 / 547 / 27	204 / 668 / 22	277 / 488 / 52	222 / 598 / 42	200 / 518 / 81	163 / 639 / 66						
20	1	446 / 170 / 44	362 / 437 / 36	438 / 215 / 82	438 / 338 / 82	353 / 286 / 156	306 / 385 / 135	434 / 373 / 43	350 / 463 / 35	438 / 238 / 82	432 / 367 / 81	349 / 311 / 154	292 / 404 / 129	414 / 390 / 41	330 / 478 / 33	438 / 262 / 82	413 / 384 / 77	339 / 332 / 149	278 / 420 / 122						
20	2	382 / 413 / 38	311 / 515 / 31	438 / 327 / 82	369 / 425 / 69	334 / 340 / 147	273 / 428 / 120	369 / 438 / 37	298 / 541 / 30	438 / 360 / 82	350 / 443 / 65	325 / 364 / 143	259 / 446 / 114	350 / 454 / 35	285 / 565 / 28	419 / 378 / 78	337 / 467 / 63	311 / 381 / 137	250 / 470 / 110						
20	3	324 / 496 / 32	259 / 604 / 26	356 / 447 / 67	286 / 548 / 54	245 / 468 / 108	198 / 575 / 87	311 / 522 / 31	246 / 629 / 25	337 / 464 / 63	273 / 575 / 51	236 / 494 / 104	189 / 601 / 83	298 / 547 / 30	240 / 668 / 24	324 / 488 / 61	261 / 598 / 49	226 / 518 / 100	184 / 639 / 81						
25	1	446 / 170 / 44	362 / 437 / 36	438 / 215 / 82	438 / 338 / 82	384 / 279 / 182	342 / 385 / 162	434 / 373 / 43	350 / 463 / 35	438 / 238 / 82	432 / 367 / 81	384 / 307 / 182	326 / 404 / 155	414 / 390 / 41	330 / 478 / 33	438 / 262 / 82	413 / 384 / 77	378 / 332 / 180	310 / 420 / 147						
25	2	382 / 413 / 38	311 / 515 / 31	438 / 327 / 82	369 / 425 / 69	373 / 340 / 177	305 / 428 / 145	369 / 438 / 37	298 / 541 / 30	438 / 360 / 82	350 / 443 / 65	363 / 364 / 172	289 / 446 / 137	350 / 454 / 35	285 / 565 / 28	419 / 378 / 78	337 / 467 / 63	347 / 381 / 165	279 / 470 / 132						
25	3	324 / 496 / 32	259 / 604 / 26	356 / 447 / 67	286 / 548 / 54	273 / 468 / 130	221 / 575 / 105	311 / 522 / 31	246 / 629 / 25	337 / 464 / 63	273 / 575 / 51	263 / 494 / 125	210 / 601 / 100	298 / 547 / 30	240 / 668 / 24	324 / 488 / 61	261 / 598 / 49	252 / 518 / 120	205 / 639 / 98						
Wind Speed [mph]		110								115															
15	1	336 / 406 / 36	270 / 501 / 29	390 / 299 / 74	336 / 400 / 63	291 / 353 / 117	235 / 435 / 94	320 / 420 / 34	259 / 521 / 28	390 / 326 / 74	320 / 414 / 60	279 / 368 / 112	235 / 455 / 91												
15	2	287 / 477 / 31	232 / 587 / 25	341 / 393 / 64	277 / 489 / 52	262 / 397 / 106	214 / 492 / 86	276 / 498 / 30	221 / 606 / 24	325 / 407 / 61	266 / 510 / 50	250 / 411 / 101	213 / 513 / 82												
15	3	243 / 569 / 26	193 / 687 / 21	266 / 511 / 50	212 / 619 / 40	192 / 540 / 77	155 / 659 / 62	232 / 589 / 25	188 / 723 / 20	255 / 532 / 48	206 / 654 / 39	183 / 560 / 74	157 / 695 / 61												
20	1	395 / 406 / 39	317 / 501 / 32	438 / 287 / 82	394 / 400 / 74	330 / 353 / 145	266 / 435 / 116	375 / 420 / 37	304 / 521 / 30	438 / 312 / 82	375 / 414 / 70	316 / 368 / 139	264 / 455 / 112												
20	2	337 / 477 / 33	272 / 587 / 27	400 / 393 / 75	324 / 489 / 61	297 / 397 / 131	242 / 492 / 106	324 / 498 / 32	259 / 606 / 26	381 / 407 / 71	312 / 510 / 58	283 / 411 / 125	240 / 513 / 102												
20	3	285 / 569 / 28	227 / 687 / 23	312 / 511 / 58	248 / 619 / 46	217 / 540 / 96	176 / 659 / 77	272 / 589 / 27	220 / 723 / 22	299 / 532 / 56	242 / 654 / 45	207 / 560 / 91	176 / 695 / 75												
25	1	395 / 406 / 39	317 / 501 / 32	438 / 287 / 82	394 / 400 / 74	368 / 353 / 175	296 / 435 / 140	375 / 420 / 37	304 / 521 / 30	438 / 312 / 82	375 / 414 / 70	352 / 368 / 167	294 / 455 / 135												
25	2	337 / 477 / 33	272 / 587 / 27	400 / 393 / 75	324 / 489 / 61	331 / 397 / 157	270 / 492 / 127	324 / 498 / 32	259 / 606 / 26	381 / 407 / 71	312 / 510 / 58	315 / 411 / 150	267 / 513 / 122												
25	3	285 / 569 / 28	227 / 687 / 23	312 / 511 / 58	248 / 619 / 46	242 / 540 / 115	196 / 659 / 93	272 / 589 / 27	220 / 723 / 22	299 / 532 / 56	242 / 654 / 45	231 / 560 / 110	196 / 695 / 90												
Wind Speed [mph]		120								130															
15	1	309 / 439 / 33	248 / 540 / 27	385 / 349 / 73	309 / 433 / 58	271 / 387 / 109	235 / 474 / 87	320 / 420 / 34	259 / 521 / 28	390 / 326 / 74	320 / 414 / 60	279 / 368 / 112	235 / 455 / 91												
15	2	265 / 517 / 28	215 / 639 / 23	314 / 427 / 59	255 / 529 / 48	242 / 430 / 97	212 / 532 / 79	276 / 498 / 30	221 / 606 / 24	325 / 407 / 61	266 / 510 / 50	250 / 411 / 101	213 / 513 / 82												
15	3	221 / 607 / 24	182 / 758 / 20	244 / 551 / 46	195 / 669 / 37	175 / 578 / 71	154 / 708 / 57	232 / 589 / 25	188 / 723 / 20	255 / 532 / 48	206 / 654 / 39	183 / 560 / 74	157 / 695 / 61												
20	1	362 / 439 / 36	291 / 540 / 29	438 / 339 / 82	362 / 433 / 68	306 / 387 / 135	263 / 474 / 108	375 / 420 / 37	304 / 521 / 30	438 / 312 / 82	375 / 414 / 70	316 / 368 / 139	264 / 455 / 112												
20	2	311 / 517 / 31	253 / 639 / 25	369 / 427 / 69	299 / 529 / 56	273 / 430 / 120	238 / 532 / 98	324 / 498 / 32	259 / 606 / 26	381 / 407 / 71	312 / 510 / 58	283 / 411 / 125	240 / 513 / 102												
20	3	259 / 607 / 26	214 / 758 / 21	286 / 551 / 54	229 / 669 / 43	198 / 578 / 87	172 / 708 / 71	272 / 589 / 27	220 / 723 / 22	299 / 532 / 56	242 / 654 / 45	207 / 560 / 91	176 / 695 / 75												
25	1	362 / 439 / 36	291 / 540 / 29	438 / 339 / 82	362 / 433 / 68	342 / 387 / 162	291 / 474 / 130	375 / 420 / 37	304 / 521 / 30	438 / 312 / 82	375 / 414 / 70	352 / 368 / 167	294 / 455 / 135												
25	2	311 / 517 / 31	253 / 639 / 25	369 / 427 / 69	299 / 529 / 56	305 / 430 / 145	263 / 532 / 117	324 / 498 / 32	259 / 606 / 26	381 / 407 / 71	312 / 510 / 58	315 / 411 / 150	267 / 513 / 122												
25	3	259 / 607 / 26	214 / 758 / 21	286 / 551 / 54	229 / 669 / 43	221 / 578 / 105	191 / 708 / 85	272 / 589 / 27	220 / 723 / 22	299 / 532 / 56	242 / 654 / 45	231 / 560 / 110	196 / 695 / 90												

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	298 / 457 / 32	243 / 569 / 26	369 / 362 / 69	298 / 452 / 56	258 / 399 / 104	234 / 492 / 84	276 / 489 / 30	234 / 611 / 24	341 / 389 / 64	286 / 484 / 52	242 / 431 / 97	236 / 534 / 79	259 / 526 / 28	227 / 647 / 23	320 / 418 / 60	283 / 521 / 49	236 / 460 / 91	238 / 571 / 74
2		254 / 534 / 27	204 / 653 / 22	304 / 445 / 57	244 / 547 / 46	233 / 448 / 94	211 / 549 / 76	237 / 576 / 26	199 / 712 / 21	282 / 478 / 53	236 / 589 / 43	217 / 481 / 87	211 / 591 / 71	221 / 613 / 24	191 / 742 / 19	260 / 505 / 49	230 / 624 / 40	210 / 508 / 81	211 / 626 / 66	
3		215 / 637 / 23	171 / 767 / 19	233 / 568 / 44	190 / 701 / 36	171 / 608 / 69	155 / 740 / 56	199 / 678 / 21	165 / 826 / 17	217 / 609 / 41	185 / 761 / 34	158 / 649 / 64	156 / 800 / 52	188 / 730 / 20	162 / 876 / 16	206 / 660 / 39	177 / 789 / 31	153 / 682 / 59	157 / 853 / 49	
1		350 / 457 / 35	285 / 569 / 28	432 / 362 / 81	350 / 452 / 65	292 / 399 / 129	261 / 492 / 104	324 / 489 / 32	273 / 611 / 26	400 / 389 / 75	334 / 484 / 61	273 / 431 / 120	262 / 534 / 98	304 / 526 / 30	264 / 647 / 25	375 / 418 / 70	327 / 521 / 57	266 / 460 / 112	262 / 571 / 91	
2		298 / 534 / 30	240 / 653 / 24	356 / 445 / 67	286 / 547 / 54	264 / 448 / 116	235 / 549 / 94	278 / 576 / 28	233 / 712 / 23	331 / 478 / 62	275 / 589 / 50	245 / 481 / 108	234 / 591 / 87	259 / 613 / 26	222 / 742 / 21	305 / 505 / 57	266 / 624 / 46	236 / 508 / 100	232 / 626 / 81	
3		253 / 637 / 25	201 / 767 / 20	273 / 568 / 51	223 / 701 / 42	193 / 608 / 85	173 / 740 / 69	233 / 678 / 23	193 / 826 / 19	254 / 609 / 48	216 / 761 / 39	179 / 649 / 79	173 / 800 / 65	220 / 730 / 22	188 / 876 / 18	242 / 660 / 45	205 / 789 / 36	172 / 682 / 73	173 / 853 / 60	
1		350 / 457 / 35	285 / 569 / 28	432 / 362 / 81	350 / 452 / 65	326 / 399 / 155	289 / 492 / 125	324 / 489 / 32	273 / 611 / 26	400 / 389 / 75	334 / 484 / 61	305 / 431 / 145	288 / 534 / 117	304 / 526 / 30	264 / 647 / 25	375 / 418 / 70	327 / 521 / 57	295 / 460 / 135	286 / 571 / 110	
2		298 / 534 / 30	240 / 653 / 24	356 / 445 / 67	286 / 547 / 54	294 / 448 / 140	260 / 549 / 112	278 / 576 / 28	233 / 712 / 23	331 / 478 / 62	275 / 589 / 50	273 / 481 / 130	257 / 591 / 105	259 / 613 / 26	222 / 742 / 21	305 / 505 / 57	266 / 624 / 46	262 / 508 / 120	253 / 626 / 98	
3		253 / 637 / 25	201 / 767 / 20	273 / 568 / 51	223 / 701 / 42	216 / 608 / 103	191 / 740 / 83	233 / 678 / 23	193 / 826 / 19	254 / 609 / 48	216 / 761 / 39	200 / 649 / 95	190 / 800 / 78	220 / 730 / 22	188 / 876 / 18	242 / 660 / 45	205 / 789 / 36	191 / 682 / 88	189 / 853 / 73	
Wind Speed [mph]		170						180												
15	1	243 / 559 / 26	226 / 694 / 21	298 / 444 / 56	278 / 554 / 46	237 / 493 / 86	238 / 603 / 69	230 / 586 / 24	224 / 737 / 20	287 / 473 / 53	273 / 582 / 43	236 / 523 / 81	243 / 645 / 66							
	2	210 / 659 / 23	188 / 787 / 18	244 / 537 / 46	229 / 671 / 38	209 / 540 / 76	215 / 673 / 62	197 / 683 / 21	191 / 855 / 17	238 / 578 / 44	228 / 713 / 36	212 / 580 / 72	218 / 715 / 59							
	3	177 / 778 / 19	163 / 954 / 16	190 / 689 / 36	180 / 862 / 30	153 / 728 / 56	157 / 898 / 46	169 / 819 / 18	158 / 989 / 14	182 / 730 / 34	176 / 902 / 28	153 / 768 / 52	156 / 934 / 42							
	1	285 / 559 / 28	261 / 694 / 23	350 / 444 / 65	320 / 554 / 54	264 / 493 / 106	260 / 603 / 85	270 / 586 / 26	257 / 737 / 22	336 / 473 / 62	312 / 582 / 50	262 / 523 / 100	264 / 645 / 81							
	2	246 / 659 / 25	217 / 787 / 19	286 / 537 / 54	264 / 671 / 44	233 / 540 / 94	235 / 673 / 77	230 / 683 / 23	219 / 855 / 19	278 / 578 / 51	260 / 713 / 42	235 / 580 / 89	237 / 715 / 73							
	3	207 / 778 / 21	188 / 954 / 17	223 / 689 / 42	207 / 862 / 35	171 / 728 / 69	172 / 898 / 56	197 / 819 / 19	181 / 989 / 16	213 / 730 / 39	201 / 902 / 32	170 / 768 / 65	169 / 934 / 52							
	1	285 / 559 / 28	261 / 694 / 23	350 / 444 / 65	320 / 554 / 54	292 / 493 / 127	283 / 603 / 103	270 / 586 / 26	257 / 737 / 22	336 / 473 / 62	312 / 582 / 50	289 / 523 / 120	285 / 645 / 98							
	2	246 / 659 / 25	217 / 787 / 19	286 / 537 / 54	264 / 671 / 44	258 / 540 / 112	255 / 673 / 93	230 / 683 / 23	219 / 855 / 19	278 / 578 / 51	260 / 713 / 42	259 / 580 / 107	256 / 715 / 88							
	3	207 / 778 / 21	188 / 954 / 17	223 / 689 / 42	207 / 862 / 35	189 / 728 / 83	186 / 898 / 68	197 / 819 / 19	181 / 989 / 16	213 / 730 / 39	201 / 902 / 32	187 / 768 / 78	183 / 934 / 63							
Wind Speed [mph]		190						200												
15	1	228 / 623 / 23	222 / 774 / 19	282 / 499 / 50	273 / 620 / 41	235 / 548 / 76	240 / 664 / 61	225 / 657 / 22	218 / 806 / 18	281 / 533 / 48	273 / 655 / 39	238 / 582 / 72	250 / 717 / 59							
	2	193 / 719 / 20	187 / 888 / 16	230 / 601 / 41	226 / 751 / 34	209 / 603 / 67	220 / 753 / 56	194 / 774 / 19	189 / 949 / 16	227 / 634 / 39	223 / 783 / 32	210 / 636 / 64	221 / 785 / 52							
	3	164 / 853 / 17	160 / 1057 / 14	178 / 765 / 32	171 / 931 / 26	157 / 829 / 51	160 / 1000 / 41	164 / 913 / 16	160 / 1121 / 13	180 / 822 / 31	173 / 992 / 25	155 / 859 / 47	164 / 1063 / 39							
	1	265 / 623 / 25	253 / 774 / 21	327 / 499 / 58	311 / 620 / 48	259 / 548 / 94	260 / 664 / 75	260 / 657 / 24	247 / 806 / 19	325 / 533 / 56	309 / 655 / 45	261 / 582 / 89	269 / 717 / 73							
	2	224 / 719 / 21	213 / 888 / 18	267 / 601 / 48	257 / 751 / 39	231 / 603 / 83	238 / 753 / 69	225 / 774 / 21	214 / 949 / 17	263 / 634 / 45	252 / 783 / 37	231 / 636 / 79	238 / 785 / 65							
	3	191 / 853 / 18	182 / 1057 / 15	207 / 765 / 37	194 / 931 / 30	173 / 829 / 63	173 / 1000 / 50	190 / 913 / 18	182 / 1121 / 14	208 / 822 / 36	195 / 992 / 29	170 / 859 / 58	177 / 1063 / 48							
	1	265 / 623 / 25	253 / 774 / 21	327 / 499 / 58	311 / 620 / 48	284 / 548 / 112	279 / 664 / 90	260 / 657 / 24	247 / 806 / 19	325 / 533 / 56	309 / 655 / 45	285 / 582 / 107	288 / 717 / 88							
	2	224 / 719 / 21	213 / 888 / 18	267 / 601 / 48	257 / 751 / 39	252 / 603 / 100	256 / 753 / 83	225 / 774 / 21	214 / 949 / 17	263 / 634 / 45	252 / 783 / 37	252 / 636 / 95	255 / 785 / 78							
	3	191 / 853 / 18	182 / 1057 / 15	207 / 765 / 37	194 / 931 / 30	189 / 829 / 75	186 / 1000 / 60	190 / 913 / 18	182 / 1121 / 14	208 / 822 / 36	195 / 992 / 29	186 / 859 / 70	190 / 1063 / 58							

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	468 / 165 / 45	391 / 437 / 37	466 / 212 / 87	466 / 333 / 87	412 / 271 / 207	377 / 385 / 190	468 / 183 / 45	377 / 463 / 36	466 / 234 / 87	466 / 367 / 87	412 / 299 / 207	360 / 404 / 181	447 / 390 / 43	356 / 478 / 34	466 / 258 / 87	446 / 384 / 83	412 / 328 / 207	342 / 420 / 172
2		412 / 413 / 39	335 / 515 / 32	466 / 322 / 87	398 / 425 / 74	412 / 340 / 207	337 / 428 / 169	398 / 438 / 38	322 / 541 / 31	466 / 355 / 87	377 / 443 / 70	400 / 364 / 201	319 / 446 / 160	377 / 454 / 36	308 / 565 / 30	452 / 378 / 84	363 / 467 / 68	383 / 381 / 192	308 / 470 / 155	
3		349 / 496 / 34	280 / 604 / 27	384 / 447 / 71	309 / 548 / 58	302 / 468 / 152	244 / 575 / 123	335 / 522 / 32	266 / 629 / 26	363 / 464 / 68	295 / 575 / 55	290 / 494 / 146	232 / 601 / 117	322 / 547 / 31	259 / 668 / 25	350 / 488 / 65	281 / 598 / 52	279 / 518 / 140	227 / 639 / 114	
35		1	501 / 160 / 46	432 / 437 / 40	499 / 206 / 92	499 / 323 / 92	438 / 263 / 230	413 / 385 / 217	501 / 178 / 46	417 / 463 / 38	499 / 227 / 92	499 / 356 / 92	438 / 290 / 230	394 / 404 / 207	494 / 390 / 45	393 / 478 / 36	499 / 250 / 92	492 / 384 / 91	438 / 319 / 230	375 / 420 / 197
		2	455 / 413 / 42	370 / 515 / 34	499 / 312 / 92	439 / 425 / 81	438 / 330 / 230	368 / 428 / 194	440 / 438 / 40	355 / 541 / 33	499 / 344 / 92	416 / 443 / 77	438 / 364 / 230	349 / 446 / 184	417 / 454 / 38	340 / 565 / 31	499 / 378 / 92	401 / 467 / 74	419 / 381 / 220	337 / 470 / 177
		3	386 / 496 / 35	309 / 604 / 28	424 / 447 / 78	340 / 548 / 63	330 / 468 / 174	267 / 575 / 140	370 / 522 / 34	293 / 629 / 27	401 / 464 / 74	325 / 575 / 60	318 / 494 / 167	254 / 601 / 134	355 / 547 / 33	286 / 668 / 26	386 / 488 / 71	310 / 598 / 58	305 / 518 / 160	248 / 639 / 130
40		1	546 / 158 / 104	478 / 437 / 91	531 / 199 / 147	531 / 313 / 147	469 / 260 / 262	448 / 385 / 250	546 / 175 / 104	460 / 463 / 88	531 / 221 / 147	531 / 345 / 147	469 / 286 / 262	428 / 404 / 239	546 / 193 / 104	435 / 478 / 83	531 / 243 / 147	531 / 378 / 147	469 / 314 / 262	407 / 420 / 227
		2	503 / 413 / 96	409 / 515 / 78	531 / 303 / 147	482 / 425 / 133	469 / 326 / 262	400 / 428 / 223	486 / 438 / 92	392 / 541 / 75	531 / 334 / 147	457 / 443 / 126	469 / 358 / 262	379 / 446 / 212	460 / 454 / 88	375 / 565 / 71	531 / 366 / 147	440 / 467 / 122	455 / 381 / 254	366 / 470 / 204
		3	426 / 496 / 81	341 / 604 / 65	465 / 447 / 128	374 / 548 / 103	359 / 468 / 200	290 / 575 / 162	409 / 522 / 78	324 / 629 / 62	440 / 464 / 122	357 / 575 / 99	345 / 494 / 193	276 / 601 / 154	392 / 547 / 75	316 / 668 / 60	424 / 488 / 117	341 / 598 / 94	331 / 518 / 185	269 / 639 / 150
30	Wind Speed [mph]		110						115											
	1	426 / 406 / 41	342 / 501 / 33	466 / 282 / 87	425 / 400 / 79	406 / 353 / 204	327 / 435 / 163	405 / 420 / 39	328 / 521 / 32	466 / 308 / 87	405 / 414 / 75	389 / 368 / 195	323 / 455 / 158							
	2	363 / 477 / 35	294 / 587 / 28	432 / 393 / 80	350 / 489 / 65	366 / 397 / 184	298 / 492 / 149	349 / 498 / 34	280 / 606 / 27	411 / 407 / 77	336 / 510 / 63	348 / 411 / 175	294 / 513 / 143							
	3	308 / 569 / 30	245 / 687 / 24	336 / 511 / 63	268 / 619 / 50	267 / 540 / 134	216 / 659 / 108	294 / 589 / 28	238 / 723 / 23	322 / 532 / 60	261 / 654 / 49	256 / 560 / 128	216 / 695 / 105							
	35	1	470 / 406 / 43	378 / 501 / 35	499 / 274 / 92	469 / 400 / 87	438 / 348 / 230	357 / 435 / 187	447 / 420 / 41	363 / 521 / 33	499 / 299 / 92	446 / 414 / 83	425 / 368 / 224	353 / 455 / 180						
		2	401 / 477 / 37	324 / 587 / 30	476 / 393 / 88	386 / 489 / 71	400 / 397 / 210	326 / 492 / 170	386 / 498 / 35	309 / 606 / 28	454 / 407 / 84	371 / 510 / 69	381 / 411 / 200	320 / 513 / 164						
		3	340 / 569 / 31	270 / 687 / 25	371 / 511 / 69	295 / 619 / 55	292 / 540 / 154	236 / 659 / 124	324 / 589 / 30	262 / 723 / 24	356 / 532 / 66	288 / 654 / 53	280 / 560 / 147	235 / 695 / 120						
	40	1	520 / 406 / 99	418 / 501 / 80	531 / 266 / 147	515 / 400 / 142	469 / 343 / 262	388 / 435 / 216	495 / 420 / 94	401 / 521 / 76	531 / 290 / 147	490 / 414 / 135	462 / 368 / 258	382 / 455 / 208						
		2	443 / 477 / 84	358 / 587 / 68	523 / 393 / 144	424 / 489 / 117	434 / 397 / 242	353 / 492 / 196	426 / 498 / 81	341 / 606 / 65	498 / 407 / 137	407 / 510 / 112	414 / 411 / 231	347 / 513 / 189						
3		375 / 569 / 71	299 / 687 / 57	407 / 511 / 112	324 / 619 / 90	317 / 540 / 177	257 / 659 / 143	358 / 589 / 68	290 / 723 / 55	390 / 532 / 108	316 / 654 / 87	304 / 560 / 170	255 / 695 / 139							
30	Wind Speed [mph]		120						130											
	1	391 / 439 / 37	315 / 540 / 30	466 / 334 / 87	391 / 433 / 73	377 / 387 / 190	320 / 474 / 152	405 / 420 / 39	328 / 521 / 32	466 / 308 / 87	405 / 414 / 75	389 / 368 / 195	323 / 455 / 158							
	2	335 / 517 / 32	273 / 639 / 26	398 / 427 / 74	322 / 529 / 60	337 / 430 / 169	289 / 532 / 137	349 / 498 / 34	280 / 606 / 27	411 / 407 / 77	336 / 510 / 63	348 / 411 / 175	294 / 513 / 143							
	3	280 / 607 / 27	231 / 758 / 22	309 / 551 / 58	247 / 669 / 46	244 / 578 / 123	209 / 708 / 99	294 / 589 / 28	238 / 723 / 23	322 / 532 / 60	261 / 654 / 49	256 / 560 / 128	216 / 695 / 105							
	35	1	432 / 439 / 40	347 / 540 / 32	499 / 325 / 92	431 / 433 / 80	413 / 387 / 217	348 / 474 / 174	447 / 420 / 41	363 / 521 / 33	499 / 299 / 92	446 / 414 / 83	425 / 368 / 224	353 / 455 / 180						
		2	370 / 517 / 34	301 / 639 / 28	439 / 427 / 81	356 / 529 / 66	368 / 430 / 194	315 / 532 / 157	386 / 498 / 35	309 / 606 / 28	454 / 407 / 84	371 / 510 / 69	381 / 411 / 200	320 / 513 / 164						
		3	309 / 607 / 28	255 / 758 / 24	340 / 551 / 63	272 / 669 / 51	267 / 578 / 140	228 / 708 / 114	324 / 589 / 30	262 / 723 / 24	356 / 532 / 66	288 / 654 / 53	280 / 560 / 147	235 / 695 / 120						
	40	1	478 / 439 / 91	384 / 540 / 73	531 / 315 / 147	473 / 433 / 131	448 / 387 / 250	377 / 474 / 200	495 / 420 / 94	401 / 521 / 76	531 / 290 / 147	490 / 414 / 135	462 / 368 / 258	382 / 455 / 208						
		2	409 / 517 / 78	333 / 639 / 63	482 / 427 / 133	390 / 529 / 108	400 / 430 / 223	340 / 532 / 181	426 / 498 / 81	341 / 606 / 65	498 / 407 / 137	407 / 510 / 112	414 / 411 / 231	347 / 513 / 189						
3		341 / 607 / 65	282 / 758 / 54	374 / 551 / 103	299 / 669 / 83	290 / 578 / 162	246 / 708 / 131	358 / 589 / 68	290 / 723 / 55	390 / 532 / 108	316 / 654 / 87	304 / 560 / 170	255 / 695 / 139							

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Exposure Category : C

Wind Speed [mph]	140							150							160						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	377 / 457 / 36	308 / 569 / 30	466 / 362 / 87	377 / 452 / 70	360 / 399 / 181	316 / 492 / 146	349 / 489 / 34	294 / 611 / 28	432 / 389 / 80	359 / 484 / 65	337 / 431 / 169	313 / 534 / 137	328 / 526 / 32	283 / 647 / 26	405 / 418 / 75	351 / 521 / 61	325 / 460 / 158	310 / 571 / 128		
	2	322 / 534 / 31	259 / 653 / 25	384 / 445 / 71	309 / 547 / 58	325 / 448 / 163	284 / 549 / 131	301 / 576 / 29	251 / 712 / 24	357 / 478 / 66	296 / 589 / 54	302 / 481 / 152	280 / 591 / 123	280 / 613 / 27	239 / 742 / 22	329 / 505 / 61	286 / 624 / 50	289 / 508 / 140	275 / 626 / 114		
	3	273 / 637 / 26	217 / 767 / 21	295 / 568 / 55	240 / 701 / 45	238 / 608 / 120	209 / 740 / 96	252 / 678 / 24	208 / 826 / 20	274 / 609 / 51	233 / 761 / 42	221 / 649 / 111	207 / 800 / 91	238 / 730 / 23	201 / 876 / 18	261 / 660 / 49	220 / 789 / 39	211 / 682 / 102	204 / 853 / 85		
	1	417 / 457 / 38	340 / 569 / 31	499 / 351 / 92	416 / 452 / 77	394 / 399 / 207	343 / 492 / 167	386 / 489 / 35	324 / 611 / 29	476 / 389 / 88	395 / 484 / 71	368 / 431 / 194	339 / 534 / 157	363 / 526 / 33	311 / 647 / 27	446 / 418 / 83	385 / 521 / 67	354 / 460 / 180	334 / 571 / 147		
	2	355 / 534 / 33	286 / 653 / 26	424 / 445 / 78	340 / 547 / 63	356 / 448 / 187	309 / 549 / 150	332 / 576 / 31	277 / 712 / 25	393 / 478 / 73	325 / 589 / 59	330 / 481 / 174	303 / 591 / 140	309 / 613 / 28	262 / 742 / 23	363 / 505 / 67	313 / 624 / 55	315 / 508 / 160	296 / 626 / 130		
	3	301 / 637 / 28	239 / 767 / 22	325 / 568 / 60	265 / 701 / 49	261 / 608 / 137	227 / 740 / 110	278 / 678 / 26	229 / 826 / 21	303 / 609 / 56	256 / 761 / 46	241 / 649 / 127	224 / 800 / 104	262 / 730 / 24	221 / 876 / 19	288 / 660 / 53	241 / 789 / 42	230 / 682 / 117	220 / 853 / 97		
	1	460 / 457 / 88	375 / 569 / 71	531 / 341 / 147	457 / 452 / 126	428 / 399 / 239	370 / 492 / 193	426 / 489 / 81	354 / 611 / 67	523 / 389 / 144	431 / 484 / 117	400 / 431 / 223	365 / 534 / 181	401 / 526 / 76	338 / 647 / 62	490 / 418 / 135	419 / 521 / 110	384 / 460 / 208	358 / 571 / 170		
	2	392 / 534 / 75	316 / 653 / 60	465 / 445 / 128	374 / 547 / 103	386 / 448 / 216	333 / 549 / 173	367 / 576 / 70	302 / 712 / 57	432 / 478 / 119	355 / 589 / 96	359 / 481 / 200	326 / 591 / 162	341 / 613 / 65	285 / 742 / 52	399 / 505 / 110	341 / 624 / 90	341 / 508 / 185	317 / 626 / 150		
	3	333 / 637 / 63	265 / 767 / 51	357 / 568 / 99	291 / 701 / 80	283 / 608 / 158	245 / 740 / 127	307 / 678 / 59	250 / 826 / 47	332 / 609 / 92	279 / 761 / 76	262 / 649 / 146	241 / 800 / 120	290 / 730 / 55	241 / 876 / 44	316 / 660 / 87	262 / 789 / 69	249 / 682 / 135	236 / 853 / 112		
Wind Speed [mph]	170							180													
30	1	308 / 559 / 30	279 / 694 / 24	377 / 444 / 70	343 / 554 / 58	320 / 493 / 149	305 / 603 / 120	291 / 586 / 28	274 / 737 / 23	362 / 473 / 66	333 / 582 / 54	315 / 523 / 140	307 / 645 / 114								
	2	266 / 659 / 26	233 / 787 / 20	309 / 537 / 58	282 / 671 / 47	282 / 540 / 131	275 / 673 / 108	248 / 683 / 24	234 / 855 / 20	299 / 578 / 55	278 / 713 / 45	282 / 580 / 126	275 / 715 / 102								
	3	224 / 778 / 22	202 / 954 / 18	240 / 689 / 45	221 / 862 / 37	207 / 728 / 96	201 / 898 / 79	213 / 819 / 20	194 / 989 / 16	230 / 730 / 42	214 / 902 / 35	203 / 768 / 91	197 / 934 / 73								
	1	340 / 559 / 31	305 / 694 / 26	416 / 444 / 77	375 / 554 / 63	348 / 493 / 170	327 / 603 / 137	321 / 586 / 29	299 / 737 / 24	399 / 473 / 73	363 / 582 / 59	341 / 523 / 160	328 / 645 / 130								
	2	293 / 659 / 27	254 / 787 / 21	340 / 537 / 63	308 / 671 / 52	307 / 540 / 150	296 / 673 / 124	274 / 683 / 25	255 / 855 / 21	330 / 578 / 60	303 / 713 / 49	306 / 580 / 144	294 / 715 / 117								
	3	247 / 778 / 23	221 / 954 / 19	265 / 689 / 49	242 / 862 / 41	225 / 728 / 110	216 / 898 / 90	235 / 819 / 21	211 / 989 / 17	253 / 730 / 46	234 / 902 / 38	220 / 768 / 104	210 / 934 / 84								
	1	375 / 559 / 71	331 / 694 / 59	457 / 444 / 126	406 / 554 / 103	376 / 493 / 196	350 / 603 / 158	350 / 586 / 67	324 / 737 / 55	435 / 473 / 119	393 / 582 / 96	367 / 523 / 185	349 / 645 / 150								
	2	324 / 659 / 62	276 / 787 / 49	374 / 537 / 103	334 / 671 / 85	332 / 540 / 173	316 / 673 / 143	299 / 683 / 57	276 / 855 / 47	360 / 578 / 99	327 / 713 / 80	329 / 580 / 166	313 / 715 / 135								
	3	273 / 778 / 52	240 / 954 / 42	291 / 689 / 80	262 / 862 / 67	243 / 728 / 127	231 / 898 / 104	256 / 819 / 49	229 / 989 / 39	276 / 730 / 76	253 / 902 / 62	237 / 768 / 120	224 / 934 / 97								
Wind Speed [mph]	190							200													
30	1	285 / 623 / 26	269 / 774 / 22	352 / 499 / 63	331 / 620 / 51	309 / 548 / 131	299 / 664 / 105	279 / 657 / 25	263 / 806 / 20	349 / 533 / 60	328 / 655 / 49	308 / 582 / 126	307 / 717 / 102								
	2	241 / 719 / 22	227 / 888 / 18	287 / 601 / 51	273 / 751 / 42	274 / 603 / 117	274 / 753 / 96	242 / 774 / 22	228 / 949 / 18	282 / 634 / 49	267 / 783 / 40	273 / 636 / 111	272 / 785 / 91								
	3	205 / 853 / 19	193 / 1057 / 16	223 / 765 / 40	207 / 931 / 32	206 / 829 / 88	200 / 1000 / 70	204 / 913 / 18	193 / 1121 / 15	223 / 822 / 39	207 / 992 / 31	201 / 859 / 82	202 / 1063 / 67								
	1	314 / 623 / 28	292 / 774 / 23	387 / 499 / 69	359 / 620 / 56	333 / 548 / 150	319 / 664 / 120	306 / 657 / 26	285 / 806 / 21	382 / 533 / 66	355 / 655 / 53	332 / 582 / 144	326 / 717 / 117								
	2	265 / 719 / 24	247 / 888 / 19	316 / 601 / 56	296 / 751 / 46	296 / 603 / 134	292 / 753 / 110	265 / 774 / 23	247 / 949 / 19	309 / 634 / 53	289 / 783 / 44	293 / 636 / 127	289 / 785 / 104								
	3	225 / 853 / 20	210 / 1057 / 17	245 / 765 / 44	225 / 931 / 35	222 / 829 / 100	213 / 1000 / 80	224 / 913 / 19	209 / 1121 / 16	244 / 822 / 42	224 / 992 / 34	216 / 859 / 94	215 / 1063 / 77								
	1	342 / 623 / 63	315 / 774 / 52	421 / 499 / 112	387 / 620 / 92	358 / 548 / 173	338 / 664 / 139	333 / 657 / 60	306 / 806 / 49	415 / 533 / 108	381 / 655 / 87	355 / 582 / 166	345 / 717 / 135								
	2	289 / 719 / 54	266 / 888 / 44	344 / 601 / 92	320 / 751 / 76	318 / 603 / 154	310 / 753 / 127	288 / 774 / 52	266 / 949 / 42	336 / 634 / 87	311 / 783 / 71	314 / 636 / 146	306 / 785 / 120								
	3	246 / 853 / 46	227 / 1057 / 38	267 / 765 / 71	242 / 931 / 58	239 / 829 / 116	226 / 1000 / 93	243 / 913 / 44	225 / 1121 / 36	265 / 822 / 69	241 / 992 / 55	232 / 859 / 108	227 / 1063 / 89								

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs										
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
	45	1	589 / 153 / 109	532 / 437 / 98	573 / 193 / 156	573 / 304 / 156	491 / 252 / 280	484 / 385 / 275	589 / 169 / 109	513 / 463 / 95	573 / 214 / 156	573 / 334 / 156	491 / 278 / 280	461 / 404 / 263	589 / 187 / 109	484 / 478 / 89	573 / 235 / 156	573 / 367 / 156	491 / 305 / 280	439 / 420 / 250
2		560 / 413 / 103	456 / 515 / 84	573 / 294 / 156	536 / 425 / 146	491 / 316 / 280	432 / 428 / 246	541 / 438 / 100	437 / 541 / 81	573 / 323 / 156	509 / 443 / 138	491 / 348 / 280	409 / 446 / 233	513 / 454 / 95	418 / 565 / 77	573 / 355 / 156	490 / 467 / 133	491 / 381 / 280	395 / 470 / 225	
3		475 / 496 / 88	380 / 604 / 70	518 / 447 / 141	416 / 548 / 113	387 / 468 / 220	313 / 575 / 178	456 / 522 / 84	361 / 629 / 67	490 / 464 / 133	398 / 575 / 108	372 / 494 / 212	298 / 601 / 170	437 / 547 / 81	352 / 668 / 65	472 / 488 / 128	379 / 598 / 103	357 / 518 / 204	290 / 639 / 165	
50		1	628 / 148 / 113	586 / 437 / 106	621 / 190 / 167	621 / 299 / 167	519 / 248 / 301	519 / 385 / 301	628 / 164 / 113	565 / 463 / 102	621 / 210 / 167	621 / 329 / 167	519 / 274 / 301	495 / 404 / 287	628 / 181 / 113	534 / 478 / 96	621 / 231 / 167	621 / 361 / 167	519 / 300 / 301	471 / 420 / 273
		2	617 / 413 / 111	502 / 515 / 91	621 / 289 / 167	591 / 425 / 158	519 / 311 / 301	463 / 428 / 268	596 / 438 / 107	481 / 541 / 87	621 / 318 / 167	560 / 443 / 150	519 / 343 / 301	439 / 446 / 255	565 / 454 / 102	461 / 565 / 83	621 / 349 / 167	540 / 467 / 145	519 / 375 / 301	423 / 470 / 245
		3	523 / 496 / 94	419 / 604 / 76	571 / 447 / 153	459 / 548 / 123	416 / 468 / 241	336 / 575 / 195	502 / 522 / 91	398 / 629 / 72	540 / 464 / 145	438 / 575 / 118	400 / 494 / 232	320 / 601 / 185	481 / 547 / 87	387 / 668 / 70	520 / 488 / 139	418 / 598 / 112	384 / 518 / 222	312 / 639 / 181
60		1	694 / 138 / 120	694 / 220 / 120	688 / 178 / 181	688 / 279 / 181	584 / 237 / 337	584 / 367 / 337	694 / 153 / 120	670 / 463 / 116	688 / 197 / 181	688 / 308 / 181	584 / 261 / 337	584 / 404 / 337	694 / 169 / 120	633 / 478 / 110	688 / 216 / 181	688 / 337 / 181	584 / 286 / 337	556 / 420 / 321
		2	694 / 392 / 120	595 / 515 / 103	688 / 270 / 181	688 / 418 / 181	584 / 297 / 337	546 / 428 / 316	694 / 431 / 120	571 / 541 / 99	688 / 297 / 181	664 / 443 / 175	584 / 327 / 337	518 / 446 / 299	670 / 454 / 116	546 / 565 / 95	688 / 326 / 181	640 / 467 / 168	584 / 358 / 337	499 / 470 / 288
		3	620 / 496 / 107	496 / 604 / 86	676 / 447 / 178	543 / 548 / 143	490 / 468 / 283	396 / 575 / 229	595 / 522 / 103	471 / 629 / 82	640 / 464 / 168	519 / 575 / 137	471 / 494 / 272	377 / 601 / 218	571 / 547 / 99	459 / 668 / 80	616 / 488 / 162	495 / 598 / 130	452 / 518 / 261	367 / 639 / 212
Wind Speed [mph]		110				115														
45	1	579 / 406 / 107	465 / 501 / 86	573 / 258 / 156	573 / 400 / 156	491 / 333 / 280	419 / 435 / 237	551 / 420 / 102	446 / 521 / 83	573 / 281 / 156	545 / 414 / 148	491 / 362 / 280	412 / 455 / 229							
	2	494 / 477 / 91	399 / 587 / 74	573 / 387 / 156	472 / 489 / 128	469 / 397 / 267	381 / 492 / 216	475 / 498 / 88	380 / 606 / 70	555 / 407 / 151	453 / 510 / 123	447 / 411 / 254	374 / 513 / 208							
	3	418 / 569 / 77	333 / 687 / 62	453 / 511 / 123	361 / 619 / 98	342 / 540 / 195	277 / 659 / 157	399 / 589 / 74	323 / 723 / 60	435 / 532 / 118	351 / 654 / 96	328 / 560 / 187	275 / 695 / 153							
	50	1	628 / 199 / 113	513 / 501 / 92	621 / 253 / 167	621 / 394 / 167	519 / 328 / 301	449 / 435 / 259	607 / 420 / 109	492 / 521 / 89	621 / 276 / 167	601 / 414 / 161	519 / 357 / 301	442 / 455 / 250						
		2	544 / 477 / 98	440 / 587 / 79	621 / 381 / 167	520 / 489 / 139	503 / 397 / 292	409 / 492 / 236	523 / 498 / 94	419 / 606 / 76	611 / 407 / 164	499 / 510 / 134	479 / 411 / 278	401 / 513 / 227						
		3	461 / 569 / 83	366 / 687 / 66	499 / 511 / 134	397 / 619 / 107	368 / 540 / 213	297 / 659 / 171	440 / 589 / 79	356 / 723 / 64	479 / 532 / 129	387 / 654 / 104	352 / 560 / 204	295 / 695 / 167						
	60	1	694 / 185 / 120	608 / 501 / 105	688 / 237 / 181	688 / 368 / 181	584 / 313 / 337	527 / 435 / 305	694 / 203 / 120	583 / 521 / 101	688 / 258 / 181	688 / 400 / 181	584 / 340 / 337	509 / 455 / 294						
		2	645 / 477 / 112	521 / 587 / 90	688 / 356 / 181	616 / 489 / 162	584 / 391 / 337	480 / 492 / 278	620 / 498 / 107	496 / 606 / 86	688 / 387 / 181	592 / 510 / 156	565 / 411 / 326	462 / 513 / 267						
		3	546 / 569 / 95	434 / 687 / 75	592 / 511 / 156	471 / 619 / 124	433 / 540 / 250	349 / 659 / 201	521 / 589 / 90	422 / 723 / 73	567 / 532 / 149	459 / 654 / 121	414 / 560 / 240	339 / 695 / 196						
Wind Speed [mph]		120				130														
45	1	532 / 439 / 98	427 / 540 / 79	573 / 305 / 156	527 / 433 / 143	484 / 387 / 275	405 / 474 / 220	551 / 420 / 102	446 / 521 / 83	573 / 281 / 156	545 / 414 / 148	491 / 362 / 280	412 / 455 / 229							
	2	456 / 517 / 84	370 / 639 / 69	536 / 427 / 146	435 / 529 / 118	432 / 430 / 246	366 / 532 / 199	475 / 498 / 88	380 / 606 / 70	555 / 407 / 151	453 / 510 / 123	447 / 411 / 254	374 / 513 / 208							
	3	380 / 607 / 70	314 / 758 / 58	416 / 551 / 113	333 / 669 / 91	313 / 578 / 178	265 / 708 / 144	399 / 589 / 74	323 / 723 / 60	435 / 532 / 118	351 / 654 / 96	328 / 560 / 187	275 / 695 / 153							
	50	1	586 / 439 / 106	471 / 540 / 85	621 / 300 / 167	581 / 433 / 156	519 / 387 / 301	433 / 474 / 241	607 / 420 / 109	492 / 521 / 89	621 / 276 / 167	601 / 414 / 161	519 / 357 / 301	442 / 455 / 250						
		2	502 / 517 / 91	408 / 639 / 74	591 / 427 / 158	479 / 529 / 129	463 / 430 / 268	392 / 532 / 218	523 / 498 / 94	419 / 606 / 76	611 / 407 / 164	499 / 510 / 134	479 / 411 / 278	401 / 513 / 227						
		3	419 / 607 / 76	346 / 758 / 62	459 / 551 / 123	367 / 669 / 99	336 / 578 / 195	284 / 708 / 158	440 / 589 / 79	356 / 723 / 64	479 / 532 / 129	387 / 654 / 104	352 / 560 / 204	295 / 695 / 167						
	60	1	694 / 221 / 120	558 / 540 / 97	688 / 280 / 181	688 / 433 / 181	584 / 369 / 337	490 / 474 / 283	694 / 203 / 120	583 / 521 / 101	688 / 258 / 181	688 / 400 / 181	584 / 340 / 337	509 / 455 / 294						
		2	595 / 517 / 103	484 / 639 / 84	688 / 419 / 181	567 / 529 / 149	546 / 430 / 316	443 / 532 / 256	620 / 498 / 107	496 / 606 / 86	688 / 387 / 181	592 / 510 / 156	565 / 411 / 326	462 / 513 / 267						
		3	496 / 607 / 86	409 / 758 / 71	543 / 551 / 143	435 / 669 / 114	396 / 578 / 229	321 / 708 / 185	521 / 589 / 90	422 / 723 / 73	567 / 532 / 149	459 / 654 / 121	414 / 560 / 240	339 / 695 / 196						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																			
	140						150						160							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	513 / 457 / 95	418 / 569 / 77	573 / 330 / 156	509 / 452 / 138	461 / 399 / 263	398 / 492 / 212	475 / 489 / 88	389 / 611 / 72	573 / 383 / 156	472 / 484 / 128	432 / 431 / 246	390 / 534 / 199	446 / 526 / 83	366 / 647 / 67	545 / 418 / 148	453 / 521 / 121	413 / 460 / 229	382 / 571 / 187	
	2	437 / 534 / 81	352 / 653 / 65	518 / 445 / 141	416 / 547 / 113	417 / 448 / 237	358 / 549 / 191	408 / 576 / 76	333 / 712 / 62	481 / 478 / 131	388 / 589 / 106	387 / 481 / 220	349 / 591 / 178	380 / 613 / 70	308 / 742 / 56	444 / 505 / 121	368 / 624 / 98	367 / 508 / 204	339 / 626 / 165	
	3	370 / 637 / 69	295 / 767 / 55	398 / 568 / 108	324 / 701 / 88	305 / 608 / 174	263 / 740 / 140	342 / 678 / 63	276 / 826 / 51	370 / 609 / 101	305 / 761 / 83	283 / 649 / 161	258 / 800 / 132	323 / 730 / 60	260 / 876 / 48	351 / 660 / 96	283 / 789 / 76	268 / 682 / 149	252 / 853 / 123	
	1	565 / 457 / 102	461 / 569 / 83	621 / 325 / 167	560 / 452 / 150	495 / 399 / 287	425 / 492 / 232	523 / 489 / 94	429 / 611 / 77	621 / 377 / 167	520 / 484 / 139	463 / 431 / 268	416 / 534 / 218	492 / 526 / 89	398 / 647 / 72	601 / 418 / 161	489 / 521 / 131	443 / 460 / 250	406 / 571 / 204	
	2	481 / 534 / 87	387 / 653 / 70	571 / 445 / 153	459 / 547 / 123	447 / 448 / 259	383 / 549 / 208	450 / 576 / 81	366 / 712 / 66	530 / 478 / 142	428 / 589 / 115	416 / 481 / 241	372 / 591 / 195	419 / 613 / 76	335 / 742 / 61	489 / 505 / 131	397 / 624 / 107	393 / 508 / 222	360 / 626 / 181	
	3	408 / 637 / 74	325 / 767 / 59	438 / 568 / 118	357 / 701 / 96	328 / 608 / 190	281 / 740 / 153	377 / 678 / 68	304 / 826 / 55	408 / 609 / 109	336 / 761 / 90	304 / 649 / 176	275 / 800 / 144	356 / 730 / 64	283 / 876 / 51	387 / 660 / 104	306 / 789 / 82	287 / 682 / 162	268 / 853 / 134	
	1	670 / 457 / 116	546 / 569 / 95	688 / 304 / 181	664 / 452 / 175	584 / 399 / 337	480 / 492 / 272	620 / 489 / 107	509 / 611 / 88	688 / 352 / 181	616 / 484 / 162	546 / 431 / 316	467 / 534 / 256	583 / 526 / 101	471 / 647 / 82	688 / 404 / 181	580 / 521 / 152	509 / 460 / 294	454 / 571 / 240	
	2	571 / 534 / 99	459 / 653 / 80	676 / 445 / 178	543 / 547 / 143	527 / 448 / 305	432 / 549 / 245	533 / 576 / 92	434 / 712 / 75	628 / 478 / 165	507 / 589 / 133	490 / 481 / 283	418 / 591 / 229	496 / 613 / 86	397 / 742 / 69	580 / 505 / 152	471 / 624 / 124	452 / 508 / 261	402 / 626 / 212	
	3	484 / 637 / 84	385 / 767 / 67	519 / 568 / 137	423 / 701 / 111	386 / 608 / 223	317 / 740 / 180	447 / 678 / 78	360 / 826 / 63	483 / 609 / 127	399 / 761 / 105	358 / 649 / 207	308 / 800 / 169	422 / 730 / 73	335 / 876 / 58	459 / 660 / 121	362 / 789 / 95	330 / 682 / 191	299 / 853 / 158	
50	1	418 / 559 / 77	358 / 694 / 63	509 / 444 / 138	438 / 554 / 113	404 / 493 / 216	372 / 603 / 174	389 / 586 / 72	348 / 737 / 60	481 / 473 / 131	422 / 582 / 106	393 / 523 / 204	371 / 645 / 165	ASCE Group Zone	Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3
	2	361 / 659 / 67	298 / 787 / 53	416 / 537 / 113	360 / 671 / 93	356 / 540 / 191	336 / 673 / 157	333 / 683 / 62	297 / 855 / 51	398 / 578 / 108	352 / 713 / 88	353 / 580 / 182	333 / 715 / 149					1 = 1		
	3	304 / 778 / 56	258 / 954 / 46	324 / 689 / 88	283 / 862 / 73	261 / 728 / 140	245 / 898 / 115	285 / 819 / 53	246 / 989 / 42	305 / 730 / 83	272 / 902 / 68	254 / 768 / 132	238 / 934 / 106					2 = 2' / 2		
	1	461 / 559 / 83	384 / 694 / 68	560 / 444 / 150	470 / 554 / 123	432 / 493 / 236	395 / 603 / 190	429 / 586 / 77	373 / 737 / 64	530 / 473 / 142	452 / 582 / 115	420 / 523 / 222	392 / 645 / 181				3 = 3' / 3			
	2	398 / 659 / 72	320 / 787 / 57	459 / 537 / 123	387 / 671 / 101	381 / 540 / 208	356 / 673 / 171	366 / 683 / 66	318 / 855 / 55	438 / 578 / 118	377 / 713 / 96	376 / 580 / 199	352 / 715 / 162				1 = 1			
	3	335 / 778 / 61	277 / 954 / 49	357 / 689 / 96	303 / 862 / 79	279 / 728 / 153	260 / 898 / 125	314 / 819 / 57	264 / 989 / 46	336 / 730 / 90	291 / 902 / 74	271 / 768 / 144	251 / 934 / 116				2 = 2			
	1	546 / 559 / 95	447 / 694 / 78	664 / 444 / 175	543 / 554 / 143	487 / 493 / 278	439 / 603 / 223	509 / 586 / 88	423 / 737 / 73	628 / 473 / 165	511 / 582 / 133	472 / 523 / 261	434 / 645 / 212				3 = 3			
	2	471 / 659 / 82	372 / 787 / 65	543 / 537 / 143	447 / 671 / 118	430 / 540 / 245	397 / 673 / 201	434 / 683 / 75	361 / 855 / 63	519 / 578 / 137	426 / 713 / 111	423 / 580 / 234	390 / 715 / 191				1 = 1			
	3	397 / 778 / 69	323 / 954 / 56	423 / 689 / 111	350 / 862 / 92	315 / 728 / 180	290 / 898 / 147	372 / 819 / 65	298 / 989 / 52	399 / 730 / 105	329 / 902 / 86	305 / 768 / 169	279 / 934 / 136				2 = 2			
60	1	370 / 623 / 69	339 / 774 / 56	456 / 499 / 123	416 / 620 / 101	382 / 548 / 191	358 / 664 / 153	360 / 657 / 65	328 / 806 / 53	448 / 533 / 118	408 / 655 / 96	379 / 582 / 182	365 / 717 / 149	10 - 30	Panal Angle	Mono Slope	0 - 3	1 = 1	2 = 2	3 = 3
	2	314 / 719 / 58	286 / 888 / 48	372 / 601 / 101	343 / 751 / 83	340 / 603 / 170	328 / 753 / 140	311 / 774 / 56	284 / 949 / 46	363 / 634 / 96	333 / 783 / 78	335 / 636 / 161	323 / 785 / 132					1 = 1		
	3	266 / 853 / 49	244 / 1057 / 41	289 / 765 / 78	260 / 931 / 63	255 / 829 / 127	239 / 1000 / 102	263 / 913 / 48	241 / 1121 / 39	286 / 822 / 76	258 / 992 / 61	247 / 859 / 119	240 / 1063 / 98					2 = 2		
	1	408 / 623 / 74	362 / 774 / 61	499 / 499 / 134	444 / 620 / 109	407 / 548 / 208	378 / 664 / 167	387 / 657 / 70	350 / 806 / 57	481 / 533 / 129	435 / 655 / 104	402 / 582 / 199	384 / 717 / 162				3 = 3			
	2	346 / 719 / 62	305 / 888 / 51	408 / 601 / 109	366 / 751 / 90	362 / 603 / 185	346 / 753 / 153	335 / 774 / 61	303 / 949 / 49	389 / 634 / 104	355 / 783 / 85	356 / 636 / 176	340 / 785 / 144				1 = 1			
	3	293 / 853 / 53	260 / 1057 / 44	316 / 765 / 85	278 / 931 / 69	271 / 829 / 139	252 / 1000 / 111	283 / 913 / 51	257 / 1121 / 42	307 / 822 / 82	275 / 992 / 66	262 / 859 / 130	252 / 1063 / 107				2 = 2			
	1	484 / 623 / 84	408 / 774 / 69	592 / 499 / 156	500 / 620 / 127	456 / 548 / 245	417 / 664 / 196	459 / 657 / 80	394 / 806 / 65	567 / 533 / 149	489 / 655 / 121	449 / 582 / 234	422 / 717 / 191				3 = 3			
	2	409 / 719 / 71	345 / 888 / 58	483 / 601 / 127	413 / 751 / 105	405 / 603 / 218	382 / 753 / 180	397 / 774 / 69	341 / 949 / 56	459 / 634 / 121	399 / 783 / 99	397 / 636 / 207	374 / 785 / 169				1 = 1			
	3	347 / 853 / 60	294 / 1057 / 50	374 / 765 / 99	313 / 931 / 80	304 / 829 / 163	278 / 1000 / 131	335 / 913 / 58	289 / 1121 / 48	362 / 822 / 95	309 / 992 / 76	293 / 859 / 153	277 / 1063 / 125				2 = 2			

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
	70	1	746 / 128 / 125	746 / 204 / 125	740 / 165 / 192	740 / 260 / 192	642 / 225 / 371	642 / 350 / 371	746 / 142 / 125	746 / 225 / 125	740 / 183 / 192	740 / 286 / 192	642 / 248 / 371	642 / 384 / 371	746 / 157 / 125	731 / 478 / 123	740 / 201 / 192	740 / 313 / 192	642 / 273 / 371
2		746 / 364 / 125	688 / 515 / 116	740 / 251 / 192	740 / 388 / 192	642 / 283 / 371	631 / 428 / 364	746 / 400 / 125	660 / 541 / 111	740 / 277 / 192	740 / 427 / 192	642 / 311 / 371	598 / 446 / 346	746 / 438 / 125	631 / 565 / 106	740 / 303 / 192	740 / 467 / 192	642 / 341 / 371	576 / 470 / 333
3		717 / 496 / 121	574 / 604 / 97	740 / 423 / 192	628 / 548 / 163	566 / 468 / 327	457 / 575 / 264	688 / 522 / 116	545 / 629 / 92	740 / 464 / 192	600 / 575 / 156	544 / 494 / 314	435 / 601 / 251	660 / 547 / 111	531 / 668 / 89	712 / 488 / 184	572 / 598 / 148	522 / 518 / 302	424 / 639 / 245
80	1	798 / 121 / 131	798 / 192 / 131	776 / 153 / 199	776 / 240 / 199	691 / 214 / 399	691 / 332 / 399	798 / 134 / 131	798 / 212 / 131	776 / 169 / 199	776 / 264 / 199	691 / 236 / 399	691 / 365 / 399	798 / 148 / 131	798 / 233 / 131	776 / 186 / 199	776 / 290 / 199	691 / 259 / 399	691 / 399 / 399
	2	798 / 343 / 131	781 / 515 / 128	776 / 232 / 199	776 / 359 / 199	691 / 268 / 399	691 / 413 / 399	798 / 377 / 131	749 / 541 / 123	776 / 256 / 199	776 / 395 / 199	691 / 295 / 399	678 / 446 / 392	798 / 412 / 131	716 / 565 / 118	776 / 280 / 199	776 / 432 / 199	691 / 323 / 399	654 / 470 / 378
	3	798 / 486 / 131	651 / 604 / 107	776 / 391 / 199	713 / 548 / 183	641 / 468 / 370	518 / 575 / 299	781 / 522 / 128	619 / 629 / 102	776 / 429 / 199	681 / 575 / 174	617 / 494 / 356	493 / 601 / 285	749 / 547 / 123	602 / 668 / 99	776 / 469 / 199	650 / 598 / 166	592 / 518 / 342	481 / 639 / 278
90	1	838 / 113 / 135	838 / 180 / 135	833 / 147 / 211	833 / 230 / 211	731 / 202 / 422	731 / 314 / 422	838 / 126 / 135	838 / 199 / 135	833 / 162 / 211	833 / 254 / 211	731 / 223 / 422	731 / 345 / 422	838 / 139 / 135	838 / 219 / 135	833 / 178 / 211	833 / 278 / 211	731 / 245 / 422	731 / 378 / 422
	2	838 / 322 / 135	838 / 493 / 135	833 / 223 / 211	833 / 344 / 211	731 / 254 / 422	731 / 391 / 422	838 / 354 / 135	838 / 541 / 135	833 / 245 / 211	833 / 378 / 211	731 / 279 / 422	731 / 430 / 422	838 / 387 / 135	801 / 565 / 129	833 / 269 / 211	833 / 414 / 211	731 / 306 / 422	731 / 470 / 422
	3	838 / 456 / 135	729 / 604 / 118	833 / 375 / 211	798 / 548 / 202	717 / 468 / 414	579 / 575 / 335	838 / 500 / 135	692 / 629 / 112	833 / 412 / 211	762 / 575 / 193	689 / 494 / 398	552 / 601 / 319	838 / 547 / 135	674 / 668 / 109	833 / 450 / 211	727 / 598 / 184	662 / 518 / 382	538 / 639 / 311
Wind Speed [mph]		110						115											
70	1	746 / 172 / 125	703 / 501 / 118	740 / 220 / 192	740 / 342 / 192	642 / 298 / 371	609 / 435 / 352	746 / 188 / 125	674 / 521 / 113	740 / 240 / 192	740 / 372 / 192	642 / 324 / 371	587 / 455 / 339						
	2	746 / 477 / 125	602 / 587 / 101	740 / 331 / 192	712 / 489 / 184	642 / 372 / 371	555 / 492 / 320	717 / 498 / 121	574 / 606 / 97	740 / 360 / 192	684 / 510 / 177	642 / 404 / 371	533 / 513 / 308						
	3	631 / 569 / 106	502 / 687 / 85	684 / 511 / 177	544 / 619 / 141	500 / 540 / 289	403 / 659 / 233	602 / 589 / 101	488 / 723 / 82	656 / 532 / 170	530 / 654 / 138	479 / 560 / 277	392 / 695 / 226						
80	1	798 / 162 / 131	798 / 255 / 131	776 / 204 / 199	776 / 316 / 199	691 / 283 / 399	691 / 435 / 399	798 / 177 / 131	765 / 521 / 126	776 / 222 / 199	776 / 344 / 199	691 / 307 / 399	666 / 455 / 385						
	2	798 / 449 / 131	684 / 587 / 112	776 / 306 / 199	776 / 470 / 199	691 / 353 / 399	629 / 492 / 363	798 / 488 / 131	651 / 606 / 107	776 / 333 / 199	776 / 510 / 199	691 / 383 / 399	604 / 513 / 349						
	3	716 / 569 / 118	570 / 687 / 94	776 / 511 / 199	618 / 619 / 158	567 / 540 / 328	456 / 659 / 264	684 / 589 / 112	554 / 723 / 91	745 / 532 / 191	602 / 654 / 154	543 / 560 / 314	444 / 695 / 257						
90	1	838 / 152 / 135	838 / 239 / 135	833 / 195 / 211	833 / 303 / 211	731 / 267 / 422	731 / 412 / 422	838 / 167 / 135	838 / 260 / 135	833 / 213 / 211	833 / 330 / 211	731 / 291 / 422	731 / 447 / 422						
	2	838 / 422 / 135	765 / 587 / 123	833 / 294 / 211	833 / 451 / 211	731 / 334 / 422	703 / 492 / 406	838 / 458 / 135	729 / 606 / 118	833 / 319 / 211	833 / 489 / 211	731 / 363 / 422	676 / 513 / 390						
	3	801 / 569 / 129	638 / 687 / 103	833 / 490 / 211	691 / 619 / 175	634 / 540 / 366	510 / 659 / 295	765 / 589 / 123	619 / 723 / 100	833 / 532 / 211	674 / 654 / 171	607 / 560 / 351	497 / 695 / 287						
Wind Speed [mph]		120						130											
70	1	746 / 205 / 125	645 / 540 / 109	740 / 261 / 192	740 / 403 / 192	642 / 351 / 371	566 / 474 / 327	746 / 188 / 125	674 / 521 / 113	740 / 240 / 192	740 / 372 / 192	642 / 324 / 371	587 / 455 / 339						
	2	688 / 517 / 116	559 / 639 / 94	740 / 390 / 192	656 / 529 / 170	631 / 430 / 364	511 / 532 / 295	717 / 498 / 121	574 / 606 / 97	740 / 360 / 192	684 / 510 / 177	642 / 404 / 371	533 / 513 / 308						
	3	574 / 607 / 97	473 / 758 / 80	628 / 551 / 163	503 / 669 / 130	457 / 578 / 264	370 / 708 / 214	602 / 589 / 101	488 / 723 / 82	656 / 532 / 170	530 / 654 / 138	479 / 560 / 277	392 / 695 / 226						
80	1	798 / 193 / 131	733 / 540 / 120	776 / 241 / 199	776 / 373 / 199	691 / 333 / 399	641 / 474 / 370	798 / 177 / 131	765 / 521 / 126	776 / 222 / 199	776 / 344 / 199	691 / 307 / 399	666 / 455 / 385						
	2	781 / 517 / 128	635 / 639 / 104	776 / 361 / 199	745 / 529 / 191	691 / 415 / 399	580 / 532 / 335	798 / 488 / 131	651 / 606 / 107	776 / 333 / 199	776 / 510 / 199	691 / 383 / 399	604 / 513 / 349						
	3	651 / 607 / 107	537 / 758 / 88	713 / 551 / 183	570 / 669 / 146	518 / 578 / 299	419 / 708 / 242	684 / 589 / 112	554 / 723 / 91	745 / 532 / 191	602 / 654 / 154	543 / 560 / 314	444 / 695 / 257						
90	1	838 / 181 / 135	820 / 540 / 132	833 / 231 / 211	833 / 357 / 211	731 / 315 / 422	717 / 474 / 414	838 / 167 / 135	838 / 260 / 135	833 / 213 / 211	833 / 330 / 211	731 / 291 / 422	731 / 447 / 422						
	2	838 / 495 / 135	710 / 639 / 115	833 / 346 / 211	833 / 529 / 211	731 / 393 / 422	648 / 532 / 374	838 / 458 / 135	729 / 606 / 118	833 / 319 / 211	833 / 489 / 211	731 / 363 / 422	676 / 513 / 390						
	3	729 / 607 / 118	601 / 758 / 97	798 / 551 / 202	638 / 669 / 162	579 / 578 / 335	469 / 708 / 271	765 / 589 / 123	619 / 723 / 100	833 / 532 / 211	674 / 654 / 171	607 / 560 / 351	497 / 695 / 287						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	70	1	746 / 222 / 125	631 / 569 / 106	740 / 282 / 192	740 / 435 / 192	642 / 379 / 371	544 / 492 / 314	717 / 489 / 121	588 / 611 / 99	740 / 328 / 192	712 / 484 / 184	631 / 431 / 364	519 / 534 / 295	674 / 526 / 113	545 / 647 / 92	740 / 376 / 192	670 / 521 / 174	587 / 460 / 339	502 / 571 / 277															
2		660 / 534 / 111	531 / 653 / 89	740 / 421 / 192	628 / 547 / 163	609 / 448 / 352	489 / 549 / 283	617 / 576 / 104	502 / 712 / 85	726 / 478 / 188	586 / 589 / 152	566 / 481 / 327	464 / 591 / 264	574 / 613 / 97	459 / 742 / 77	670 / 505 / 174	544 / 624 / 141	522 / 508 / 302	445 / 626 / 245																
3		559 / 637 / 94	445 / 767 / 75	600 / 568 / 156	489 / 701 / 127	446 / 608 / 258	359 / 740 / 208	516 / 678 / 87	416 / 826 / 70	558 / 609 / 145	461 / 761 / 119	413 / 649 / 239	342 / 800 / 195	488 / 730 / 82	387 / 876 / 65	530 / 660 / 138	419 / 789 / 109	381 / 682 / 220	331 / 853 / 182																
1		798 / 209 / 131	716 / 569 / 118	776 / 261 / 199	776 / 402 / 199	691 / 360 / 399	617 / 492 / 356	798 / 243 / 131	667 / 611 / 110	776 / 303 / 199	776 / 465 / 199	691 / 417 / 399	580 / 534 / 335	765 / 526 / 126	619 / 647 / 102	776 / 348 / 199	760 / 521 / 195	666 / 460 / 385	550 / 571 / 314																
2		749 / 534 / 123	602 / 653 / 99	776 / 390 / 199	713 / 547 / 183	691 / 448 / 399	555 / 549 / 321	700 / 576 / 115	570 / 712 / 94	776 / 450 / 199	665 / 589 / 170	641 / 481 / 370	518 / 591 / 299	651 / 613 / 107	521 / 742 / 86	760 / 505 / 195	618 / 624 / 158	592 / 508 / 342	488 / 626 / 278																
3		635 / 637 / 104	505 / 767 / 83	681 / 568 / 174	555 / 701 / 142	506 / 608 / 292	407 / 740 / 235	586 / 678 / 96	472 / 826 / 78	634 / 609 / 162	523 / 761 / 134	469 / 649 / 271	382 / 800 / 221	554 / 730 / 91	440 / 876 / 72	602 / 660 / 154	475 / 789 / 122	432 / 682 / 250	363 / 853 / 207																
1		838 / 196 / 135	801 / 569 / 129	833 / 250 / 211	833 / 386 / 211	731 / 341 / 422	689 / 492 / 398	838 / 229 / 135	747 / 611 / 121	833 / 290 / 211	833 / 446 / 211	731 / 394 / 422	648 / 534 / 374	838 / 263 / 135	692 / 647 / 112	833 / 333 / 211	833 / 511 / 211	731 / 451 / 422	607 / 571 / 351																
2		838 / 534 / 135	674 / 653 / 109	833 / 374 / 211	798 / 547 / 202	731 / 424 / 422	621 / 549 / 359	783 / 576 / 126	638 / 712 / 103	833 / 432 / 211	745 / 589 / 189	717 / 481 / 414	579 / 591 / 335	729 / 613 / 118	583 / 742 / 94	833 / 494 / 211	691 / 624 / 175	662 / 508 / 382	538 / 626 / 311																
3		710 / 637 / 115	565 / 767 / 91	762 / 568 / 193	621 / 701 / 158	565 / 608 / 327	455 / 740 / 263	656 / 678 / 106	528 / 826 / 85	709 / 609 / 180	585 / 761 / 149	524 / 649 / 303	428 / 800 / 247	619 / 730 / 100	492 / 876 / 80	674 / 660 / 171	532 / 789 / 135	483 / 682 / 279	400 / 853 / 231																
Wind Speed [mph]		170						180																											
70	1	631 / 559 / 106	516 / 694 / 87	740 / 427 / 192	628 / 554 / 163	555 / 493 / 320	484 / 603 / 258	588 / 586 / 99	488 / 737 / 82	726 / 473 / 188	586 / 582 / 152	525 / 523 / 302	477 / 645 / 245	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
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	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
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	3 = 3																																		
2	545 / 659 / 92	430 / 787 / 73	628 / 537 / 163	517 / 671 / 134	489 / 540 / 283	437 / 673 / 233	502 / 683 / 85	416 / 855 / 70	600 / 578 / 156	489 / 713 / 127	470 / 580 / 270	428 / 715 / 220																							
3	459 / 778 / 77	373 / 954 / 63	489 / 689 / 127	405 / 862 / 105	359 / 728 / 208	319 / 898 / 170	430 / 819 / 73	344 / 989 / 58	461 / 730 / 119	377 / 902 / 98	339 / 768 / 195	306 / 934 / 157																							
1	716 / 559 / 118	586 / 694 / 96	776 / 395 / 199	713 / 554 / 183	629 / 493 / 363	529 / 603 / 292	667 / 586 / 110	554 / 737 / 91	776 / 446 / 199	665 / 582 / 170	592 / 523 / 342	520 / 645 / 278																							
2	619 / 659 / 102	489 / 787 / 80	713 / 537 / 183	586 / 671 / 150	555 / 540 / 321	477 / 673 / 264	570 / 683 / 94	472 / 855 / 78	681 / 578 / 174	555 / 713 / 142	530 / 580 / 306	466 / 715 / 250																							
3	521 / 778 / 86	423 / 954 / 70	555 / 689 / 142	460 / 862 / 118	407 / 728 / 235	349 / 898 / 193	489 / 819 / 80	391 / 989 / 64	523 / 730 / 134	428 / 902 / 110	382 / 768 / 221	333 / 934 / 178																							
1	801 / 559 / 129	656 / 694 / 106	833 / 379 / 211	798 / 554 / 202	703 / 493 / 406	574 / 603 / 327	747 / 586 / 121	619 / 737 / 100	833 / 428 / 211	745 / 582 / 189	662 / 523 / 382	562 / 645 / 311																							
2	692 / 659 / 112	547 / 787 / 88	798 / 537 / 202	656 / 671 / 167	621 / 540 / 359	518 / 673 / 295	638 / 683 / 103	528 / 855 / 85	762 / 578 / 193	621 / 713 / 158	593 / 580 / 343	505 / 715 / 279																							
3	583 / 778 / 94	474 / 954 / 77	621 / 689 / 158	514 / 862 / 131	455 / 728 / 263	378 / 898 / 215	547 / 819 / 88	437 / 989 / 71	585 / 730 / 149	479 / 902 / 122	428 / 768 / 247	361 / 934 / 199																							
Wind Speed [mph]		190						200																											
70	1	559 / 623 / 94	459 / 774 / 77	684 / 499 / 177	558 / 620 / 145	505 / 548 / 283	456 / 664 / 226	531 / 657 / 89	437 / 806 / 73	656 / 533 / 170	543 / 655 / 138	496 / 582 / 270							460 / 717 / 220																
	2	473 / 719 / 80	387 / 888 / 65	558 / 601 / 145	461 / 751 / 119	449 / 603 / 251	418 / 753 / 208	459 / 774 / 77	379 / 949 / 63	530 / 634 / 138	443 / 783 / 112	439 / 636 / 239							408 / 785 / 195																
	3	402 / 853 / 68	330 / 1057 / 56	433 / 765 / 112	349 / 931 / 91	337 / 829 / 189	304 / 1000 / 151	387 / 913 / 65	321 / 1121 / 53	419 / 822 / 109	343 / 992 / 87	323 / 859 / 176	303 / 1063 / 145																						
	1	635 / 623 / 104	521 / 774 / 86	776 / 499 / 199	634 / 620 / 162	555 / 548 / 321	496 / 664 / 257	602 / 657 / 99	489 / 806 / 80	745 / 533 / 191	602 / 655 / 154	543 / 582 / 306	498 / 717 / 250																						
	2	537 / 719 / 88	440 / 888 / 72	634 / 601 / 162	523 / 751 / 134	493 / 603 / 285	455 / 753 / 235	521 / 774 / 86	423 / 949 / 70	602 / 634 / 154	491 / 783 / 126	480 / 636 / 271	442 / 785 / 221																						
	3	456 / 853 / 75	375 / 1057 / 62	491 / 765 / 126	396 / 931 / 102	370 / 829 / 214	331 / 1000 / 171	440 / 913 / 72	358 / 1121 / 59	475 / 822 / 122	380 / 992 / 98	354 / 859 / 200	328 / 1063 / 164																						
	1	710 / 623 / 115	583 / 774 / 94	833 / 479 / 211	709 / 620 / 180	621 / 548 / 359	535 / 664 / 287	674 / 657 / 109	547 / 806 / 88	833 / 533 / 211	674 / 655 / 171	593 / 582 / 343	537 / 717 / 279																						
	2	601 / 719 / 97	492 / 888 / 80	709 / 601 / 180	585 / 751 / 149	552 / 603 / 319	491 / 753 / 263	583 / 774 / 94	474 / 949 / 77	674 / 634 / 171	550 / 783 / 140	524 / 636 / 303	475 / 785 / 247																						
	3	510 / 853 / 82	419 / 1057 / 68	550 / 765 / 140	443 / 931 / 113	414 / 829 / 239	357 / 1000 / 191	492 / 913 / 80	401 / 1121 / 65	532 / 822 / 135	426 / 992 / 108	386 / 859 / 223	353 / 1063 / 183																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Exposure Category : C	Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs																		
	Wind Speed [mph] 95						100						105						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
100	1	887 / 108 / 141	887 / 173 / 141	863 / 137 / 217	863 / 216 / 217	762 / 191 / 440	762 / 296 / 440	887 / 120 / 141	887 / 190 / 141	863 / 152 / 217	863 / 237 / 217	762 / 211 / 440	762 / 326 / 440	887 / 133 / 141	887 / 209 / 141	863 / 167 / 217	863 / 260 / 217	762 / 231 / 440	762 / 356 / 440
	2	887 / 308 / 141	887 / 472 / 141	863 / 208 / 217	863 / 323 / 217	762 / 240 / 440	762 / 369 / 440	887 / 338 / 141	887 / 518 / 141	863 / 230 / 217	863 / 354 / 217	762 / 264 / 440	762 / 405 / 440	887 / 370 / 141	887 / 565 / 141	863 / 252 / 217	863 / 388 / 217	762 / 289 / 440	762 / 443 / 440
	3	887 / 436 / 141	806 / 604 / 128	863 / 351 / 217	863 / 536 / 217	762 / 450 / 440	640 / 575 / 370	887 / 479 / 141	766 / 629 / 122	863 / 385 / 217	843 / 575 / 212	762 / 494 / 440	610 / 601 / 352	887 / 523 / 141	746 / 668 / 119	863 / 421 / 217	804 / 598 / 203	732 / 518 / 423	595 / 639 / 344
100	1	887 / 146 / 141	887 / 229 / 141	863 / 183 / 217	863 / 284 / 217	762 / 252 / 440	762 / 388 / 440	887 / 159 / 141	887 / 249 / 141	863 / 199 / 217	863 / 309 / 217	762 / 275 / 440	762 / 422 / 440						
	2	887 / 403 / 141	846 / 587 / 134	863 / 275 / 217	863 / 422 / 217	762 / 315 / 440	762 / 482 / 440	887 / 438 / 141	806 / 606 / 128	863 / 299 / 217	863 / 458 / 217	762 / 342 / 440	747 / 513 / 432						
	3	887 / 569 / 141	705 / 687 / 112	863 / 459 / 217	765 / 619 / 193	701 / 540 / 405	564 / 659 / 326	846 / 589 / 134	685 / 723 / 109	863 / 498 / 217	745 / 654 / 188	671 / 560 / 388	549 / 695 / 317						
100	1	887 / 173 / 141	887 / 270 / 141	863 / 217 / 217	863 / 335 / 217	762 / 298 / 440	762 / 456 / 440	887 / 159 / 141	887 / 249 / 141	863 / 199 / 217	863 / 309 / 217	762 / 275 / 440	762 / 422 / 440						
	2	887 / 474 / 141	786 / 639 / 125	863 / 324 / 217	863 / 496 / 217	762 / 371 / 440	717 / 532 / 414	887 / 438 / 141	806 / 606 / 128	863 / 299 / 217	863 / 458 / 217	762 / 342 / 440	747 / 513 / 432						
	3	806 / 607 / 128	665 / 758 / 106	863 / 539 / 217	706 / 669 / 178	640 / 578 / 370	519 / 708 / 300	846 / 589 / 134	685 / 723 / 109	863 / 498 / 217	745 / 654 / 188	671 / 560 / 388	549 / 695 / 317						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]		140						150						160					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	887 / 188 / 141	887 / 292 / 141	863 / 234 / 217	863 / 361 / 217	762 / 322 / 440	762 / 492 / 440	887 / 219 / 141	826 / 611 / 131	863 / 272 / 217	863 / 418 / 217	762 / 372 / 440	717 / 534 / 414	887 / 252 / 141	766 / 647 / 122	863 / 312 / 217	863 / 478 / 217	762 / 426 / 440	671 / 571 / 388	
	2	887 / 511 / 141	746 / 653 / 119	863 / 350 / 217	863 / 535 / 217	762 / 400 / 440	686 / 549 / 396	867 / 576 / 138	705 / 712 / 112	863 / 404 / 217	824 / 589 / 207	762 / 462 / 440	640 / 591 / 370	806 / 613 / 128	645 / 742 / 103	863 / 463 / 217	765 / 624 / 193	732 / 508 / 423	595 / 626 / 344	
	3	786 / 637 / 125	625 / 767 / 99	843 / 568 / 212	686 / 701 / 173	625 / 608 / 361	503 / 740 / 291	726 / 678 / 115	585 / 826 / 93	784 / 609 / 198	647 / 761 / 163	579 / 649 / 335	473 / 800 / 273	685 / 730 / 109	544 / 876 / 87	745 / 660 / 188	588 / 789 / 148	534 / 682 / 308	442 / 853 / 256	
100	1	887 / 287 / 141	726 / 694 / 115	863 / 355 / 217	863 / 542 / 217	762 / 483 / 440	625 / 603 / 361	826 / 586 / 131	685 / 737 / 109	863 / 400 / 217	824 / 582 / 207	732 / 523 / 423	605 / 645 / 344							
	2	766 / 659 / 122	605 / 787 / 96	863 / 525 / 217	726 / 671 / 183	686 / 540 / 396	564 / 673 / 326	705 / 683 / 112	585 / 855 / 93	843 / 578 / 212	686 / 713 / 173	656 / 580 / 379	543 / 715 / 308							
	3	645 / 778 / 103	524 / 954 / 83	686 / 689 / 173	569 / 862 / 143	503 / 728 / 291	412 / 898 / 238	605 / 819 / 96	484 / 989 / 77	647 / 730 / 163	530 / 902 / 134	473 / 768 / 273	388 / 934 / 220							
100	1	786 / 623 / 125	645 / 774 / 103	863 / 448 / 217	784 / 620 / 198	686 / 548 / 396	574 / 664 / 317	746 / 657 / 119	605 / 806 / 96	863 / 499 / 217	745 / 655 / 188	656 / 582 / 379	575 / 717 / 308							
	2	665 / 719 / 106	544 / 888 / 87	784 / 601 / 198	647 / 751 / 163	610 / 603 / 352	527 / 753 / 291	645 / 774 / 103	524 / 949 / 83	745 / 634 / 188	608 / 783 / 153	579 / 636 / 335	509 / 785 / 273							
	3	564 / 853 / 90	464 / 1057 / 74	608 / 765 / 153	490 / 931 / 124	458 / 829 / 264	383 / 1000 / 212	544 / 913 / 87	444 / 1121 / 71	588 / 822 / 148	471 / 992 / 119	427 / 859 / 247	378 / 1063 / 203							

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																			
	95						100						105							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																	
0	1	211 / 382 / 37	169 / 470 / 30	252 / 284 / 51	213 / 376 / 43	229 / 325 / 62	189 / 412 / 51	201 / 401 / 35	162 / 496 / 29	242 / 302 / 49	204 / 395 / 41	223 / 348 / 60	179 / 430 / 48	191 / 418 / 34	156 / 521 / 27	236 / 323 / 48	194 / 412 / 39	214 / 365 / 57	183 / 454 / 47	
	2	179 / 446 / 31	146 / 558 / 26	217 / 369 / 44	175 / 458 / 36	210 / 373 / 57	170 / 461 / 46	172 / 472 / 30	140 / 584 / 25	207 / 388 / 42	165 / 475 / 34	201 / 391 / 54	160 / 478 / 43	162 / 487 / 29	133 / 608 / 24	197 / 405 / 40	159 / 499 / 32	192 / 408 / 52	163 / 502 / 42	
	3	149 / 527 / 26	123 / 662 / 22	168 / 480 / 34	136 / 591 / 28	154 / 510 / 42	123 / 616 / 33	143 / 553 / 25	117 / 687 / 21	159 / 496 / 32	130 / 617 / 26	145 / 525 / 39	120 / 658 / 32	136 / 576 / 24	111 / 708 / 20	152 / 520 / 31	123 / 640 / 25	138 / 548 / 37	120 / 680 / 31	
	5	1	233 / 382 / 37	187 / 470 / 30	277 / 284 / 54	234 / 376 / 46	229 / 325 / 74	189 / 412 / 61	223 / 401 / 35	180 / 496 / 29	266 / 302 / 52	224 / 395 / 44	223 / 348 / 72	179 / 430 / 58	212 / 418 / 34	172 / 521 / 27	259 / 323 / 50	213 / 412 / 42	214 / 365 / 69	183 / 454 / 56
	2	197 / 446 / 31	162 / 558 / 26	238 / 369 / 46	192 / 458 / 37	210 / 373 / 68	170 / 461 / 55	190 / 472 / 30	154 / 584 / 25	227 / 388 / 44	181 / 475 / 35	201 / 391 / 65	160 / 478 / 52	180 / 487 / 29	147 / 608 / 24	217 / 405 / 42	174 / 499 / 34	192 / 408 / 62	163 / 502 / 50	
	3	165 / 527 / 26	137 / 662 / 22	185 / 480 / 36	149 / 591 / 29	154 / 510 / 50	123 / 616 / 40	158 / 553 / 25	129 / 687 / 21	174 / 496 / 34	142 / 617 / 28	145 / 525 / 47	120 / 658 / 39	151 / 576 / 24	122 / 708 / 20	167 / 520 / 33	135 / 640 / 27	138 / 548 / 45	120 / 680 / 37	
	10	1	296 / 382 / 37	237 / 470 / 30	341 / 277 / 65	296 / 376 / 57	255 / 325 / 94	210 / 412 / 78	282 / 401 / 35	228 / 496 / 29	336 / 302 / 64	283 / 395 / 54	248 / 348 / 92	199 / 430 / 74	268 / 418 / 34	218 / 521 / 27	327 / 323 / 63	269 / 412 / 51	238 / 365 / 88	200 / 454 / 71
	2	250 / 446 / 31	205 / 558 / 26	301 / 369 / 57	242 / 458 / 46	234 / 373 / 87	189 / 461 / 70	241 / 472 / 30	196 / 584 / 25	287 / 388 / 55	229 / 475 / 44	224 / 391 / 83	178 / 478 / 66	228 / 487 / 29	187 / 608 / 24	274 / 405 / 52	220 / 499 / 42	213 / 408 / 79	178 / 502 / 64	
	3	209 / 527 / 26	173 / 662 / 22	233 / 480 / 45	189 / 591 / 36	171 / 510 / 64	137 / 616 / 51	200 / 553 / 25	164 / 687 / 21	220 / 496 / 42	180 / 617 / 34	161 / 525 / 60	133 / 658 / 49	191 / 576 / 24	155 / 708 / 20	211 / 520 / 40	171 / 640 / 33	154 / 548 / 57	131 / 680 / 47	
5	Wind Speed [mph]																			
	110						115													
	0	1	185 / 440 / 33	149 / 543 / 26	230 / 344 / 47	184 / 427 / 37	204 / 381 / 55	185 / 467 / 44	175 / 453 / 31	143 / 563 / 25	223 / 364 / 45	178 / 447 / 36	195 / 395 / 52	190 / 487 / 42						
	2	156 / 509 / 27	127 / 629 / 22	188 / 420 / 38	152 / 521 / 31	182 / 423 / 49	167 / 524 / 40	149 / 529 / 26	120 / 647 / 21	181 / 441 / 37	146 / 541 / 30	176 / 444 / 47	171 / 544 / 38							
	3	133 / 612 / 24	107 / 747 / 19	146 / 542 / 30	120 / 677 / 25	135 / 583 / 37	125 / 718 / 30	127 / 631 / 22	104 / 784 / 18	139 / 562 / 28	113 / 694 / 23	129 / 602 / 35	125 / 734 / 28							
	5	1	205 / 440 / 33	165 / 543 / 26	252 / 344 / 49	202 / 427 / 40	204 / 381 / 66	185 / 467 / 53	194 / 453 / 31	158 / 563 / 25	245 / 364 / 48	195 / 447 / 38	195 / 395 / 63	190 / 487 / 51						
	2	172 / 509 / 27	140 / 629 / 22	206 / 420 / 40	167 / 521 / 33	182 / 423 / 59	167 / 524 / 48	165 / 529 / 26	133 / 647 / 21	199 / 441 / 39	160 / 541 / 31	176 / 444 / 57	171 / 544 / 46							
	3	147 / 612 / 24	119 / 747 / 19	160 / 542 / 31	132 / 677 / 26	135 / 583 / 44	125 / 718 / 36	140 / 631 / 22	115 / 784 / 18	153 / 562 / 30	125 / 694 / 24	129 / 602 / 42	125 / 734 / 34							
	10	1	259 / 440 / 33	209 / 543 / 26	318 / 344 / 61	256 / 427 / 49	227 / 381 / 84	198 / 467 / 67	246 / 453 / 31	200 / 563 / 25	309 / 364 / 59	247 / 447 / 47	217 / 395 / 80	199 / 487 / 65						
2	218 / 509 / 27	178 / 629 / 22	260 / 420 / 50	211 / 521 / 40	203 / 423 / 75	179 / 524 / 61	209 / 529 / 26	169 / 647 / 21	251 / 441 / 48	202 / 541 / 39	196 / 444 / 73	180 / 544 / 58								
3	187 / 612 / 24	150 / 747 / 19	202 / 542 / 39	166 / 677 / 32	151 / 583 / 56	134 / 718 / 46	178 / 631 / 22	146 / 784 / 18	193 / 562 / 37	157 / 694 / 30	144 / 602 / 53	132 / 734 / 43								
10	Wind Speed [mph]																			
	120						130													
	0	1	169 / 472 / 30	139 / 582 / 24	213 / 377 / 43	174 / 467 / 35	189 / 414 / 51	194 / 506 / 41	175 / 453 / 31	143 / 563 / 25	223 / 364 / 45	178 / 447 / 36	195 / 395 / 52	190 / 487 / 42						
	2	143 / 548 / 25	119 / 680 / 21	175 / 460 / 36	142 / 559 / 28	170 / 463 / 46	174 / 562 / 37	149 / 529 / 26	120 / 647 / 21	181 / 441 / 37	146 / 541 / 30	176 / 444 / 47	171 / 544 / 38							
	3	120 / 647 / 21	99 / 794 / 17	136 / 594 / 28	112 / 728 / 23	123 / 619 / 33	130 / 768 / 27	127 / 631 / 22	104 / 784 / 18	139 / 562 / 28	113 / 694 / 23	129 / 602 / 35	125 / 734 / 28							
	5	1	187 / 472 / 30	153 / 582 / 24	234 / 377 / 46	191 / 467 / 37	189 / 414 / 61	194 / 506 / 49	194 / 453 / 31	158 / 563 / 25	245 / 364 / 48	195 / 447 / 38	195 / 395 / 63	190 / 487 / 51						
	2	158 / 548 / 25	131 / 680 / 21	192 / 460 / 37	155 / 559 / 30	170 / 463 / 55	174 / 562 / 44	165 / 529 / 26	133 / 647 / 21	199 / 441 / 39	160 / 541 / 31	176 / 444 / 57	171 / 544 / 46							
	3	133 / 647 / 21	109 / 794 / 17	149 / 594 / 29	122 / 728 / 24	123 / 619 / 40	130 / 768 / 33	140 / 631 / 22	115 / 784 / 18	153 / 562 / 30	125 / 694 / 24	129 / 602 / 42	125 / 734 / 34							
	10	1	237 / 472 / 30	193 / 582 / 24	296 / 377 / 57	240 / 467 / 46	210 / 414 / 78	200 / 506 / 62	246 / 453 / 31	200 / 563 / 25	309 / 364 / 59	247 / 447 / 47	217 / 395 / 80	199 / 487 / 65						
2	200 / 548 / 25	166 / 680 / 21	242 / 460 / 46	195 / 559 / 37	189 / 463 / 70	179 / 562 / 56	209 / 529 / 26	169 / 647 / 21	251 / 441 / 48	202 / 541 / 39	196 / 444 / 73	180 / 544 / 58								
3	169 / 647 / 21	138 / 794 / 17	189 / 594 / 36	154 / 728 / 29	137 / 619 / 51	134 / 768 / 42	178 / 631 / 22	146 / 784 / 18	193 / 562 / 37	157 / 694 / 30	144 / 602 / 53	132 / 734 / 43								

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0 - 3	1 = 1' / 1
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Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																																			
	140						150						160																							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																											
0	1	162 / 490 / 29	143 / 612 / 24	204 / 390 / 41	178 / 485 / 34	182 / 432 / 49	202 / 534 / 40	153 / 532 / 27	148 / 654 / 22	191 / 423 / 39	183 / 516 / 31	186 / 465 / 46	208 / 564 / 37	143 / 569 / 25	151 / 687 / 20	178 / 452 / 36	190 / 552 / 29	191 / 492 / 42	216 / 599 / 34																	
	2	140 / 577 / 25	122 / 712 / 20	168 / 478 / 34	146 / 589 / 28	163 / 481 / 44	180 / 591 / 36	130 / 619 / 23	125 / 750 / 18	155 / 510 / 32	152 / 631 / 26	165 / 513 / 41	188 / 633 / 33	120 / 654 / 21	130 / 802 / 17	146 / 547 / 30	155 / 665 / 24	172 / 549 / 38	195 / 666 / 31																	
	3	117 / 678 / 21	102 / 826 / 17	130 / 609 / 26	115 / 761 / 22	120 / 650 / 32	133 / 801 / 26	111 / 738 / 20	105 / 885 / 16	120 / 649 / 25	117 / 797 / 20	121 / 689 / 30	140 / 862 / 25	101 / 767 / 18	108 / 934 / 15	113 / 701 / 23	121 / 848 / 19	126 / 741 / 28	146 / 915 / 23																	
	5	1	180 / 490 / 29	155 / 612 / 24	224 / 390 / 44	191 / 485 / 35	182 / 432 / 59	202 / 534 / 48	169 / 532 / 27	155 / 654 / 22	210 / 423 / 41	190 / 516 / 33	186 / 465 / 55	208 / 564 / 44	158 / 569 / 25	154 / 687 / 20	195 / 452 / 38	192 / 552 / 31	191 / 492 / 51	216 / 599 / 41																
	2	154 / 577 / 25	132 / 712 / 20	185 / 478 / 36	157 / 589 / 29	163 / 481 / 53	180 / 591 / 43	144 / 619 / 23	131 / 750 / 18	171 / 510 / 33	158 / 631 / 27	165 / 513 / 49	188 / 633 / 40	133 / 654 / 21	132 / 802 / 17	160 / 547 / 31	157 / 665 / 25	172 / 549 / 46	195 / 666 / 37																	
	3	129 / 678 / 21	110 / 826 / 17	142 / 609 / 28	124 / 761 / 23	120 / 650 / 39	133 / 801 / 32	122 / 738 / 20	110 / 885 / 16	132 / 649 / 26	121 / 797 / 21	121 / 689 / 36	140 / 862 / 30	112 / 767 / 18	110 / 934 / 15	125 / 701 / 24	122 / 848 / 20	126 / 741 / 34	146 / 915 / 28																	
	10	1	228 / 490 / 29	194 / 612 / 24	283 / 390 / 54	238 / 485 / 44	203 / 432 / 75	205 / 534 / 61	214 / 532 / 27	192 / 654 / 22	265 / 423 / 51	234 / 516 / 40	201 / 465 / 70	208 / 564 / 56	200 / 569 / 25	188 / 687 / 20	247 / 452 / 47	233 / 552 / 38	201 / 492 / 65	216 / 599 / 52																
	2	196 / 577 / 25	166 / 712 / 20	233 / 478 / 45	196 / 589 / 36	182 / 481 / 67	183 / 591 / 55	182 / 619 / 23	161 / 750 / 18	215 / 510 / 41	194 / 631 / 34	179 / 513 / 62	188 / 633 / 51	169 / 654 / 21	161 / 802 / 17	202 / 547 / 39	191 / 665 / 31	181 / 549 / 58	195 / 666 / 47																	
	3	164 / 678 / 21	138 / 826 / 17	180 / 609 / 34	154 / 761 / 29	133 / 650 / 49	135 / 801 / 40	155 / 738 / 20	136 / 885 / 16	166 / 649 / 32	149 / 797 / 26	131 / 689 / 46	140 / 862 / 38	141 / 767 / 18	134 / 934 / 15	157 / 701 / 30	149 / 848 / 24	133 / 741 / 43	146 / 915 / 35																	
5	Wind Speed [mph]																																			
	170						180																													
	0	1	141 / 601 / 24	158 / 733 / 19	175 / 476 / 34	200 / 597 / 28	199 / 525 / 40	229 / 644 / 32	147 / 643 / 22	163 / 774 / 18	180 / 505 / 32	205 / 624 / 26	205 / 553 / 37	240 / 686 / 31	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																			
	Panel Angle	Mono Slope																																		
	0 - 3	1 = 1' / 1																																		
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2	121 / 700 / 20	134 / 846 / 16	144 / 579 / 28	162 / 710 / 23	178 / 581 / 36	205 / 712 / 29	125 / 742 / 19	142 / 916 / 16	150 / 620 / 26	168 / 751 / 21	187 / 622 / 34	213 / 753 / 27																								
3	100 / 812 / 17	115 / 1014 / 14	114 / 748 / 22	129 / 924 / 18	131 / 787 / 26	151 / 957 / 21	106 / 881 / 16	121 / 1090 / 13	117 / 790 / 21	132 / 961 / 17	135 / 827 / 25	160 / 1031 / 21																								
5	1	153 / 601 / 24	158 / 733 / 19	189 / 476 / 35	200 / 597 / 29	199 / 525 / 48	229 / 644 / 39	155 / 643 / 22	163 / 774 / 18	189 / 505 / 33	205 / 624 / 27	205 / 553 / 45	240 / 686 / 37																							
2	131 / 700 / 20	134 / 846 / 16	156 / 579 / 29	162 / 710 / 24	178 / 581 / 43	205 / 712 / 35	132 / 742 / 19	142 / 916 / 16	158 / 620 / 28	168 / 751 / 22	187 / 622 / 41	213 / 753 / 33																								
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10	1	193 / 601 / 24	188 / 733 / 19	237 / 476 / 44	237 / 597 / 36	203 / 525 / 61	229 / 644 / 49	193 / 643 / 22	188 / 774 / 18	234 / 505 / 41	234 / 624 / 34	205 / 553 / 57	240 / 686 / 47																							
2	165 / 700 / 20	160 / 846 / 16	195 / 579 / 36	192 / 710 / 29	181 / 581 / 55	205 / 712 / 44	163 / 742 / 19	164 / 916 / 16	195 / 620 / 34	192 / 751 / 28	187 / 622 / 52	213 / 753 / 42																								
3	137 / 812 / 17	137 / 1014 / 14	153 / 748 / 29	152 / 924 / 23	134 / 787 / 40	151 / 957 / 33	139 / 881 / 16	140 / 1090 / 13	151 / 790 / 27	150 / 961 / 22	135 / 827 / 38	160 / 1031 / 31																								
10	Wind Speed [mph]																																			
	190						200																													
	0	1	148 / 664 / 21	174 / 836 / 17	189 / 541 / 30	213 / 662 / 25	215 / 590 / 36	250 / 723 / 29	157 / 716 / 20	177 / 866 / 16	192 / 563 / 28	221 / 695 / 23	224 / 624 / 34	258 / 756 / 27																						
	2	128 / 778 / 18	145 / 947 / 15	156 / 658 / 25	173 / 786 / 20	195 / 660 / 32	220 / 788 / 26	134 / 836 / 17	152 / 1008 / 14	161 / 693 / 24	183 / 844 / 19	202 / 695 / 31	234 / 845 / 25																							
	3	107 / 912 / 15	122 / 1110 / 12	119 / 825 / 19	139 / 1029 / 16	144 / 891 / 24	162 / 1054 / 19	112 / 973 / 15	127 / 1173 / 12	125 / 884 / 19	139 / 1046 / 15	146 / 918 / 22	170 / 1116 / 18																							
	5	1	153 / 664 / 21	174 / 836 / 17	193 / 541 / 32	213 / 662 / 26	215 / 590 / 43	250 / 723 / 35	158 / 716 / 20	177 / 866 / 16	192 / 563 / 30	221 / 695 / 24	224 / 624 / 41	258 / 756 / 33																						
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	3	110 / 912 / 15	122 / 1110 / 12	122 / 825 / 20	139 / 1029 / 17	144 / 891 / 29	162 / 1054 / 23	113 / 973 / 15	127 / 1173 / 12	125 / 884 / 20	139 / 1046 / 16	146 / 918 / 27	170 / 1116 / 22																							
	10	1	187 / 664 / 21	194 / 836 / 17	236 / 541 / 40	236 / 662 / 32	215 / 590 / 55	250 / 723 / 44	192 / 716 / 20	192 / 866 / 16	233 / 563 / 37	238 / 695 / 30	224 / 624 / 52	258 / 756 / 42																						
2	161 / 778 / 18	161 / 947 / 15	195 / 658 / 33	192 / 786 / 26	195 / 660 / 49	220 / 788 / 39	164 / 836 / 17	165 / 1008 / 14	195 / 693 / 31	197 / 844 / 25	202 / 695 / 47	234 / 845 / 38																								
3	135 / 912 / 15	136 / 1110 / 12	149 / 825 / 25	154 / 1029 / 21	144 / 891 / 37	162 / 1054 / 29	137 / 973 / 15	137 / 1173 / 12	152 / 884 / 24	150 / 1046 / 19	146 / 918 / 34	170 / 1116 / 28																								

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Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	358 / 382 / 38	287 / 470 / 31	390 / 263 / 74	358 / 376 / 67	291 / 325 / 115	239 / 412 / 94	342 / 401 / 37	276 / 496 / 30	390 / 290 / 74	341 / 395 / 64	283 / 348 / 112	227 / 430 / 90	325 / 418 / 35	265 / 521 / 28	390 / 319 / 74	325 / 412 / 61	271 / 365 / 107	227 / 454 / 87
2		303 / 446 / 33	248 / 558 / 27	363 / 369 / 68	293 / 458 / 55	267 / 373 / 105	215 / 461 / 85	292 / 472 / 31	237 / 584 / 26	347 / 388 / 65	277 / 475 / 52	255 / 391 / 101	203 / 478 / 80	276 / 487 / 30	226 / 608 / 24	331 / 405 / 62	266 / 499 / 50	243 / 408 / 96	202 / 502 / 77	
3		254 / 527 / 27	210 / 662 / 23	282 / 480 / 53	228 / 591 / 43	195 / 510 / 77	156 / 616 / 62	243 / 553 / 26	199 / 687 / 21	266 / 496 / 50	217 / 617 / 41	183 / 525 / 73	152 / 658 / 60	232 / 576 / 25	188 / 708 / 20	255 / 520 / 48	206 / 640 / 39	175 / 548 / 69	149 / 680 / 57	
20		1	421 / 382 / 42	337 / 470 / 33	438 / 252 / 82	419 / 376 / 78	326 / 325 / 138	268 / 412 / 113	401 / 401 / 40	324 / 496 / 32	438 / 278 / 82	400 / 395 / 75	317 / 348 / 134	255 / 430 / 108	382 / 418 / 38	311 / 521 / 31	438 / 305 / 82	381 / 412 / 71	304 / 365 / 128	254 / 454 / 104
		2	356 / 446 / 35	291 / 558 / 29	426 / 369 / 79	343 / 458 / 64	299 / 373 / 127	241 / 461 / 102	343 / 472 / 34	278 / 584 / 28	407 / 388 / 76	324 / 475 / 61	286 / 391 / 121	228 / 478 / 96	324 / 487 / 32	265 / 608 / 26	388 / 405 / 72	312 / 499 / 58	273 / 408 / 115	226 / 502 / 93
		3	298 / 527 / 30	246 / 662 / 25	331 / 480 / 62	267 / 591 / 50	219 / 510 / 93	174 / 616 / 74	285 / 553 / 28	233 / 687 / 23	312 / 496 / 58	254 / 617 / 48	206 / 525 / 87	170 / 658 / 72	272 / 576 / 27	220 / 708 / 22	299 / 520 / 56	242 / 640 / 45	197 / 548 / 83	166 / 680 / 68
25		1	421 / 382 / 42	337 / 470 / 33	438 / 252 / 82	419 / 376 / 78	362 / 325 / 165	297 / 412 / 136	401 / 401 / 40	324 / 496 / 32	438 / 278 / 82	400 / 395 / 75	352 / 348 / 161	282 / 430 / 129	382 / 418 / 38	311 / 521 / 31	438 / 305 / 82	381 / 412 / 71	337 / 365 / 154	280 / 454 / 125
		2	356 / 446 / 35	291 / 558 / 29	426 / 369 / 79	343 / 458 / 64	332 / 373 / 152	268 / 461 / 122	343 / 472 / 34	278 / 584 / 28	407 / 388 / 76	324 / 475 / 61	317 / 391 / 145	253 / 478 / 115	324 / 487 / 32	265 / 608 / 26	388 / 405 / 72	312 / 499 / 58	302 / 408 / 138	250 / 502 / 111
		3	298 / 527 / 30	246 / 662 / 25	331 / 480 / 62	267 / 591 / 50	243 / 510 / 111	193 / 616 / 88	285 / 553 / 28	233 / 687 / 23	312 / 496 / 58	254 / 617 / 48	228 / 525 / 104	188 / 658 / 86	272 / 576 / 27	220 / 708 / 22	299 / 520 / 56	242 / 640 / 45	218 / 548 / 100	184 / 680 / 82
15	1	314 / 440 / 34	254 / 543 / 27	385 / 344 / 73	309 / 427 / 58	259 / 381 / 102	223 / 467 / 82	298 / 453 / 32	243 / 563 / 26	374 / 364 / 70	298 / 447 / 56	247 / 395 / 98	224 / 487 / 79							
	2	265 / 509 / 28	215 / 629 / 23	314 / 420 / 59	255 / 521 / 48	231 / 423 / 91	202 / 524 / 74	254 / 529 / 27	204 / 647 / 22	304 / 441 / 57	244 / 541 / 46	223 / 444 / 88	201 / 544 / 71							
	3	226 / 612 / 24	182 / 747 / 20	244 / 542 / 46	201 / 677 / 38	171 / 583 / 68	151 / 718 / 55	215 / 631 / 23	177 / 784 / 19	233 / 562 / 44	190 / 694 / 36	163 / 602 / 65	148 / 734 / 52							
	20	1	369 / 440 / 37	298 / 543 / 30	438 / 334 / 82	362 / 427 / 68	290 / 381 / 123	249 / 467 / 98	350 / 453 / 35	285 / 563 / 28	438 / 364 / 82	350 / 447 / 65	277 / 395 / 117	248 / 487 / 95						
		2	311 / 509 / 31	253 / 629 / 25	369 / 420 / 69	299 / 521 / 56	259 / 423 / 110	225 / 524 / 89	298 / 529 / 30	240 / 647 / 24	356 / 441 / 67	286 / 541 / 54	250 / 444 / 106	223 / 544 / 85						
		3	265 / 612 / 26	214 / 747 / 21	286 / 542 / 54	235 / 677 / 44	192 / 583 / 81	168 / 718 / 66	253 / 631 / 25	207 / 784 / 21	273 / 562 / 51	223 / 694 / 42	183 / 602 / 78	164 / 734 / 63						
	25	1	369 / 440 / 37	298 / 543 / 30	438 / 334 / 82	362 / 427 / 68	322 / 381 / 147	274 / 467 / 118	350 / 453 / 35	285 / 563 / 28	438 / 364 / 82	350 / 447 / 65	307 / 395 / 140	272 / 487 / 113						
		2	311 / 509 / 31	253 / 629 / 25	369 / 420 / 69	299 / 521 / 56	287 / 423 / 131	248 / 524 / 106	298 / 529 / 30	240 / 647 / 24	356 / 441 / 67	286 / 541 / 54	277 / 444 / 127	245 / 544 / 102						
		3	265 / 612 / 26	214 / 747 / 21	286 / 542 / 54	235 / 677 / 44	213 / 583 / 97	185 / 718 / 79	253 / 631 / 25	207 / 784 / 21	273 / 562 / 51	223 / 694 / 42	203 / 602 / 93	180 / 734 / 75						
15	1	287 / 472 / 31	233 / 582 / 25	358 / 377 / 67	290 / 467 / 54	239 / 414 / 94	224 / 506 / 76	298 / 453 / 32	243 / 563 / 26	374 / 364 / 70	298 / 447 / 56	247 / 395 / 98	224 / 487 / 79							
	2	243 / 548 / 26	200 / 680 / 21	293 / 460 / 55	235 / 559 / 44	215 / 463 / 85	200 / 562 / 68	254 / 529 / 27	204 / 647 / 22	304 / 441 / 57	244 / 541 / 46	223 / 444 / 88	201 / 544 / 71							
	3	204 / 647 / 22	167 / 794 / 18	228 / 594 / 43	186 / 728 / 35	156 / 619 / 62	149 / 768 / 51	215 / 631 / 23	177 / 784 / 19	233 / 562 / 44	190 / 694 / 36	163 / 602 / 65	148 / 734 / 52							
	20	1	337 / 472 / 33	274 / 582 / 27	419 / 377 / 78	339 / 467 / 63	268 / 414 / 113	247 / 506 / 91	350 / 453 / 35	285 / 563 / 28	438 / 364 / 82	350 / 447 / 65	277 / 395 / 117	248 / 487 / 95						
		2	285 / 548 / 28	235 / 680 / 23	343 / 460 / 64	275 / 559 / 51	241 / 463 / 102	221 / 562 / 81	298 / 529 / 30	240 / 647 / 24	356 / 441 / 67	286 / 541 / 54	250 / 444 / 106	223 / 544 / 85						
		3	240 / 647 / 24	196 / 794 / 19	267 / 594 / 50	218 / 728 / 41	174 / 619 / 74	165 / 768 / 61	253 / 631 / 25	207 / 784 / 21	273 / 562 / 51	223 / 694 / 42	183 / 602 / 78	164 / 734 / 63						
	25	1	337 / 472 / 33	274 / 582 / 27	419 / 377 / 78	339 / 467 / 63	297 / 414 / 136	270 / 506 / 109	350 / 453 / 35	285 / 563 / 28	438 / 364 / 82	350 / 447 / 65	307 / 395 / 140	272 / 487 / 113						
		2	285 / 548 / 28	235 / 680 / 23	343 / 460 / 64	275 / 559 / 51	268 / 463 / 122	242 / 562 / 97	298 / 529 / 30	240 / 647 / 24	356 / 441 / 67	286 / 541 / 54	277 / 444 / 127	245 / 544 / 102						
		3	240 / 647 / 24	196 / 794 / 19	267 / 594 / 50	218 / 728 / 41	193 / 619 / 88	180 / 768 / 73	253 / 631 / 25	207 / 784 / 21	273 / 562 / 51	223 / 694 / 42	203 / 602 / 93	180 / 734 / 75						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		140						150						160																					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
Ground Snow	15	1	276 / 490 / 30	234 / 612 / 24	341 / 390 / 64	286 / 485 / 52	231 / 432 / 91	228 / 534 / 74	259 / 532 / 28	228 / 654 / 23	320 / 423 / 60	278 / 516 / 48	227 / 465 / 85	226 / 564 / 68	243 / 569 / 26	221 / 687 / 21	298 / 452 / 56	274 / 552 / 45	225 / 492 / 79	227 / 599 / 63																
		2	237 / 577 / 26	200 / 712 / 21	282 / 478 / 53	236 / 589 / 43	207 / 481 / 82	204 / 591 / 66	221 / 619 / 24	192 / 750 / 19	260 / 510 / 49	231 / 631 / 40	202 / 513 / 76	205 / 633 / 62	204 / 654 / 22	190 / 802 / 18	244 / 547 / 46	224 / 665 / 37	202 / 549 / 71	205 / 666 / 57																
		3	199 / 678 / 21	165 / 826 / 17	217 / 609 / 41	185 / 761 / 34	152 / 650 / 60	150 / 801 / 49	188 / 738 / 20	162 / 885 / 16	201 / 649 / 38	177 / 797 / 31	148 / 689 / 55	152 / 862 / 46	171 / 767 / 19	158 / 934 / 15	190 / 701 / 36	175 / 848 / 29	149 / 741 / 52	154 / 915 / 43																
	20	1	324 / 490 / 32	273 / 612 / 26	400 / 390 / 75	334 / 485 / 61	259 / 432 / 110	251 / 534 / 89	304 / 532 / 30	265 / 654 / 25	375 / 423 / 70	322 / 516 / 56	254 / 465 / 102	247 / 564 / 81	285 / 569 / 28	255 / 687 / 23	350 / 452 / 65	315 / 552 / 52	249 / 492 / 95	247 / 599 / 76																
		2	278 / 577 / 28	233 / 712 / 23	331 / 478 / 62	275 / 589 / 50	232 / 481 / 98	224 / 591 / 79	259 / 619 / 26	223 / 750 / 21	305 / 510 / 57	267 / 631 / 46	225 / 513 / 91	224 / 633 / 74	240 / 654 / 24	219 / 802 / 19	286 / 547 / 54	258 / 665 / 43	224 / 549 / 85	222 / 666 / 68																
		3	233 / 678 / 23	193 / 826 / 19	254 / 609 / 48	216 / 761 / 39	170 / 650 / 72	166 / 801 / 59	220 / 738 / 22	188 / 885 / 18	235 / 649 / 44	205 / 797 / 36	165 / 689 / 66	167 / 862 / 55	201 / 767 / 20	182 / 934 / 16	223 / 701 / 42	201 / 848 / 34	165 / 741 / 63	167 / 915 / 51																
	25	1	324 / 490 / 32	273 / 612 / 26	400 / 390 / 75	334 / 485 / 61	287 / 432 / 131	274 / 534 / 106	304 / 532 / 30	265 / 654 / 25	375 / 423 / 70	322 / 516 / 56	280 / 465 / 122	268 / 564 / 97	285 / 569 / 28	255 / 687 / 23	350 / 452 / 65	315 / 552 / 52	273 / 492 / 113	266 / 599 / 91																
		2	278 / 577 / 28	233 / 712 / 23	331 / 478 / 62	275 / 589 / 50	258 / 481 / 118	244 / 591 / 95	259 / 619 / 26	223 / 750 / 21	305 / 510 / 57	267 / 631 / 46	249 / 513 / 109	243 / 633 / 88	240 / 654 / 24	219 / 802 / 19	286 / 547 / 54	258 / 665 / 43	246 / 549 / 102	240 / 666 / 82																
		3	233 / 678 / 23	193 / 826 / 19	254 / 609 / 48	216 / 761 / 39	188 / 650 / 86	181 / 801 / 70	220 / 738 / 22	188 / 885 / 18	235 / 649 / 44	205 / 797 / 36	182 / 689 / 79	181 / 862 / 66	201 / 767 / 20	182 / 934 / 16	223 / 701 / 42	201 / 848 / 34	181 / 741 / 75	180 / 915 / 61																
15	170	1	232 / 601 / 24	220 / 733 / 20	284 / 476 / 52	276 / 597 / 43	226 / 525 / 74	233 / 644 / 60	230 / 643 / 23	218 / 774 / 19	279 / 505 / 49	271 / 624 / 40	226 / 553 / 69	240 / 686 / 57	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	198 / 700 / 21	187 / 846 / 17	234 / 579 / 43	224 / 710 / 35	202 / 581 / 66	209 / 712 / 54	195 / 742 / 20	190 / 916 / 16	233 / 620 / 41	222 / 751 / 33	205 / 622 / 63	213 / 753 / 51																								
3	164 / 812 / 17	160 / 1014 / 14	184 / 748 / 34	178 / 924 / 28	149 / 787 / 49	154 / 957 / 40	166 / 881 / 17	162 / 1090 / 14	180 / 790 / 32	174 / 961 / 26	149 / 827 / 46	160 / 1031 / 38																								
20	1	272 / 601 / 26	252 / 733 / 21	332 / 476 / 61	315 / 597 / 50	249 / 525 / 89	252 / 644 / 72	268 / 643 / 25	248 / 774 / 20	324 / 505 / 57	307 / 624 / 46	247 / 553 / 83	256 / 686 / 68																							
	2	232 / 700 / 23	214 / 846 / 18	273 / 579 / 50	255 / 710 / 41	222 / 581 / 79	225 / 712 / 64	227 / 742 / 21	216 / 916 / 18	270 / 620 / 48	252 / 751 / 38	225 / 622 / 76	228 / 753 / 61																							
	3	192 / 812 / 19	183 / 1014 / 16	215 / 748 / 39	203 / 924 / 32	164 / 787 / 59	166 / 957 / 48	192 / 881 / 18	184 / 1090 / 15	209 / 790 / 37	197 / 961 / 30	163 / 827 / 55	171 / 1031 / 46																							
25	1	272 / 601 / 26	252 / 733 / 21	332 / 476 / 61	315 / 597 / 50	271 / 525 / 106	270 / 644 / 86	268 / 643 / 25	248 / 774 / 20	324 / 505 / 57	307 / 624 / 46	268 / 553 / 100	273 / 686 / 82																							
	2	232 / 700 / 23	214 / 846 / 18	273 / 579 / 50	255 / 710 / 41	243 / 581 / 95	242 / 712 / 77	227 / 742 / 21	216 / 916 / 18	270 / 620 / 48	252 / 751 / 38	244 / 622 / 91	243 / 753 / 73																							
	3	192 / 812 / 19	183 / 1014 / 16	215 / 748 / 39	203 / 924 / 32	179 / 787 / 70	178 / 957 / 57	192 / 881 / 18	184 / 1090 / 15	209 / 790 / 37	197 / 961 / 30	177 / 827 / 66	182 / 1031 / 55																							
15	190	1	222 / 664 / 21	223 / 836 / 18	279 / 541 / 47	271 / 662 / 38	230 / 590 / 66	250 / 723 / 54	225 / 716 / 21	219 / 866 / 17	273 / 563 / 44	271 / 695 / 36	233 / 624 / 63													258 / 756 / 51										
		2	191 / 778 / 19	186 / 947 / 15	231 / 658 / 39	220 / 786 / 31	208 / 660 / 60	220 / 788 / 47	193 / 836 / 18	188 / 1008 / 14	228 / 693 / 37	224 / 844 / 30	210 / 695 / 57													234 / 845 / 46										
		3	160 / 912 / 16	156 / 1110 / 13	176 / 825 / 30	176 / 1029 / 25	153 / 891 / 44	162 / 1054 / 35	161 / 973 / 15	157 / 1173 / 12	178 / 884 / 29	170 / 1046 / 23	152 / 918 / 41													170 / 1116 / 33										
	20	1	257 / 664 / 23	251 / 836 / 19	322 / 541 / 55	306 / 662 / 44	250 / 590 / 79	259 / 723 / 64	259 / 716 / 23	246 / 866 / 18	313 / 563 / 51	303 / 695 / 42	253 / 624 / 76	261 / 756 / 61																						
		2	221 / 778 / 20	210 / 947 / 16	266 / 658 / 45	248 / 786 / 36	226 / 660 / 72	229 / 788 / 57	222 / 836 / 19	211 / 1008 / 16	262 / 693 / 43	251 / 844 / 35	227 / 695 / 68	237 / 845 / 55																						
		3	185 / 912 / 17	176 / 1110 / 14	203 / 825 / 35	198 / 1029 / 29	167 / 891 / 53	168 / 1054 / 42	185 / 973 / 16	176 / 1173 / 13	204 / 884 / 34	191 / 1046 / 26	164 / 918 / 49	172 / 1116 / 40																						
	25	1	257 / 664 / 23	251 / 836 / 19	322 / 541 / 55	306 / 662 / 44	270 / 590 / 95	276 / 723 / 77	259 / 716 / 23	246 / 866 / 18	313 / 563 / 51	303 / 695 / 42	272 / 624 / 91	277 / 756 / 73																						
		2	221 / 778 / 20	210 / 947 / 16	266 / 658 / 45	248 / 786 / 36	245 / 660 / 86	243 / 788 / 68	222 / 836 / 19	211 / 1008 / 16	262 / 693 / 43	251 / 844 / 35	245 / 695 / 82	251 / 845 / 66																						
		3	185 / 912 / 17	176 / 1110 / 14	203 / 825 / 35	198 / 1029 / 29	180 / 891 / 64	179 / 1054 / 50	185 / 973 / 16	176 / 1173 / 13	204 / 884 / 34	191 / 1046 / 26	177 / 918 / 59	182 / 1116 / 48																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	423 / 382 / 42	338 / 470 / 34	441 / 252 / 82	421 / 376 / 79	392 / 320 / 190	326 / 412 / 158	403 / 401 / 40	325 / 496 / 32	441 / 278 / 82	402 / 395 / 75	386 / 348 / 187	310 / 430 / 150	384 / 418 / 38	312 / 521 / 31	441 / 305 / 82	383 / 412 / 72	370 / 365 / 179	307 / 454 / 145
2		358 / 446 / 35	293 / 558 / 29	428 / 369 / 80	345 / 458 / 64	364 / 373 / 177	294 / 461 / 142	345 / 472 / 34	280 / 584 / 28	409 / 388 / 76	326 / 475 / 61	348 / 391 / 169	277 / 478 / 135	325 / 487 / 32	267 / 608 / 27	389 / 405 / 73	313 / 499 / 59	332 / 408 / 161	274 / 502 / 129	
3		299 / 527 / 30	247 / 662 / 25	332 / 480 / 62	268 / 591 / 50	267 / 510 / 129	212 / 616 / 103	286 / 553 / 28	234 / 687 / 23	313 / 496 / 59	256 / 617 / 48	250 / 525 / 121	207 / 658 / 100	273 / 576 / 27	221 / 708 / 22	300 / 520 / 56	243 / 640 / 46	239 / 548 / 116	201 / 680 / 95	
35		1	465 / 382 / 44	372 / 470 / 35	470 / 244 / 87	463 / 376 / 86	421 / 316 / 214	356 / 412 / 181	443 / 401 / 42	357 / 496 / 34	470 / 270 / 87	442 / 395 / 82	421 / 348 / 214	338 / 430 / 172	422 / 418 / 40	343 / 521 / 33	470 / 296 / 87	421 / 412 / 78	403 / 365 / 205	334 / 454 / 166
		2	393 / 446 / 37	322 / 558 / 31	470 / 369 / 87	379 / 458 / 70	397 / 373 / 202	320 / 461 / 163	379 / 472 / 36	308 / 584 / 29	449 / 388 / 83	358 / 475 / 67	379 / 391 / 193	302 / 478 / 154	357 / 487 / 34	293 / 608 / 28	428 / 405 / 80	344 / 499 / 64	361 / 408 / 184	297 / 502 / 148
		3	329 / 527 / 31	272 / 662 / 26	365 / 480 / 68	295 / 591 / 55	290 / 510 / 148	231 / 616 / 118	315 / 553 / 30	258 / 687 / 25	344 / 496 / 64	281 / 617 / 52	273 / 525 / 139	225 / 658 / 115	300 / 576 / 29	243 / 708 / 23	330 / 520 / 61	267 / 640 / 50	261 / 548 / 133	219 / 680 / 109
40		1	507 / 188 / 46	405 / 470 / 37	497 / 237 / 92	497 / 370 / 92	442 / 307 / 233	385 / 412 / 203	483 / 401 / 44	390 / 496 / 36	497 / 262 / 92	481 / 395 / 89	442 / 338 / 233	365 / 430 / 193	460 / 418 / 42	374 / 521 / 34	497 / 288 / 92	458 / 412 / 85	436 / 365 / 230	361 / 454 / 186
		2	429 / 446 / 39	351 / 558 / 32	497 / 358 / 92	413 / 458 / 76	429 / 373 / 227	346 / 461 / 183	413 / 472 / 38	335 / 584 / 31	489 / 388 / 90	390 / 475 / 72	410 / 391 / 217	327 / 478 / 173	390 / 487 / 36	320 / 608 / 29	466 / 405 / 86	375 / 499 / 69	391 / 408 / 206	321 / 502 / 166
		3	359 / 527 / 33	296 / 662 / 27	397 / 480 / 74	321 / 591 / 60	314 / 510 / 166	250 / 616 / 132	343 / 553 / 31	281 / 687 / 26	375 / 496 / 69	306 / 617 / 57	295 / 525 / 156	244 / 658 / 129	327 / 576 / 30	265 / 708 / 24	359 / 520 / 67	291 / 640 / 54	282 / 548 / 149	236 / 680 / 122
Wind Speed [mph]		110						115												
30	1	371 / 440 / 37	299 / 543 / 30	441 / 334 / 82	364 / 427 / 68	354 / 381 / 171	299 / 467 / 137	351 / 453 / 35	286 / 563 / 28	441 / 364 / 82	351 / 447 / 66	337 / 395 / 163	297 / 487 / 132							
	2	312 / 509 / 31	254 / 629 / 25	370 / 420 / 69	300 / 521 / 56	316 / 423 / 153	270 / 524 / 124	299 / 529 / 30	241 / 647 / 24	358 / 441 / 67	287 / 541 / 54	305 / 444 / 148	267 / 544 / 119							
	3	267 / 612 / 27	215 / 747 / 21	287 / 542 / 54	236 / 677 / 44	234 / 583 / 114	202 / 718 / 92	254 / 631 / 25	208 / 784 / 21	275 / 562 / 51	224 / 694 / 42	223 / 602 / 108	196 / 734 / 87							
	35	1	407 / 440 / 39	329 / 543 / 31	470 / 324 / 87	400 / 427 / 74	385 / 381 / 196	324 / 467 / 157	386 / 453 / 37	315 / 563 / 30	470 / 353 / 87	386 / 447 / 72	367 / 395 / 187	321 / 487 / 151						
		2	343 / 509 / 33	279 / 629 / 27	407 / 420 / 76	330 / 521 / 61	344 / 423 / 175	293 / 524 / 142	329 / 529 / 31	265 / 647 / 25	393 / 441 / 73	316 / 541 / 59	332 / 444 / 169	289 / 544 / 136						
		3	293 / 612 / 28	236 / 747 / 23	316 / 542 / 59	260 / 677 / 48	255 / 583 / 130	219 / 718 / 106	279 / 631 / 27	229 / 784 / 22	302 / 562 / 56	246 / 694 / 46	243 / 602 / 124	212 / 734 / 100						
	40	1	444 / 440 / 41	359 / 543 / 33	497 / 315 / 92	436 / 427 / 81	417 / 381 / 220	350 / 467 / 176	421 / 453 / 38	343 / 563 / 31	497 / 343 / 92	420 / 447 / 78	397 / 395 / 210	345 / 487 / 169						
		2	374 / 509 / 34	304 / 629 / 28	443 / 420 / 82	359 / 521 / 67	372 / 423 / 196	316 / 524 / 159	359 / 529 / 33	289 / 647 / 26	428 / 441 / 79	344 / 541 / 64	359 / 444 / 190	311 / 544 / 152						
		3	320 / 612 / 29	257 / 747 / 24	344 / 542 / 64	283 / 677 / 53	276 / 583 / 146	236 / 718 / 119	304 / 631 / 28	250 / 784 / 23	329 / 562 / 61	268 / 694 / 50	263 / 602 / 139	228 / 734 / 112						
Wind Speed [mph]		120						130												
30	1	338 / 472 / 34	275 / 582 / 27	421 / 377 / 79	341 / 467 / 63	326 / 414 / 158	294 / 506 / 127	351 / 453 / 35	286 / 563 / 28	441 / 364 / 82	351 / 447 / 66	337 / 395 / 163	297 / 487 / 132							
	2	286 / 548 / 28	236 / 680 / 23	345 / 460 / 64	277 / 559 / 51	294 / 463 / 142	263 / 562 / 114	299 / 529 / 30	241 / 647 / 24	358 / 441 / 67	287 / 541 / 54	305 / 444 / 148	267 / 544 / 119							
	3	241 / 647 / 24	197 / 794 / 20	268 / 594 / 50	219 / 728 / 41	212 / 619 / 103	196 / 768 / 85	254 / 631 / 25	208 / 784 / 21	275 / 562 / 51	224 / 694 / 42	223 / 602 / 108	196 / 734 / 87							
	35	1	372 / 472 / 35	302 / 582 / 29	463 / 377 / 86	374 / 467 / 69	356 / 414 / 181	317 / 506 / 145	386 / 453 / 37	315 / 563 / 30	470 / 353 / 87	386 / 447 / 72	367 / 395 / 187	321 / 487 / 151						
		2	315 / 548 / 30	259 / 680 / 25	379 / 460 / 70	304 / 559 / 56	320 / 463 / 163	284 / 562 / 130	329 / 529 / 31	265 / 647 / 25	393 / 441 / 73	316 / 541 / 59	332 / 444 / 169	289 / 544 / 136						
		3	265 / 647 / 25	216 / 794 / 21	295 / 594 / 55	240 / 728 / 45	231 / 619 / 118	211 / 768 / 97	279 / 631 / 27	229 / 784 / 22	302 / 562 / 56	246 / 694 / 46	243 / 602 / 124	212 / 734 / 100						
	40	1	405 / 472 / 37	329 / 582 / 30	497 / 372 / 92	407 / 467 / 75	385 / 414 / 203	340 / 506 / 163	421 / 453 / 38	343 / 563 / 31	497 / 343 / 92	420 / 447 / 78	397 / 395 / 210	345 / 487 / 169						
		2	343 / 548 / 31	282 / 680 / 26	413 / 460 / 76	331 / 559 / 61	346 / 463 / 183	305 / 562 / 146	359 / 529 / 33	289 / 647 / 26	428 / 441 / 79	344 / 541 / 64	359 / 444 / 190	311 / 544 / 152						
		3	289 / 647 / 26	235 / 794 / 22	321 / 594 / 60	261 / 728 / 48	250 / 619 / 132	227 / 768 / 109	304 / 631 / 28	250 / 784 / 23	329 / 562 / 61	268 / 694 / 50	263 / 602 / 139	228 / 734 / 112						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																																		
	140						150						160																						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
30	1	325 / 490 / 32	274 / 612 / 27	402 / 390 / 75	335 / 485 / 61	316 / 432 / 153	296 / 534 / 124	306 / 532 / 30	266 / 654 / 25	377 / 423 / 70	323 / 516 / 56	306 / 465 / 142	288 / 564 / 114	286 / 569 / 28	256 / 687 / 23	351 / 452 / 66	317 / 552 / 53	298 / 492 / 132	286 / 599 / 106																
	2	280 / 577 / 28	234 / 712 / 23	332 / 478 / 62	276 / 589 / 50	283 / 481 / 137	265 / 591 / 111	260 / 619 / 26	224 / 750 / 21	307 / 510 / 57	268 / 631 / 47	272 / 513 / 127	262 / 633 / 103	241 / 654 / 24	220 / 802 / 20	287 / 547 / 54	259 / 665 / 43	268 / 549 / 119	257 / 666 / 95																
	3	234 / 678 / 23	194 / 826 / 19	256 / 609 / 48	217 / 761 / 40	207 / 650 / 100	196 / 801 / 82	221 / 738 / 22	189 / 885 / 18	236 / 649 / 44	206 / 797 / 36	199 / 689 / 92	195 / 862 / 77	202 / 767 / 20	183 / 934 / 16	224 / 701 / 42	202 / 848 / 34	197 / 741 / 87	193 / 915 / 71																
	1	357 / 490 / 34	301 / 612 / 28	442 / 390 / 82	367 / 485 / 67	344 / 432 / 175	319 / 534 / 142	336 / 532 / 32	290 / 654 / 26	414 / 423 / 77	353 / 516 / 61	332 / 465 / 163	309 / 564 / 130	315 / 569 / 30	279 / 687 / 24	386 / 452 / 72	344 / 552 / 57	322 / 492 / 151	305 / 599 / 121																
	2	308 / 577 / 29	257 / 712 / 24	365 / 478 / 68	302 / 589 / 55	308 / 481 / 157	285 / 591 / 127	286 / 619 / 27	245 / 750 / 22	337 / 510 / 63	293 / 631 / 51	295 / 513 / 145	281 / 633 / 118	265 / 654 / 25	239 / 802 / 21	316 / 547 / 59	282 / 665 / 47	290 / 549 / 136	274 / 666 / 109																
	3	258 / 678 / 25	213 / 826 / 20	281 / 609 / 52	238 / 761 / 43	225 / 650 / 115	211 / 801 / 94	243 / 738 / 23	206 / 885 / 19	260 / 649 / 48	225 / 797 / 39	216 / 689 / 106	209 / 862 / 88	222 / 767 / 21	199 / 934 / 17	246 / 701 / 46	219 / 848 / 37	213 / 741 / 100	206 / 915 / 82																
	1	390 / 490 / 36	327 / 612 / 29	481 / 390 / 89	399 / 485 / 72	372 / 432 / 196	342 / 534 / 159	366 / 532 / 34	315 / 654 / 27	451 / 423 / 83	382 / 516 / 67	358 / 465 / 183	330 / 564 / 146	343 / 569 / 31	301 / 687 / 25	420 / 452 / 78	372 / 552 / 62	346 / 492 / 169	324 / 599 / 136																
	2	335 / 577 / 31	279 / 712 / 25	397 / 478 / 74	329 / 589 / 60	333 / 481 / 176	306 / 591 / 142	312 / 619 / 29	265 / 750 / 23	367 / 510 / 68	317 / 631 / 55	319 / 513 / 163	300 / 633 / 132	289 / 654 / 26	258 / 802 / 22	344 / 547 / 64	304 / 665 / 51	312 / 549 / 152	292 / 666 / 122																
	3	281 / 678 / 26	232 / 826 / 21	306 / 609 / 57	258 / 761 / 47	244 / 650 / 129	226 / 801 / 105	265 / 738 / 24	224 / 885 / 19	283 / 649 / 53	244 / 797 / 43	233 / 689 / 119	223 / 862 / 98	242 / 767 / 22	215 / 934 / 18	268 / 701 / 50	237 / 848 / 40	229 / 741 / 112	219 / 915 / 92																
35	1	273 / 601 / 27	253 / 733 / 21	333 / 476 / 61	317 / 597 / 50	294 / 525 / 124	289 / 644 / 100	269 / 643 / 25	249 / 774 / 20	325 / 505 / 57	308 / 624 / 47	290 / 553 / 116	291 / 686 / 95	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panel Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
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		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	233 / 700 / 23	215 / 846 / 18	275 / 579 / 50	256 / 710 / 41	263 / 581 / 111	258 / 712 / 90	228 / 742 / 21	217 / 916 / 18	271 / 620 / 48	253 / 751 / 38	263 / 622 / 106	259 / 753 / 85																							
3	193 / 812 / 19	184 / 1014 / 16	216 / 748 / 40	204 / 924 / 32	194 / 787 / 82	190 / 957 / 66	193 / 881 / 18	185 / 1090 / 15	210 / 790 / 37	198 / 961 / 30	191 / 827 / 77	194 / 1031 / 64																							
1	299 / 601 / 28	274 / 733 / 23	365 / 476 / 67	343 / 597 / 55	317 / 525 / 142	307 / 644 / 115	294 / 643 / 27	269 / 774 / 21	356 / 505 / 63	333 / 624 / 51	311 / 553 / 133	308 / 686 / 109																							
2	256 / 700 / 24	233 / 846 / 19	301 / 579 / 55	278 / 710 / 45	283 / 581 / 127	275 / 712 / 103	249 / 742 / 23	234 / 916 / 19	296 / 620 / 52	273 / 751 / 42	283 / 622 / 121	274 / 753 / 97																							
3	212 / 812 / 20	199 / 1014 / 17	237 / 748 / 43	221 / 924 / 35	209 / 787 / 94	202 / 957 / 76	211 / 881 / 19	200 / 1090 / 16	230 / 790 / 41	213 / 961 / 33	205 / 827 / 88	206 / 1031 / 73																							
1	326 / 601 / 29	295 / 733 / 24	397 / 476 / 72	369 / 597 / 60	340 / 525 / 159	326 / 644 / 129	319 / 643 / 28	289 / 774 / 22	386 / 505 / 68	357 / 624 / 55	332 / 553 / 149	326 / 686 / 122																							
2	278 / 700 / 25	251 / 846 / 20	327 / 579 / 60	299 / 710 / 48	304 / 581 / 142	291 / 712 / 115	270 / 742 / 24	252 / 916 / 19	322 / 620 / 57	293 / 751 / 45	302 / 622 / 136	290 / 753 / 109																							
3	231 / 812 / 21	215 / 1014 / 17	257 / 748 / 47	238 / 924 / 38	224 / 787 / 105	214 / 957 / 85	229 / 881 / 20	214 / 1090 / 17	249 / 790 / 44	229 / 961 / 36	219 / 827 / 98	217 / 1031 / 82																							
40	1	258 / 664 / 23	252 / 836 / 20	324 / 541 / 55	307 / 662 / 44	291 / 590 / 111	292 / 723 / 90	260 / 716 / 23	247 / 866 / 18	314 / 563 / 51	304 / 695 / 42	291 / 624 / 106	292 / 756 / 85																						
	2	222 / 778 / 20	210 / 947 / 16	267 / 658 / 46	249 / 786 / 36	263 / 660 / 100	258 / 788 / 79	223 / 836 / 20	212 / 1008 / 16	263 / 693 / 43	252 / 844 / 35	262 / 695 / 95	265 / 845 / 77																						
	3	186 / 912 / 17	177 / 1110 / 14	204 / 825 / 35	199 / 1029 / 29	194 / 891 / 74	189 / 1054 / 58	186 / 973 / 16	176 / 1173 / 13	205 / 884 / 34	191 / 1046 / 27	190 / 918 / 69	192 / 1116 / 56																						
	1	281 / 664 / 25	272 / 836 / 21	353 / 541 / 60	330 / 662 / 48	311 / 590 / 127	309 / 723 / 103	283 / 716 / 24	265 / 866 / 19	341 / 563 / 56	326 / 695 / 46	311 / 624 / 121	308 / 756 / 97																						
	2	242 / 778 / 21	226 / 947 / 17	291 / 658 / 50	268 / 786 / 39	282 / 660 / 115	272 / 788 / 91	242 / 836 / 21	227 / 1008 / 17	286 / 693 / 47	270 / 844 / 38	280 / 695 / 109	279 / 845 / 88																						
	3	203 / 912 / 18	190 / 1110 / 15	222 / 825 / 38	214 / 1029 / 32	208 / 891 / 85	200 / 1054 / 67	202 / 973 / 17	189 / 1173 / 14	222 / 884 / 37	205 / 1046 / 29	202 / 918 / 79	202 / 1116 / 64																						
	1	304 / 664 / 26	291 / 836 / 22	381 / 541 / 65	353 / 662 / 53	332 / 590 / 142	325 / 723 / 115	305 / 716 / 25	283 / 866 / 20	368 / 563 / 61	348 / 695 / 50	330 / 624 / 136	323 / 756 / 109																						
	2	262 / 778 / 22	243 / 947 / 18	315 / 658 / 54	286 / 786 / 43	300 / 660 / 129	287 / 788 / 102	262 / 836 / 22	243 / 1008 / 17	308 / 693 / 51	289 / 844 / 41	297 / 695 / 122	293 / 845 / 98																						
	3	220 / 912 / 19	204 / 1110 / 15	241 / 825 / 41	229 / 1029 / 34	221 / 891 / 95	211 / 1054 / 75	218 / 973 / 18	202 / 1173 / 15	240 / 884 / 40	219 / 1046 / 31	215 / 918 / 88	212 / 1116 / 71																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						74in x 41.2in				Load: Up / Down / Side , lbs								
Wind Speed [mph]		95						100				105								
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	45	1	546 / 185 / 104	443 / 470 / 84	531 / 233 / 147	531 / 364 / 147	469 / 302 / 262	414 / 412 / 231	529 / 401 / 101	426 / 496 / 81	531 / 258 / 147	523 / 395 / 144	469 / 333 / 262	393 / 430 / 219	503 / 418 / 96	409 / 521 / 78	531 / 283 / 147	498 / 412 / 137	469 / 365 / 262	387 / 454 / 212
2		469 / 446 / 89	384 / 558 / 73	531 / 353 / 147	448 / 458 / 124	462 / 373 / 258	372 / 461 / 208	452 / 472 / 86	367 / 584 / 70	531 / 388 / 147	424 / 475 / 117	441 / 391 / 246	352 / 478 / 196	426 / 487 / 81	350 / 608 / 67	506 / 405 / 140	407 / 499 / 112	421 / 408 / 235	345 / 502 / 189	
3		392 / 527 / 75	324 / 662 / 62	432 / 480 / 119	349 / 591 / 96	338 / 510 / 189	269 / 616 / 150	375 / 553 / 71	307 / 687 / 59	407 / 496 / 112	332 / 617 / 92	317 / 525 / 177	262 / 658 / 146	358 / 576 / 68	290 / 708 / 55	390 / 520 / 108	316 / 640 / 87	304 / 548 / 170	254 / 680 / 139	
50		1	582 / 180 / 108	488 / 470 / 90	576 / 230 / 157	576 / 359 / 157	487 / 293 / 277	443 / 412 / 252	582 / 199 / 108	469 / 496 / 87	576 / 254 / 157	576 / 395 / 157	487 / 323 / 277	421 / 430 / 239	554 / 418 / 103	451 / 521 / 84	576 / 279 / 157	548 / 412 / 149	487 / 354 / 277	414 / 454 / 231
		2	516 / 446 / 96	423 / 558 / 78	576 / 347 / 157	494 / 458 / 134	487 / 367 / 277	399 / 461 / 227	498 / 472 / 92	404 / 584 / 75	576 / 382 / 157	466 / 475 / 127	472 / 391 / 268	377 / 478 / 214	469 / 487 / 87	385 / 608 / 71	558 / 405 / 152	448 / 499 / 122	450 / 408 / 256	369 / 502 / 206
		3	432 / 527 / 80	357 / 662 / 66	475 / 480 / 129	384 / 591 / 105	362 / 510 / 206	288 / 616 / 164	413 / 553 / 77	338 / 687 / 63	448 / 496 / 122	366 / 617 / 100	340 / 525 / 193	281 / 658 / 160	394 / 576 / 73	319 / 708 / 59	430 / 520 / 117	348 / 640 / 95	325 / 548 / 185	271 / 680 / 151
60		1	655 / 171 / 116	578 / 470 / 103	638 / 215 / 170	638 / 336 / 170	541 / 285 / 313	507 / 412 / 293	655 / 189 / 116	556 / 496 / 99	638 / 238 / 170	638 / 370 / 170	541 / 313 / 313	481 / 430 / 279	655 / 208 / 116	533 / 521 / 95	638 / 261 / 170	638 / 405 / 170	541 / 343 / 313	467 / 454 / 269
		2	611 / 446 / 109	500 / 558 / 89	638 / 325 / 170	584 / 458 / 156	541 / 356 / 313	456 / 461 / 264	589 / 472 / 105	478 / 584 / 85	638 / 358 / 170	552 / 475 / 147	541 / 391 / 313	431 / 478 / 249	556 / 487 / 99	456 / 608 / 81	638 / 392 / 170	530 / 499 / 141	515 / 408 / 298	416 / 502 / 240
		3	511 / 527 / 91	422 / 662 / 75	562 / 480 / 150	454 / 591 / 121	414 / 510 / 240	330 / 616 / 191	489 / 553 / 87	400 / 687 / 71	530 / 496 / 141	433 / 617 / 115	389 / 525 / 225	321 / 658 / 186	467 / 576 / 83	378 / 708 / 67	508 / 520 / 135	411 / 640 / 110	372 / 548 / 215	306 / 680 / 176
Wind Speed [mph]		110						115												
45	1	486 / 440 / 92	392 / 543 / 75	531 / 310 / 147	473 / 427 / 131	448 / 381 / 250	375 / 467 / 200	460 / 453 / 88	375 / 563 / 71	531 / 337 / 147	457 / 447 / 126	428 / 395 / 239	369 / 487 / 193							
	2	409 / 509 / 78	333 / 629 / 63	482 / 420 / 133	390 / 521 / 108	400 / 423 / 223	339 / 524 / 181	392 / 529 / 75	316 / 647 / 60	465 / 441 / 128	374 / 541 / 103	386 / 444 / 216	332 / 544 / 173							
	3	350 / 612 / 67	282 / 747 / 54	374 / 542 / 103	307 / 677 / 85	297 / 583 / 166	253 / 718 / 135	333 / 631 / 63	273 / 784 / 52	357 / 562 / 99	291 / 694 / 80	283 / 602 / 158	244 / 734 / 127							
	50	1	535 / 440 / 99	432 / 543 / 80	576 / 305 / 157	521 / 427 / 142	480 / 381 / 273	400 / 467 / 218	507 / 453 / 94	413 / 563 / 77	576 / 332 / 157	503 / 447 / 137	458 / 395 / 260	394 / 487 / 210						
		2	451 / 509 / 84	366 / 629 / 68	530 / 420 / 144	430 / 521 / 117	428 / 423 / 243	362 / 524 / 197	432 / 529 / 80	348 / 647 / 65	512 / 441 / 139	411 / 541 / 112	413 / 444 / 235	354 / 544 / 189						
		3	385 / 612 / 71	310 / 747 / 58	411 / 542 / 112	338 / 677 / 92	318 / 583 / 181	270 / 718 / 147	366 / 631 / 68	301 / 784 / 56	393 / 562 / 107	320 / 694 / 87	303 / 602 / 172	260 / 734 / 139						
	60	1	633 / 440 / 112	511 / 543 / 91	638 / 286 / 170	616 / 427 / 164	541 / 375 / 313	451 / 467 / 254	600 / 453 / 107	489 / 563 / 87	638 / 311 / 170	595 / 447 / 158	524 / 395 / 303	442 / 487 / 244						
		2	533 / 509 / 95	433 / 629 / 77	627 / 420 / 167	508 / 521 / 135	490 / 423 / 284	407 / 524 / 230	511 / 529 / 91	411 / 647 / 73	606 / 441 / 161	487 / 541 / 130	473 / 444 / 274	398 / 544 / 220						
		3	456 / 612 / 81	367 / 747 / 65	487 / 542 / 130	400 / 677 / 107	363 / 583 / 210	304 / 718 / 171	433 / 631 / 77	356 / 784 / 63	465 / 562 / 124	379 / 694 / 101	346 / 602 / 201	292 / 734 / 162						
Wind Speed [mph]		120						130												
45	1	443 / 472 / 84	358 / 582 / 68	531 / 366 / 147	441 / 467 / 122	414 / 414 / 231	363 / 506 / 185	460 / 453 / 88	375 / 563 / 71	531 / 337 / 147	457 / 447 / 126	428 / 395 / 239	369 / 487 / 193							
	2	375 / 548 / 71	307 / 680 / 59	448 / 460 / 124	358 / 559 / 99	372 / 463 / 208	326 / 562 / 166	392 / 529 / 75	316 / 647 / 60	465 / 441 / 128	374 / 541 / 103	386 / 444 / 216	332 / 544 / 173							
	3	316 / 647 / 60	256 / 794 / 49	349 / 594 / 96	283 / 728 / 78	269 / 619 / 150	242 / 768 / 123	333 / 631 / 63	273 / 784 / 52	357 / 562 / 99	291 / 694 / 80	283 / 602 / 158	244 / 734 / 127							
	50	1	488 / 472 / 90	394 / 582 / 73	576 / 360 / 157	485 / 467 / 132	443 / 414 / 252	387 / 506 / 201	507 / 453 / 94	413 / 563 / 77	576 / 332 / 157	503 / 447 / 137	458 / 395 / 260	394 / 487 / 210						
		2	413 / 548 / 77	338 / 680 / 63	494 / 460 / 134	393 / 559 / 107	399 / 463 / 227	347 / 562 / 181	432 / 529 / 80	348 / 647 / 65	512 / 441 / 139	411 / 541 / 112	413 / 444 / 235	354 / 544 / 189						
		3	348 / 647 / 65	282 / 794 / 52	384 / 594 / 105	311 / 728 / 85	288 / 619 / 164	258 / 768 / 134	366 / 631 / 68	301 / 784 / 56	393 / 562 / 107	320 / 694 / 87	303 / 602 / 172	260 / 734 / 139						
	60	1	578 / 472 / 103	467 / 582 / 83	638 / 337 / 170	573 / 467 / 153	507 / 414 / 293	433 / 506 / 235	600 / 453 / 107	489 / 563 / 87	638 / 311 / 170	595 / 447 / 158	524 / 395 / 303	442 / 487 / 244						
		2	489 / 548 / 87	400 / 680 / 71	584 / 460 / 156	465 / 559 / 124	456 / 463 / 264	388 / 562 / 210	511 / 529 / 91	411 / 647 / 73	606 / 441 / 161	487 / 541 / 130	473 / 444 / 274	398 / 544 / 220						
		3	411 / 647 / 73	334 / 794 / 59	454 / 594 / 121	368 / 728 / 98	330 / 619 / 191	289 / 768 / 157	433 / 631 / 77	356 / 784 / 63	465 / 562 / 124	379 / 694 / 101	346 / 602 / 201	292 / 734 / 162						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																		
	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	426 / 490 / 81	354 / 612 / 67	523 / 390 / 144	431 / 485 / 117	400 / 432 / 223	365 / 534 / 181	401 / 532 / 76	339 / 654 / 62	490 / 423 / 135	412 / 516 / 108	385 / 465 / 208	351 / 564 / 166	375 / 569 / 71	324 / 687 / 57	457 / 452 / 126	400 / 552 / 101	371 / 492 / 193	344 / 599 / 154
	2	367 / 577 / 70	302 / 712 / 57	432 / 478 / 119	355 / 589 / 96	359 / 481 / 200	326 / 591 / 162	341 / 619 / 65	286 / 750 / 52	399 / 510 / 110	342 / 631 / 90	342 / 513 / 185	318 / 633 / 150	316 / 654 / 60	278 / 802 / 49	374 / 547 / 103	327 / 665 / 83	334 / 549 / 173	309 / 666 / 139
	3	307 / 678 / 59	250 / 826 / 47	332 / 609 / 92	279 / 761 / 76	262 / 650 / 146	241 / 801 / 120	290 / 738 / 55	241 / 885 / 44	307 / 649 / 85	263 / 797 / 69	250 / 689 / 135	237 / 862 / 112	265 / 767 / 51	231 / 934 / 41	291 / 701 / 80	254 / 848 / 64	245 / 741 / 127	232 / 915 / 104
	1	469 / 490 / 87	385 / 612 / 71	576 / 390 / 157	466 / 485 / 127	428 / 432 / 243	388 / 534 / 197	441 / 532 / 82	364 / 654 / 66	539 / 423 / 147	441 / 516 / 117	411 / 465 / 227	372 / 564 / 181	413 / 569 / 77	346 / 687 / 61	503 / 452 / 137	427 / 552 / 110	395 / 492 / 210	363 / 599 / 168
	2	404 / 577 / 75	329 / 712 / 61	475 / 478 / 129	384 / 589 / 105	384 / 481 / 218	346 / 591 / 176	376 / 619 / 70	307 / 750 / 56	439 / 510 / 119	366 / 631 / 97	365 / 513 / 201	337 / 633 / 164	348 / 654 / 65	297 / 802 / 52	411 / 547 / 112	350 / 665 / 90	355 / 549 / 189	327 / 666 / 151
	3	338 / 678 / 63	273 / 826 / 51	366 / 609 / 100	302 / 761 / 82	281 / 650 / 160	256 / 801 / 130	319 / 738 / 59	259 / 885 / 47	338 / 649 / 92	282 / 797 / 75	267 / 689 / 147	251 / 862 / 122	291 / 767 / 54	248 / 934 / 44	320 / 701 / 87	272 / 848 / 70	261 / 741 / 139	245 / 915 / 114
	1	556 / 490 / 99	456 / 612 / 81	638 / 365 / 170	552 / 485 / 147	490 / 432 / 284	433 / 534 / 230	522 / 532 / 93	422 / 654 / 75	638 / 423 / 170	508 / 516 / 135	463 / 465 / 264	414 / 564 / 210	489 / 569 / 87	392 / 687 / 69	595 / 452 / 158	482 / 552 / 127	443 / 492 / 244	402 / 599 / 196
	2	478 / 577 / 85	389 / 712 / 69	562 / 478 / 150	454 / 589 / 121	439 / 481 / 254	387 / 591 / 205	445 / 619 / 79	356 / 750 / 63	519 / 510 / 138	422 / 631 / 112	412 / 513 / 235	375 / 633 / 191	411 / 654 / 73	336 / 802 / 59	487 / 547 / 130	395 / 665 / 104	399 / 549 / 220	362 / 666 / 176
	3	400 / 678 / 71	322 / 826 / 57	433 / 609 / 115	357 / 761 / 95	321 / 650 / 186	286 / 801 / 152	378 / 738 / 67	300 / 885 / 54	400 / 649 / 107	325 / 797 / 87	301 / 689 / 171	279 / 862 / 142	345 / 767 / 61	280 / 934 / 50	379 / 701 / 101	307 / 848 / 81	293 / 741 / 162	272 / 915 / 132
50	1	352 / 601 / 67	317 / 733 / 54	429 / 476 / 117	396 / 597 / 96	363 / 525 / 181	344 / 644 / 146	345 / 643 / 63	309 / 774 / 51	416 / 505 / 110	382 / 624 / 90	354 / 553 / 170	343 / 686 / 139						
	2	301 / 700 / 57	269 / 846 / 46	354 / 579 / 96	320 / 710 / 78	324 / 581 / 162	308 / 712 / 131	292 / 742 / 54	269 / 916 / 44	347 / 620 / 92	313 / 751 / 74	322 / 622 / 154	305 / 753 / 123						
	3	249 / 812 / 47	230 / 1014 / 39	278 / 748 / 76	255 / 924 / 62	239 / 787 / 120	226 / 957 / 97	248 / 881 / 46	229 / 1090 / 38	269 / 790 / 71	245 / 961 / 58	233 / 827 / 112	229 / 1031 / 93						
	1	385 / 601 / 71	338 / 733 / 58	466 / 476 / 127	422 / 597 / 105	385 / 525 / 197	362 / 644 / 160	370 / 643 / 68	329 / 774 / 54	446 / 505 / 119	406 / 624 / 97	375 / 553 / 185	361 / 686 / 151						
	2	329 / 700 / 61	287 / 846 / 49	384 / 579 / 105	342 / 710 / 85	345 / 581 / 176	324 / 712 / 143	313 / 742 / 58	286 / 916 / 47	372 / 620 / 100	333 / 751 / 80	341 / 622 / 168	321 / 753 / 134						
	3	273 / 812 / 51	246 / 1014 / 42	302 / 748 / 82	272 / 924 / 67	254 / 787 / 130	239 / 957 / 105	266 / 881 / 49	244 / 1090 / 40	288 / 790 / 77	261 / 961 / 62	247 / 827 / 122	241 / 1031 / 101						
	1	456 / 601 / 81	381 / 733 / 65	552 / 476 / 147	475 / 597 / 121	431 / 525 / 230	399 / 644 / 186	433 / 643 / 77	369 / 774 / 61	519 / 505 / 138	455 / 624 / 112	418 / 553 / 215	396 / 686 / 176						
	2	389 / 700 / 69	323 / 846 / 55	454 / 579 / 121	385 / 710 / 98	385 / 581 / 205	357 / 712 / 166	367 / 742 / 65	321 / 916 / 54	433 / 620 / 115	374 / 751 / 92	380 / 622 / 196	352 / 753 / 157						
	3	322 / 812 / 57	277 / 1014 / 48	357 / 748 / 95	305 / 924 / 78	285 / 787 / 152	263 / 957 / 122	311 / 881 / 55	274 / 1090 / 46	336 / 790 / 89	292 / 961 / 72	276 / 827 / 142	264 / 1031 / 118						
60	1	327 / 664 / 59	310 / 836 / 49	410 / 541 / 106	376 / 662 / 85	352 / 590 / 162	342 / 723 / 131	328 / 716 / 57	301 / 866 / 46	395 / 563 / 99	370 / 695 / 80	350 / 624 / 154	339 / 756 / 123						
	2	282 / 778 / 51	259 / 947 / 41	339 / 658 / 87	305 / 786 / 69	319 / 660 / 146	302 / 788 / 116	281 / 836 / 49	258 / 1008 / 39	331 / 693 / 83	307 / 844 / 67	315 / 695 / 139	307 / 845 / 112						
	3	237 / 912 / 42	217 / 1110 / 34	259 / 825 / 67	244 / 1029 / 55	235 / 891 / 108	221 / 1054 / 85	234 / 973 / 41	215 / 1173 / 33	258 / 884 / 64	233 / 1046 / 51	227 / 918 / 100	223 / 1116 / 81						
	1	351 / 664 / 63	330 / 836 / 52	439 / 541 / 115	400 / 662 / 92	372 / 590 / 176	358 / 723 / 143	350 / 716 / 61	319 / 866 / 49	422 / 563 / 107	392 / 695 / 87	369 / 624 / 168	354 / 756 / 134						
	2	302 / 778 / 54	275 / 947 / 44	363 / 658 / 95	324 / 786 / 75	337 / 660 / 160	316 / 788 / 126	300 / 836 / 52	274 / 1008 / 42	354 / 693 / 90	325 / 844 / 72	332 / 695 / 151	321 / 845 / 122						
	3	253 / 912 / 45	231 / 1110 / 37	277 / 825 / 72	259 / 1029 / 60	248 / 891 / 118	232 / 1054 / 93	250 / 973 / 44	228 / 1173 / 35	275 / 884 / 70	247 / 1046 / 55	240 / 918 / 109	233 / 1116 / 88						
	1	400 / 664 / 71	368 / 836 / 59	498 / 541 / 133	446 / 662 / 107	413 / 590 / 205	391 / 723 / 166	396 / 716 / 69	355 / 866 / 55	476 / 563 / 124	436 / 695 / 101	408 / 624 / 196	386 / 756 / 157						
	2	345 / 778 / 61	307 / 947 / 50	411 / 658 / 110	362 / 786 / 87	374 / 660 / 186	345 / 788 / 147	339 / 836 / 59	305 / 1008 / 48	399 / 693 / 104	361 / 844 / 84	367 / 695 / 176	349 / 845 / 142						
	3	289 / 912 / 52	258 / 1110 / 42	314 / 825 / 84	290 / 1029 / 69	276 / 891 / 137	253 / 1054 / 108	283 / 973 / 50	254 / 1173 / 40	310 / 884 / 81	274 / 1046 / 64	265 / 918 / 127	253 / 1116 / 103						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																																		
	95						100						105																						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
70	1	706 / 159 / 121	667 / 470 / 115	699 / 204 / 183	699 / 319 / 183	604 / 276 / 349	584 / 412 / 338	706 / 176 / 121	642 / 496 / 110	699 / 226 / 183	699 / 351 / 183	604 / 304 / 349	555 / 430 / 321	706 / 194 / 121	616 / 521 / 106	699 / 248 / 183	699 / 384 / 183	604 / 333 / 349	536 / 454 / 310																
	2	706 / 446 / 121	578 / 558 / 99	699 / 309 / 183	674 / 458 / 177	604 / 345 / 349	526 / 461 / 304	680 / 472 / 117	552 / 584 / 95	699 / 340 / 183	637 / 475 / 167	604 / 379 / 349	497 / 478 / 287	642 / 487 / 110	526 / 608 / 91	699 / 372 / 183	612 / 499 / 160	594 / 408 / 343	477 / 502 / 276																
	3	590 / 527 / 102	488 / 662 / 84	650 / 480 / 170	525 / 591 / 138	477 / 510 / 276	380 / 616 / 220	565 / 553 / 97	462 / 687 / 80	612 / 496 / 160	500 / 617 / 131	448 / 525 / 259	370 / 658 / 214	539 / 576 / 93	436 / 708 / 75	587 / 520 / 154	475 / 640 / 124	429 / 548 / 248	351 / 680 / 203																
	1	757 / 151 / 127	757 / 238 / 127	737 / 190 / 191	737 / 296 / 191	651 / 262 / 376	651 / 405 / 376	757 / 167 / 127	728 / 496 / 122	737 / 210 / 191	737 / 326 / 191	651 / 289 / 376	629 / 430 / 363	757 / 184 / 127	699 / 521 / 117	737 / 230 / 191	737 / 357 / 191	651 / 317 / 376	607 / 454 / 351																
	2	757 / 422 / 127	655 / 558 / 110	737 / 287 / 191	737 / 441 / 191	651 / 328 / 376	596 / 461 / 344	757 / 463 / 127	626 / 584 / 105	737 / 315 / 191	722 / 475 / 187	651 / 361 / 376	563 / 478 / 325	728 / 487 / 122	597 / 608 / 100	737 / 345 / 191	694 / 499 / 180	651 / 395 / 376	541 / 502 / 312																
	3	670 / 527 / 112	553 / 662 / 93	737 / 480 / 191	595 / 591 / 154	541 / 510 / 312	431 / 616 / 249	640 / 553 / 107	524 / 687 / 88	694 / 496 / 180	567 / 617 / 147	508 / 525 / 293	420 / 658 / 242	611 / 576 / 103	495 / 708 / 83	666 / 520 / 172	538 / 640 / 139	486 / 548 / 281	397 / 680 / 230																
	1	798 / 142 / 131	798 / 224 / 131	776 / 179 / 199	776 / 279 / 199	691 / 249 / 399	691 / 385 / 399	798 / 157 / 131	798 / 247 / 131	776 / 197 / 199	776 / 307 / 199	691 / 274 / 399	691 / 422 / 399	798 / 173 / 131	781 / 521 / 128	776 / 217 / 199	776 / 336 / 199	691 / 301 / 399	678 / 454 / 392																
	2	798 / 397 / 131	733 / 558 / 120	776 / 270 / 199	776 / 416 / 199	691 / 312 / 399	666 / 461 / 385	798 / 436 / 131	700 / 584 / 115	776 / 297 / 199	776 / 457 / 199	691 / 343 / 399	629 / 478 / 363	798 / 477 / 131	667 / 608 / 110	776 / 325 / 199	776 / 499 / 199	691 / 375 / 399	604 / 502 / 349																
	3	749 / 527 / 123	619 / 662 / 102	776 / 452 / 199	665 / 591 / 170	604 / 510 / 349	481 / 616 / 278	716 / 553 / 118	586 / 687 / 96	776 / 496 / 199	634 / 617 / 162	567 / 525 / 328	469 / 658 / 271	684 / 576 / 112	554 / 708 / 91	745 / 520 / 191	602 / 640 / 154	543 / 548 / 314	444 / 680 / 257																
80	1	706 / 213 / 121	590 / 543 / 102	699 / 271 / 183	699 / 419 / 183	604 / 363 / 349	507 / 467 / 293	693 / 453 / 119	565 / 563 / 97	699 / 295 / 183	687 / 447 / 180	604 / 395 / 349	491 / 487 / 281	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 74in x 41.2in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		140						150						160																																															
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																											
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																											
Ground Snow	70	1	642 / 490 / 110	526 / 612 / 91	699 / 346 / 183	637 / 485 / 167	565 / 432 / 326	479 / 534 / 265	603 / 532 / 104	488 / 654 / 84	699 / 401 / 183	587 / 516 / 154	526 / 465 / 304	455 / 564 / 242	565 / 569 / 97	449 / 687 / 77	687 / 452 / 180	550 / 552 / 144	492 / 492 / 281	441 / 599 / 225																																										
		2	552 / 577 / 95	449 / 712 / 77	650 / 478 / 170	525 / 589 / 138	507 / 481 / 293	428 / 591 / 237	513 / 619 / 88	411 / 750 / 71	600 / 510 / 157	487 / 631 / 128	468 / 513 / 270	413 / 633 / 220	475 / 654 / 82	385 / 802 / 66	562 / 547 / 147	450 / 665 / 118	443 / 549 / 253	397 / 666 / 203																																										
		3	462 / 678 / 80	372 / 826 / 64	500 / 609 / 131	412 / 761 / 108	370 / 650 / 214	316 / 801 / 175	436 / 738 / 75	347 / 885 / 60	462 / 649 / 121	375 / 797 / 98	341 / 689 / 197	307 / 862 / 163	398 / 767 / 69	321 / 934 / 55	437 / 701 / 115	350 / 848 / 92	325 / 741 / 186	298 / 915 / 152																																										
	80	1	728 / 490 / 122	597 / 612 / 100	737 / 322 / 191	722 / 485 / 187	640 / 432 / 370	525 / 534 / 300	684 / 532 / 115	553 / 654 / 93	737 / 373 / 191	666 / 516 / 172	596 / 465 / 344	497 / 564 / 274	640 / 569 / 107	510 / 687 / 86	737 / 427 / 191	623 / 552 / 161	552 / 492 / 319	480 / 599 / 255																																										
		2	626 / 577 / 105	510 / 712 / 86	737 / 478 / 191	595 / 589 / 154	574 / 481 / 332	469 / 591 / 268	582 / 619 / 98	466 / 750 / 78	680 / 510 / 176	553 / 631 / 143	530 / 513 / 306	451 / 633 / 249	539 / 654 / 90	437 / 802 / 73	638 / 547 / 165	510 / 665 / 132	497 / 549 / 287	432 / 666 / 230																																										
		3	524 / 678 / 88	422 / 826 / 71	567 / 609 / 147	468 / 761 / 121	420 / 650 / 242	346 / 801 / 198	495 / 738 / 83	393 / 885 / 66	524 / 649 / 136	425 / 797 / 110	386 / 689 / 223	336 / 862 / 185	451 / 767 / 76	364 / 934 / 61	496 / 701 / 128	397 / 848 / 103	364 / 741 / 211	324 / 915 / 172																																										
	90	1	798 / 244 / 131	667 / 612 / 110	776 / 303 / 199	776 / 466 / 199	691 / 417 / 399	580 / 534 / 335	765 / 532 / 126	619 / 654 / 102	776 / 351 / 199	745 / 516 / 191	666 / 465 / 385	539 / 564 / 306	716 / 569 / 118	570 / 687 / 94	776 / 403 / 199	697 / 552 / 179	617 / 492 / 356	519 / 599 / 285																																										
		2	700 / 577 / 115	570 / 712 / 94	776 / 451 / 199	665 / 589 / 170	641 / 481 / 370	518 / 591 / 299	651 / 619 / 107	521 / 750 / 86	760 / 510 / 195	618 / 631 / 158	592 / 513 / 342	489 / 633 / 278	602 / 654 / 99	489 / 802 / 80	713 / 547 / 183	570 / 665 / 146	555 / 549 / 321	467 / 666 / 257																																										
		3	586 / 678 / 96	472 / 826 / 78	634 / 609 / 162	523 / 761 / 134	469 / 650 / 271	382 / 801 / 221	554 / 738 / 91	440 / 885 / 72	586 / 649 / 150	475 / 797 / 122	432 / 689 / 250	364 / 862 / 207	505 / 767 / 83	407 / 934 / 67	555 / 701 / 142	444 / 848 / 114	407 / 741 / 235	350 / 915 / 193																																										
70	170	1	526 / 601 / 91	424 / 733 / 73	637 / 476 / 167	528 / 597 / 138	477 / 525 / 265	436 / 644 / 214	501 / 643 / 86	409 / 774 / 69	600 / 505 / 157	504 / 624 / 128	461 / 553 / 248	431 / 686 / 203	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3																										
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3	372 / 812 / 64	308 / 1014 / 53	412 / 748 / 108	339 / 924 / 89	315 / 787 / 175	287 / 957 / 141	360 / 881 / 62	303 / 1090 / 51	387 / 790 / 102	323 / 961 / 82	304 / 827 / 163	287 / 1031 / 135																																																		
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	3	422 / 812 / 71	350 / 1014 / 59	468 / 748 / 121	383 / 924 / 99	345 / 787 / 198	311 / 957 / 160	408 / 881 / 69	335 / 1090 / 56	439 / 790 / 114	355 / 961 / 92	332 / 827 / 185													311 / 1031 / 153																																					
90	1	667 / 601 / 110	537 / 733 / 88	776 / 457 / 199	665 / 597 / 170	580 / 525 / 335	510 / 644 / 271	635 / 643 / 104	505 / 774 / 83	760 / 505 / 195	618 / 624 / 158	546 / 553 / 314													501 / 686 / 257																																					
	2	570 / 700 / 94	456 / 846 / 75	665 / 579 / 170	539 / 710 / 138	518 / 581 / 299	456 / 712 / 242	537 / 742 / 88	440 / 916 / 72	634 / 620 / 162	507 / 751 / 130	496 / 622 / 285													445 / 753 / 228																																					
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70	190	1	462 / 664 / 80	407 / 836 / 66	575 / 541 / 151	493 / 662 / 121	454 / 590 / 237	424 / 723 / 192	449 / 716 / 77	391 / 866 / 62	537 / 563 / 141	480 / 695 / 115													447 / 624 / 225																																					417 / 756 / 180
		2	398 / 778 / 69	339 / 947 / 55	475 / 658 / 124	399 / 786 / 98	411 / 660 / 214	374 / 788 / 169	385 / 836 / 66	336 / 1008 / 53	450 / 693 / 118	398 / 844 / 95	402 / 695 / 203	378 / 845 / 163																																																
		3	334 / 912 / 58	285 / 1110 / 47	362 / 825 / 95	320 / 1029 / 79	303 / 891 / 158	275 / 1054 / 124	321 / 973 / 55	280 / 1173 / 44	350 / 884 / 92	302 / 1046 / 72	291 / 918 / 147	274 / 1116 / 119																																																
	80	1	524 / 664 / 88	446 / 836 / 73	652 / 541 / 169	539 / 662 / 136	495 / 590 / 268	457 / 723 / 217	510 / 716 / 86	428 / 866 / 69	609 / 563 / 158	524 / 695 / 128	486 / 624 / 255	448 / 756 / 204																																																
		2	451 / 778 / 76	372 / 947 / 61	538 / 658 / 139	437 / 786 / 110	448 / 660 / 242	404 / 788 / 192	437 / 836 / 73	367 / 1008 / 59	510 / 693 / 132	434 / 844 / 106	437 / 695 / 230	406 / 845 / 185																																																
		3	379 / 912 / 64	312 / 1110 / 52	411 / 825 / 106	350 / 1029 / 88	330 / 891 / 179	296 / 1054 / 141	364 / 973 / 61	306 / 1173 / 49	397 / 884 / 103	330 / 1046 / 81	316 / 918 / 166	294 / 1116 / 134																																																
	90	1	586 / 664 / 96	489 / 836 / 80	729 / 541 / 187	586 / 662 / 150	536 / 590 / 299	490 / 723 / 242	570 / 716 / 94	464 / 866 / 75	681 / 563 / 174	568 / 695 / 142	525 / 624 / 285	479 / 756 / 228																																																
		2	505 / 778 / 83	407 / 947 / 67	602 / 658 / 154	475 / 786 / 122	485 / 660 / 271	433 / 788 / 214	489 / 836 / 80	398 / 1008 / 64	570 / 693 / 146	471 / 844 / 118	472 / 695 / 257	434 / 845 / 207																																																
		3	423 / 912 / 70	342 / 1110 / 56	460 / 825 / 118	380 / 1029 / 98	357 / 891 / 200	317 / 1054 / 157	407 / 973 / 67	331 / 1173 / 54	444 / 884 / 114	357 / 1046 / 90	341 / 918 / 185	314 / 1116 / 150																																																

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 74in x 41.2in | Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																	
100	1	828 / 133 / 134	828 / 210 / 134	823 / 172 / 209	823 / 268 / 209	722 / 236 / 417	722 / 364 / 417	828 / 148 / 134	828 / 232 / 134	823 / 189 / 209	823 / 295 / 209	722 / 260 / 417	722 / 400 / 417	828 / 163 / 134	828 / 254 / 134	823 / 208 / 209	823 / 323 / 209	722 / 284 / 417	722 / 437 / 417	
	2	828 / 373 / 134	810 / 558 / 131	823 / 259 / 209	823 / 399 / 209	722 / 295 / 417	722 / 453 / 417	828 / 410 / 134	774 / 584 / 125	823 / 285 / 209	823 / 438 / 209	722 / 324 / 417	695 / 478 / 401	828 / 448 / 134	738 / 608 / 119	823 / 312 / 209	823 / 479 / 209	722 / 355 / 417	668 / 502 / 386	
	3	828 / 527 / 134	684 / 662 / 111	823 / 434 / 209	736 / 591 / 187	668 / 510 / 386	532 / 616 / 307	792 / 553 / 128	648 / 687 / 105	823 / 476 / 209	701 / 617 / 178	627 / 525 / 362	518 / 658 / 299	756 / 576 / 122	612 / 708 / 99	823 / 520 / 209	666 / 640 / 169	600 / 548 / 346	491 / 680 / 284	
100	1	828 / 178 / 134	828 / 278 / 134	823 / 228 / 209	823 / 352 / 209	722 / 310 / 417	709 / 467 / 409	828 / 194 / 134	792 / 563 / 128	823 / 248 / 209	823 / 382 / 209	722 / 337 / 417	681 / 487 / 394							
	2	828 / 488 / 134	702 / 629 / 114	823 / 341 / 209	823 / 521 / 209	722 / 387 / 417	641 / 524 / 370	828 / 529 / 134	666 / 647 / 108	823 / 370 / 209	788 / 541 / 200	722 / 420 / 417	613 / 544 / 354							
	3	738 / 612 / 119	594 / 747 / 96	788 / 542 / 200	648 / 677 / 165	586 / 583 / 339	477 / 718 / 276	702 / 631 / 114	576 / 784 / 93	753 / 562 / 191	613 / 694 / 156	559 / 602 / 323	450 / 734 / 260							
100	1	828 / 211 / 134	756 / 582 / 122	823 / 269 / 209	823 / 414 / 209	722 / 366 / 417	654 / 506 / 378	828 / 194 / 134	792 / 563 / 128	823 / 248 / 209	823 / 382 / 209	722 / 337 / 417	681 / 487 / 394							
	2	792 / 548 / 128	648 / 680 / 105	823 / 401 / 209	753 / 559 / 191	722 / 455 / 417	586 / 562 / 339	828 / 529 / 134	666 / 647 / 108	823 / 370 / 209	788 / 541 / 200	722 / 420 / 417	613 / 544 / 354							
	3	666 / 647 / 108	540 / 794 / 87	736 / 594 / 187	596 / 728 / 151	532 / 619 / 307	436 / 768 / 252	702 / 631 / 114	576 / 784 / 93	753 / 562 / 191	613 / 694 / 156	559 / 602 / 323	450 / 734 / 260							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 83in x 41.5in Load: Up / Down / Side , lbs

Ground Snow	Panal Angle	95						100						105					
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
		Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior
0	1	258 / 348 / 46	207 / 434 / 37	283 / 234 / 58	257 / 338 / 53	275 / 289 / 74	233 / 381 / 63	247 / 368 / 44	197 / 452 / 35	283 / 260 / 58	250 / 362 / 51	264 / 306 / 71	218 / 394 / 59	236 / 386 / 42	189 / 476 / 34	283 / 286 / 58	239 / 380 / 49	257 / 328 / 69	211 / 417 / 57
	2	218 / 409 / 39	175 / 503 / 31	261 / 331 / 53	214 / 422 / 44	254 / 335 / 69	208 / 425 / 56	207 / 428 / 37	167 / 529 / 30	254 / 355 / 52	203 / 440 / 42	247 / 359 / 67	197 / 443 / 53	200 / 452 / 35	160 / 553 / 28	243 / 373 / 50	196 / 464 / 40	233 / 371 / 63	187 / 459 / 51
	3	182 / 485 / 32	149 / 606 / 27	203 / 436 / 42	163 / 537 / 33	187 / 467 / 51	152 / 577 / 41	175 / 511 / 31	142 / 632 / 25	196 / 462 / 40	156 / 563 / 32	180 / 493 / 49	145 / 603 / 39	167 / 535 / 30	135 / 655 / 24	185 / 477 / 38	149 / 586 / 31	169 / 507 / 46	138 / 626 / 37
5	1	286 / 348 / 46	229 / 434 / 37	311 / 234 / 61	283 / 338 / 55	275 / 289 / 92	233 / 381 / 78	274 / 368 / 44	217 / 452 / 35	311 / 260 / 61	275 / 362 / 54	264 / 306 / 88	218 / 394 / 73	262 / 386 / 42	209 / 476 / 34	311 / 286 / 61	263 / 380 / 51	257 / 328 / 86	211 / 417 / 71
	2	241 / 409 / 39	193 / 503 / 31	287 / 331 / 56	235 / 422 / 46	254 / 335 / 85	208 / 425 / 70	229 / 428 / 37	185 / 529 / 30	279 / 355 / 55	223 / 440 / 44	247 / 359 / 82	197 / 443 / 66	221 / 452 / 35	177 / 553 / 28	267 / 373 / 52	215 / 464 / 42	233 / 371 / 78	187 / 459 / 63
	3	201 / 485 / 32	165 / 606 / 27	223 / 436 / 44	179 / 537 / 35	187 / 467 / 63	152 / 577 / 51	193 / 511 / 31	157 / 632 / 25	215 / 462 / 42	171 / 563 / 34	180 / 493 / 60	145 / 603 / 48	185 / 535 / 30	149 / 655 / 24	203 / 477 / 40	163 / 586 / 32	169 / 507 / 57	138 / 626 / 46
10	1	362 / 348 / 46	291 / 434 / 37	367 / 219 / 70	357 / 338 / 68	316 / 289 / 119	268 / 381 / 101	347 / 368 / 44	276 / 452 / 35	367 / 243 / 70	347 / 362 / 67	304 / 306 / 115	252 / 394 / 95	332 / 386 / 42	265 / 476 / 34	367 / 268 / 70	332 / 380 / 64	296 / 328 / 112	243 / 417 / 92
	2	306 / 409 / 39	245 / 503 / 31	362 / 331 / 69	297 / 422 / 57	292 / 335 / 110	239 / 425 / 90	291 / 428 / 37	235 / 529 / 30	352 / 355 / 67	282 / 440 / 54	284 / 359 / 107	227 / 443 / 86	281 / 452 / 35	225 / 553 / 28	337 / 373 / 65	272 / 464 / 52	268 / 371 / 101	215 / 459 / 81
	3	255 / 485 / 32	209 / 606 / 27	282 / 436 / 54	227 / 537 / 44	215 / 467 / 81	175 / 577 / 66	245 / 511 / 31	199 / 632 / 25	272 / 462 / 52	216 / 563 / 42	207 / 493 / 78	167 / 603 / 63	235 / 535 / 30	189 / 655 / 24	257 / 477 / 49	206 / 586 / 40	195 / 507 / 74	158 / 626 / 60

Exposure Category : B

Ground Snow	Panal Angle	110						115											
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
		Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge					
0	1	226 / 402 / 40	182 / 499 / 32	272 / 302 / 55	228 / 396 / 47	250 / 348 / 68	201 / 432 / 54	215 / 416 / 38	175 / 520 / 31	265 / 321 / 54	218 / 411 / 44	240 / 363 / 65	194 / 453 / 52						
	2	193 / 475 / 34	153 / 575 / 27	232 / 389 / 47	185 / 478 / 38	225 / 393 / 61	180 / 481 / 49	182 / 486 / 32	149 / 609 / 27	221 / 404 / 45	178 / 499 / 36	215 / 408 / 58	173 / 502 / 47						
	3	160 / 557 / 28	131 / 693 / 23	178 / 500 / 36	145 / 622 / 30	162 / 529 / 44	131 / 646 / 35	153 / 577 / 27	124 / 709 / 22	171 / 520 / 35	138 / 641 / 28	155 / 549 / 42	127 / 681 / 35						
5	1	250 / 402 / 40	201 / 499 / 32	299 / 302 / 58	251 / 396 / 49	250 / 348 / 84	201 / 432 / 67	237 / 416 / 38	193 / 520 / 31	291 / 321 / 57	239 / 411 / 47	240 / 363 / 80	194 / 453 / 65						
	2	213 / 475 / 34	169 / 575 / 27	255 / 389 / 50	203 / 478 / 40	225 / 393 / 75	180 / 481 / 60	201 / 486 / 32	165 / 609 / 27	243 / 404 / 48	195 / 499 / 38	215 / 408 / 72	173 / 502 / 58						
	3	177 / 557 / 28	145 / 693 / 23	195 / 500 / 38	159 / 622 / 31	162 / 529 / 54	131 / 646 / 44	169 / 577 / 27	137 / 709 / 22	187 / 520 / 37	152 / 641 / 30	155 / 549 / 52	127 / 681 / 43						
10	1	316 / 402 / 40	255 / 499 / 32	367 / 294 / 70	317 / 396 / 61	288 / 348 / 109	231 / 432 / 87	301 / 416 / 38	245 / 520 / 31	367 / 321 / 70	302 / 411 / 58	276 / 363 / 104	223 / 453 / 84						
	2	270 / 475 / 34	214 / 575 / 27	322 / 389 / 62	257 / 478 / 49	260 / 393 / 98	207 / 481 / 78	255 / 486 / 32	209 / 609 / 27	307 / 404 / 59	247 / 499 / 47	248 / 408 / 93	199 / 502 / 75						
	3	225 / 557 / 28	184 / 693 / 23	247 / 500 / 47	201 / 622 / 39	187 / 529 / 71	150 / 646 / 57	214 / 577 / 27	174 / 709 / 22	237 / 520 / 45	191 / 641 / 37	179 / 549 / 68	146 / 681 / 55						

Ground Snow	Panal Angle	120						130											
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
		Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge					
0	1	207 / 436 / 37	167 / 540 / 30	257 / 339 / 53	210 / 430 / 43	229 / 377 / 62	193 / 473 / 51	215 / 416 / 38	175 / 520 / 31	265 / 321 / 54	218 / 411 / 44	240 / 363 / 65	194 / 453 / 52						
	2	175 / 506 / 31	142 / 626 / 25	214 / 423 / 44	171 / 518 / 35	204 / 420 / 55	171 / 521 / 45	182 / 486 / 32	149 / 609 / 27	221 / 404 / 45	178 / 499 / 36	215 / 408 / 58	173 / 502 / 47						
	3	149 / 609 / 27	120 / 744 / 21	163 / 539 / 33	134 / 674 / 28	152 / 580 / 41	128 / 716 / 34	153 / 577 / 27	124 / 709 / 22	171 / 520 / 35	138 / 641 / 28	155 / 549 / 42	127 / 681 / 35						
5	1	229 / 436 / 37	185 / 540 / 30	283 / 339 / 55	231 / 430 / 45	229 / 377 / 77	193 / 473 / 63	237 / 416 / 38	193 / 520 / 31	291 / 321 / 57	239 / 411 / 47	240 / 363 / 80	194 / 453 / 65						
	2	193 / 506 / 31	157 / 626 / 25	235 / 423 / 46	187 / 518 / 37	204 / 420 / 68	171 / 521 / 56	201 / 486 / 32	165 / 609 / 27	243 / 404 / 48	195 / 499 / 38	215 / 408 / 72	173 / 502 / 58						
	3	165 / 609 / 27	133 / 744 / 21	179 / 539 / 35	148 / 674 / 29	152 / 580 / 51	128 / 716 / 41	169 / 577 / 27	137 / 709 / 22	187 / 520 / 37	152 / 641 / 30	155 / 549 / 52	127 / 681 / 43						
10	1	291 / 436 / 37	235 / 540 / 30	357 / 339 / 68	292 / 430 / 56	264 / 377 / 100	220 / 473 / 81	301 / 416 / 38	245 / 520 / 31	367 / 321 / 70	302 / 411 / 58	276 / 363 / 104	223 / 453 / 84						
	2	245 / 506 / 31	199 / 626 / 25	297 / 423 / 57	237 / 518 / 45	235 / 420 / 89	195 / 521 / 72	255 / 486 / 32	209 / 609 / 27	307 / 404 / 59	247 / 499 / 47	248 / 408 / 93	199 / 502 / 75						
	3	209 / 609 / 27	169 / 744 / 21	227 / 539 / 44	186 / 674 / 36	175 / 580 / 66	145 / 716 / 54	214 / 577 / 27	174 / 709 / 22	237 / 520 / 45	191 / 641 / 37	179 / 549 / 68	146 / 681 / 55						

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	0	1	200 / 455 / 35	160 / 557 / 28	250 / 357 / 51	203 / 449 / 42	222 / 395 / 60	197 / 491 / 49	186 / 488 / 33	149 / 599 / 27	232 / 385 / 47	189 / 482 / 39	204 / 421 / 55	203 / 523 / 45	171 / 515 / 30	149 / 634 / 25	218 / 415 / 44	187 / 510 / 36	190 / 450 / 52	211 / 559 / 42
2		171 / 534 / 30	138 / 658 / 25	203 / 434 / 42	167 / 547 / 34	197 / 438 / 53	174 / 538 / 43	157 / 564 / 28	128 / 698 / 23	189 / 467 / 39	152 / 576 / 31	183 / 470 / 50	181 / 579 / 40	146 / 600 / 26	129 / 751 / 21	178 / 504 / 36	156 / 627 / 30	173 / 507 / 47	187 / 614 / 37	
3		142 / 625 / 25	117 / 777 / 21	160 / 569 / 33	127 / 687 / 26	145 / 596 / 39	127 / 727 / 32	131 / 665 / 23	109 / 838 / 20	149 / 611 / 31	120 / 746 / 25	134 / 636 / 36	134 / 786 / 30	124 / 716 / 22	110 / 892 / 18	138 / 647 / 28	121 / 800 / 23	127 / 688 / 35	140 / 838 / 28	
5		1	221 / 455 / 35	177 / 557 / 28	275 / 357 / 54	223 / 449 / 44	222 / 395 / 74	197 / 491 / 60	205 / 488 / 33	165 / 599 / 27	255 / 385 / 50	207 / 482 / 41	204 / 421 / 68	203 / 523 / 56	189 / 515 / 30	161 / 634 / 25	239 / 415 / 47	201 / 510 / 38	190 / 450 / 64	211 / 559 / 52
		2	189 / 534 / 30	153 / 658 / 25	223 / 434 / 44	183 / 547 / 36	197 / 438 / 66	174 / 538 / 53	173 / 564 / 28	141 / 698 / 23	207 / 467 / 41	167 / 576 / 33	183 / 470 / 61	181 / 579 / 50	161 / 600 / 26	140 / 751 / 21	195 / 504 / 38	168 / 627 / 31	173 / 507 / 58	187 / 614 / 46
		3	157 / 625 / 25	129 / 777 / 21	175 / 569 / 34	140 / 687 / 28	145 / 596 / 48	127 / 727 / 39	145 / 665 / 23	121 / 838 / 20	163 / 611 / 32	132 / 746 / 26	134 / 636 / 45	134 / 786 / 37	137 / 716 / 22	119 / 892 / 18	152 / 647 / 30	130 / 800 / 24	127 / 688 / 43	140 / 838 / 34
10		1	281 / 455 / 35	225 / 557 / 28	347 / 357 / 67	282 / 449 / 54	256 / 395 / 97	220 / 491 / 78	260 / 488 / 33	209 / 599 / 27	322 / 385 / 62	262 / 482 / 50	235 / 421 / 89	219 / 523 / 72	240 / 515 / 30	202 / 634 / 25	302 / 415 / 58	251 / 510 / 46	219 / 450 / 83	221 / 559 / 68
		2	240 / 534 / 30	194 / 658 / 25	282 / 434 / 54	232 / 547 / 45	227 / 438 / 86	194 / 538 / 69	220 / 564 / 28	179 / 698 / 23	262 / 467 / 50	211 / 576 / 41	211 / 470 / 80	195 / 579 / 65	204 / 600 / 26	175 / 751 / 21	247 / 504 / 47	209 / 627 / 39	199 / 507 / 75	196 / 614 / 60
		3	199 / 625 / 25	164 / 777 / 21	222 / 569 / 43	176 / 687 / 34	167 / 596 / 63	142 / 727 / 51	184 / 665 / 23	153 / 838 / 20	206 / 611 / 40	166 / 746 / 32	154 / 636 / 58	144 / 786 / 48	174 / 716 / 22	149 / 892 / 18	191 / 647 / 37	162 / 800 / 30	146 / 688 / 55	146 / 838 / 45
Wind Speed [mph]		170						180												
0	1	160 / 547 / 28	155 / 681 / 23	203 / 441 / 42	193 / 543 / 33	194 / 482 / 49	218 / 591 / 39	153 / 588 / 27	160 / 723 / 22	192 / 471 / 39	202 / 584 / 32	200 / 511 / 46	229 / 632 / 37							
	2	138 / 646 / 25	133 / 799 / 20	167 / 537 / 34	159 / 658 / 28	175 / 540 / 44	197 / 660 / 35	131 / 688 / 23	137 / 839 / 19	156 / 566 / 32	165 / 699 / 26	179 / 568 / 41	206 / 702 / 34							
	3	117 / 763 / 21	112 / 937 / 17	131 / 695 / 27	125 / 847 / 22	129 / 736 / 33	144 / 882 / 26	109 / 804 / 20	113 / 971 / 16	124 / 738 / 25	127 / 885 / 20	134 / 778 / 31	153 / 954 / 25							
	5	1	177 / 547 / 28	163 / 681 / 23	223 / 441 / 44	202 / 543 / 35	194 / 482 / 60	218 / 591 / 48	169 / 588 / 27	164 / 723 / 22	211 / 471 / 41	206 / 584 / 34	200 / 511 / 57	229 / 632 / 46						
		2	153 / 646 / 25	140 / 799 / 20	183 / 537 / 36	166 / 658 / 29	175 / 540 / 54	197 / 660 / 44	145 / 688 / 23	140 / 839 / 19	171 / 566 / 34	168 / 699 / 28	179 / 568 / 51	206 / 702 / 41						
		3	129 / 763 / 21	118 / 937 / 17	144 / 695 / 28	130 / 847 / 23	129 / 736 / 40	144 / 882 / 32	121 / 804 / 20	116 / 971 / 16	136 / 738 / 27	130 / 885 / 21	134 / 778 / 38	153 / 954 / 31						
	10	1	225 / 547 / 28	202 / 681 / 23	282 / 441 / 54	249 / 543 / 44	218 / 482 / 78	222 / 591 / 63	214 / 588 / 27	201 / 723 / 22	267 / 471 / 51	251 / 584 / 42	218 / 511 / 74	229 / 632 / 60						
		2	194 / 646 / 25	174 / 799 / 20	232 / 537 / 45	205 / 658 / 36	196 / 540 / 71	200 / 660 / 57	184 / 688 / 23	172 / 839 / 19	216 / 566 / 42	204 / 699 / 34	195 / 568 / 66	206 / 702 / 54						
		3	164 / 763 / 21	146 / 937 / 17	181 / 695 / 35	160 / 847 / 28	145 / 736 / 52	146 / 882 / 42	153 / 804 / 20	142 / 971 / 16	171 / 738 / 33	158 / 885 / 26	146 / 778 / 49	153 / 954 / 40						
Wind Speed [mph]		190						200												
0	1	149 / 626 / 26	165 / 760 / 21	186 / 498 / 37	206 / 608 / 30	205 / 537 / 43	239 / 670 / 35	153 / 661 / 25	169 / 791 / 20	189 / 521 / 35	213 / 642 / 28	214 / 570 / 41	248 / 704 / 34							
	2	127 / 726 / 22	139 / 872 / 18	152 / 603 / 31	170 / 737 / 25	187 / 606 / 39	213 / 739 / 32	129 / 759 / 21	146 / 932 / 17	157 / 638 / 29	174 / 769 / 23	194 / 640 / 37	220 / 770 / 30							
	3	105 / 838 / 18	119 / 1038 / 15	119 / 775 / 24	134 / 951 / 20	137 / 814 / 29	155 / 982 / 23	109 / 897 / 18	124 / 1102 / 14	121 / 807 / 22	135 / 974 / 18	139 / 843 / 27	163 / 1044 / 22							
	5	1	164 / 626 / 26	165 / 760 / 21	202 / 498 / 39	206 / 608 / 31	205 / 537 / 53	239 / 670 / 44	164 / 661 / 25	169 / 791 / 20	201 / 521 / 37	213 / 642 / 30	214 / 570 / 51	248 / 704 / 41						
		2	139 / 726 / 22	140 / 872 / 18	166 / 603 / 32	170 / 737 / 26	187 / 606 / 48	213 / 739 / 39	138 / 759 / 21	146 / 932 / 17	167 / 638 / 31	174 / 769 / 24	194 / 640 / 46	220 / 770 / 37						
		3	115 / 838 / 18	119 / 1038 / 15	130 / 775 / 25	134 / 951 / 21	137 / 814 / 36	155 / 982 / 29	117 / 897 / 18	124 / 1102 / 14	129 / 807 / 24	135 / 974 / 19	139 / 843 / 33	163 / 1044 / 27						
	10	1	207 / 626 / 26	200 / 760 / 21	255 / 498 / 48	247 / 608 / 39	218 / 537 / 69	239 / 670 / 57	205 / 661 / 25	198 / 791 / 20	250 / 521 / 45	248 / 642 / 37	221 / 570 / 66	248 / 704 / 54						
		2	176 / 726 / 22	169 / 872 / 18	209 / 603 / 40	204 / 737 / 32	198 / 606 / 63	213 / 739 / 51	173 / 759 / 21	171 / 932 / 17	208 / 638 / 38	202 / 769 / 30	201 / 640 / 60	220 / 770 / 48						
		3	145 / 838 / 18	144 / 1038 / 15	163 / 775 / 31	161 / 951 / 25	145 / 814 / 46	155 / 982 / 37	146 / 897 / 18	145 / 1102 / 14	160 / 807 / 29	157 / 974 / 23	144 / 843 / 43	163 / 1044 / 36						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	426 / 163 / 46	352 / 434 / 38	419 / 207 / 79	419 / 328 / 79	350 / 278 / 141	308 / 381 / 124	420 / 368 / 45	334 / 452 / 36	419 / 230 / 79	419 / 362 / 79	350 / 306 / 141	290 / 394 / 117	402 / 386 / 43	321 / 476 / 35	419 / 253 / 79	401 / 380 / 76	341 / 328 / 138	280 / 417 / 113
2		371 / 409 / 40	297 / 503 / 32	419 / 317 / 79	359 / 422 / 68	336 / 335 / 136	276 / 425 / 111	352 / 428 / 38	284 / 529 / 31	419 / 350 / 79	340 / 440 / 64	327 / 359 / 132	262 / 443 / 106	340 / 452 / 37	272 / 553 / 29	407 / 373 / 77	328 / 464 / 62	308 / 371 / 124	248 / 459 / 100	
3		309 / 485 / 33	254 / 606 / 27	340 / 436 / 64	274 / 537 / 52	248 / 467 / 100	201 / 577 / 81	297 / 511 / 32	241 / 632 / 26	328 / 462 / 62	262 / 563 / 50	238 / 493 / 96	192 / 603 / 77	284 / 535 / 31	229 / 655 / 25	310 / 477 / 59	249 / 586 / 47	224 / 507 / 91	182 / 626 / 74	
20		1	479 / 156 / 48	414 / 434 / 41	470 / 198 / 88	470 / 314 / 88	380 / 266 / 167	349 / 381 / 154	479 / 173 / 48	392 / 452 / 39	470 / 220 / 88	470 / 346 / 88	380 / 294 / 167	328 / 394 / 144	472 / 386 / 47	377 / 476 / 38	470 / 242 / 88	470 / 380 / 88	380 / 323 / 167	317 / 417 / 140
		2	435 / 409 / 43	348 / 503 / 35	470 / 303 / 88	421 / 422 / 79	380 / 335 / 167	312 / 425 / 137	414 / 428 / 41	334 / 529 / 33	470 / 335 / 88	399 / 440 / 75	370 / 359 / 163	296 / 443 / 130	399 / 452 / 40	319 / 553 / 32	470 / 367 / 88	385 / 464 / 72	349 / 371 / 154	280 / 459 / 123
		3	363 / 485 / 36	298 / 606 / 30	399 / 436 / 75	321 / 537 / 60	280 / 467 / 123	227 / 577 / 100	348 / 511 / 35	283 / 632 / 28	385 / 462 / 72	307 / 563 / 58	270 / 493 / 119	217 / 603 / 96	334 / 535 / 33	269 / 655 / 27	364 / 477 / 68	292 / 586 / 55	254 / 507 / 112	206 / 626 / 91
25		1	479 / 156 / 48	414 / 434 / 41	470 / 198 / 88	470 / 314 / 88	413 / 259 / 196	389 / 381 / 185	479 / 173 / 48	392 / 452 / 39	470 / 220 / 88	470 / 346 / 88	413 / 286 / 196	366 / 394 / 174	472 / 386 / 47	377 / 476 / 38	470 / 242 / 88	470 / 380 / 88	413 / 314 / 196	354 / 417 / 168
		2	435 / 409 / 43	348 / 503 / 35	470 / 303 / 88	421 / 422 / 79	413 / 326 / 196	348 / 425 / 165	414 / 428 / 41	334 / 529 / 33	470 / 335 / 88	399 / 440 / 75	413 / 359 / 196	330 / 443 / 157	399 / 452 / 40	319 / 553 / 32	470 / 367 / 88	385 / 464 / 72	389 / 371 / 185	313 / 459 / 148
		3	363 / 485 / 36	298 / 606 / 30	399 / 436 / 75	321 / 537 / 60	313 / 467 / 148	254 / 577 / 121	348 / 511 / 35	283 / 632 / 28	385 / 462 / 72	307 / 563 / 58	301 / 493 / 143	242 / 603 / 115	334 / 535 / 33	269 / 655 / 27	364 / 477 / 68	292 / 586 / 55	283 / 507 / 134	230 / 626 / 109
15	1	383 / 402 / 41	309 / 499 / 33	419 / 278 / 79	383 / 396 / 72	332 / 348 / 134	266 / 432 / 108	365 / 416 / 39	297 / 520 / 32	419 / 303 / 79	365 / 411 / 69	318 / 363 / 128	257 / 453 / 104							
	2	328 / 475 / 35	260 / 575 / 28	389 / 389 / 74	310 / 478 / 59	299 / 393 / 121	238 / 481 / 96	309 / 486 / 33	254 / 609 / 27	371 / 404 / 70	298 / 499 / 56	285 / 408 / 115	229 / 502 / 93							
	3	272 / 557 / 29	223 / 693 / 24	298 / 500 / 56	243 / 622 / 46	215 / 529 / 87	173 / 646 / 70	260 / 577 / 28	210 / 709 / 23	286 / 520 / 54	231 / 641 / 44	206 / 549 / 83	168 / 681 / 68							
	20	1	450 / 402 / 45	363 / 499 / 36	470 / 266 / 88	449 / 396 / 84	375 / 348 / 165	301 / 432 / 133	428 / 416 / 43	348 / 520 / 35	470 / 290 / 88	428 / 411 / 80	359 / 363 / 158	291 / 453 / 128						
		2	385 / 475 / 38	305 / 575 / 31	456 / 389 / 85	364 / 478 / 68	338 / 393 / 149	270 / 481 / 119	363 / 486 / 36	298 / 609 / 30	435 / 404 / 81	349 / 499 / 65	322 / 408 / 142	259 / 502 / 114						
		3	319 / 557 / 32	261 / 693 / 26	349 / 500 / 65	285 / 622 / 54	243 / 529 / 107	196 / 646 / 86	305 / 577 / 31	247 / 709 / 25	335 / 520 / 63	271 / 641 / 51	233 / 549 / 103	190 / 681 / 84						
	25	1	450 / 402 / 45	363 / 499 / 36	470 / 266 / 88	449 / 396 / 84	413 / 344 / 196	336 / 432 / 160	428 / 416 / 43	348 / 520 / 35	470 / 290 / 88	428 / 411 / 80	401 / 363 / 190	324 / 453 / 154						
		2	385 / 475 / 38	305 / 575 / 31	456 / 389 / 85	364 / 478 / 68	377 / 393 / 179	301 / 481 / 143	363 / 486 / 36	298 / 609 / 30	435 / 404 / 81	349 / 499 / 65	360 / 408 / 171	289 / 502 / 137						
		3	319 / 557 / 32	261 / 693 / 26	349 / 500 / 65	285 / 622 / 54	271 / 529 / 129	218 / 646 / 104	305 / 577 / 31	247 / 709 / 25	335 / 520 / 63	271 / 641 / 51	260 / 549 / 123	212 / 681 / 101						
15	1	352 / 436 / 38	284 / 540 / 31	419 / 330 / 79	353 / 430 / 67	304 / 377 / 123	252 / 473 / 100	365 / 416 / 39	297 / 520 / 32	419 / 303 / 79	365 / 411 / 69	318 / 363 / 128	257 / 453 / 104							
	2	297 / 506 / 32	241 / 626 / 26	359 / 423 / 68	286 / 518 / 54	271 / 420 / 109	224 / 521 / 89	309 / 486 / 33	254 / 609 / 27	371 / 404 / 70	298 / 499 / 56	285 / 408 / 115	229 / 502 / 93							
	3	254 / 609 / 27	204 / 744 / 22	274 / 539 / 52	225 / 674 / 43	201 / 580 / 81	167 / 716 / 66	260 / 577 / 28	210 / 709 / 23	286 / 520 / 54	231 / 641 / 44	206 / 549 / 83	168 / 681 / 68							
	20	1	414 / 436 / 41	334 / 540 / 33	470 / 315 / 88	413 / 430 / 77	343 / 377 / 151	285 / 473 / 123	428 / 416 / 43	348 / 520 / 35	470 / 290 / 88	428 / 411 / 80	359 / 363 / 158	291 / 453 / 128						
		2	348 / 506 / 35	283 / 626 / 28	421 / 423 / 79	335 / 518 / 63	306 / 420 / 135	252 / 521 / 109	363 / 486 / 36	298 / 609 / 30	435 / 404 / 81	349 / 499 / 65	322 / 408 / 142	259 / 502 / 114						
		3	298 / 609 / 30	240 / 744 / 24	321 / 539 / 60	264 / 674 / 50	227 / 580 / 100	188 / 716 / 82	305 / 577 / 31	247 / 709 / 25	335 / 520 / 63	271 / 641 / 51	233 / 549 / 103	190 / 681 / 84						
	25	1	414 / 436 / 41	334 / 540 / 33	470 / 315 / 88	413 / 430 / 77	383 / 377 / 182	317 / 473 / 148	428 / 416 / 43	348 / 520 / 35	470 / 290 / 88	428 / 411 / 80	401 / 363 / 190	324 / 453 / 154						
		2	348 / 506 / 35	283 / 626 / 28	421 / 423 / 79	335 / 518 / 63	342 / 420 / 162	281 / 521 / 132	363 / 486 / 36	298 / 609 / 30	435 / 404 / 81	349 / 499 / 65	360 / 408 / 171	289 / 502 / 137						
		3	298 / 609 / 30	240 / 744 / 24	321 / 539 / 60	264 / 674 / 50	254 / 580 / 121	210 / 716 / 98	305 / 577 / 31	247 / 709 / 25	335 / 520 / 63	271 / 641 / 51	260 / 549 / 123	212 / 681 / 101						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	340 / 455 / 37	272 / 557 / 29	419 / 357 / 79	340 / 449 / 64	294 / 395 / 119	251 / 491 / 96	315 / 488 / 34	254 / 599 / 27	389 / 385 / 74	316 / 482 / 60	271 / 421 / 109	247 / 523 / 89	291 / 515 / 31	243 / 634 / 25	365 / 415 / 69	302 / 510 / 55	252 / 450 / 102	248 / 559 / 83
15	2	291 / 534 / 31	235 / 658 / 25	340 / 434 / 64	280 / 547 / 53	262 / 438 / 106	221 / 538 / 85	266 / 564 / 29	217 / 698 / 24	316 / 467 / 60	255 / 576 / 48	243 / 470 / 98	221 / 579 / 79	247 / 600 / 27	211 / 751 / 22	298 / 504 / 56	251 / 627 / 46	229 / 507 / 93	220 / 614 / 74	
15	3	241 / 625 / 26	198 / 777 / 22	268 / 569 / 51	213 / 687 / 40	192 / 596 / 77	163 / 727 / 62	223 / 665 / 24	186 / 838 / 20	249 / 611 / 47	201 / 746 / 38	178 / 636 / 72	163 / 786 / 59	210 / 716 / 23	179 / 892 / 19	231 / 647 / 44	195 / 800 / 36	168 / 688 / 68	164 / 838 / 55	
20	1	399 / 455 / 40	319 / 557 / 32	470 / 342 / 88	399 / 449 / 75	333 / 395 / 147	282 / 491 / 119	370 / 488 / 37	298 / 599 / 30	456 / 385 / 85	371 / 482 / 69	306 / 421 / 135	276 / 523 / 109	341 / 515 / 34	284 / 634 / 28	428 / 415 / 80	352 / 510 / 64	285 / 450 / 126	275 / 559 / 103	
20	2	341 / 534 / 34	276 / 658 / 28	399 / 434 / 75	328 / 547 / 62	296 / 438 / 130	249 / 538 / 105	312 / 564 / 31	254 / 698 / 26	371 / 467 / 69	299 / 576 / 56	275 / 470 / 121	247 / 579 / 98	290 / 600 / 29	246 / 751 / 24	349 / 504 / 65	293 / 627 / 54	259 / 507 / 114	244 / 614 / 91	
20	3	283 / 625 / 28	232 / 777 / 23	314 / 569 / 59	250 / 687 / 47	217 / 596 / 96	183 / 727 / 77	261 / 665 / 26	218 / 838 / 22	292 / 611 / 55	235 / 746 / 44	201 / 636 / 89	182 / 786 / 72	247 / 716 / 25	209 / 892 / 21	271 / 647 / 51	227 / 800 / 42	190 / 688 / 84	181 / 838 / 68	
25	1	399 / 455 / 40	319 / 557 / 32	470 / 342 / 88	399 / 449 / 75	371 / 395 / 176	313 / 491 / 143	370 / 488 / 37	298 / 599 / 30	456 / 385 / 85	371 / 482 / 69	342 / 421 / 162	305 / 523 / 132	341 / 515 / 34	284 / 634 / 28	428 / 415 / 80	352 / 510 / 64	318 / 450 / 151	302 / 559 / 123	
25	2	341 / 534 / 34	276 / 658 / 28	399 / 434 / 75	328 / 547 / 62	330 / 438 / 157	277 / 538 / 126	312 / 564 / 31	254 / 698 / 26	371 / 467 / 69	299 / 576 / 56	307 / 470 / 146	273 / 579 / 118	290 / 600 / 29	246 / 751 / 24	349 / 504 / 65	293 / 627 / 54	289 / 507 / 137	268 / 614 / 109	
25	3	283 / 625 / 28	232 / 777 / 23	314 / 569 / 59	250 / 687 / 47	242 / 596 / 115	203 / 727 / 93	261 / 665 / 26	218 / 838 / 22	292 / 611 / 55	235 / 746 / 44	224 / 636 / 107	201 / 786 / 87	247 / 716 / 25	209 / 892 / 21	271 / 647 / 51	227 / 800 / 42	212 / 688 / 101	199 / 838 / 81	
Wind Speed [mph]		170						180												
Exposure Category : B	15	1	272 / 547 / 29	240 / 681 / 24	340 / 441 / 64	296 / 543 / 52	249 / 482 / 96	247 / 591 / 77	260 / 588 / 28	238 / 723 / 23	322 / 471 / 61	296 / 584 / 50	248 / 511 / 91	251 / 632 / 74						
	15	2	235 / 646 / 25	207 / 799 / 21	280 / 537 / 53	243 / 658 / 43	225 / 540 / 87	223 / 660 / 70	223 / 688 / 24	203 / 839 / 20	262 / 566 / 50	241 / 699 / 40	222 / 568 / 81	225 / 702 / 66						
	15	3	198 / 763 / 22	174 / 937 / 18	219 / 695 / 42	191 / 847 / 34	166 / 736 / 64	163 / 882 / 51	186 / 804 / 20	168 / 971 / 16	207 / 738 / 39	186 / 885 / 31	165 / 778 / 61	168 / 954 / 49						
	20	1	319 / 547 / 32	279 / 681 / 26	399 / 441 / 75	343 / 543 / 60	280 / 482 / 119	272 / 591 / 96	305 / 588 / 31	274 / 723 / 25	378 / 471 / 71	341 / 584 / 58	277 / 511 / 112	275 / 632 / 91						
	20	2	276 / 646 / 28	241 / 799 / 23	328 / 537 / 62	282 / 658 / 50	253 / 540 / 107	246 / 660 / 86	261 / 688 / 26	234 / 839 / 21	307 / 566 / 58	278 / 699 / 47	248 / 568 / 100	247 / 702 / 82						
	20	3	232 / 763 / 23	202 / 937 / 19	257 / 695 / 48	221 / 847 / 39	187 / 736 / 79	179 / 882 / 63	218 / 804 / 22	194 / 971 / 18	243 / 738 / 46	214 / 885 / 36	185 / 778 / 75	184 / 954 / 61						
	25	1	319 / 547 / 32	279 / 681 / 26	399 / 441 / 75	343 / 543 / 60	311 / 482 / 143	297 / 591 / 115	305 / 588 / 31	274 / 723 / 25	378 / 471 / 71	341 / 584 / 58	306 / 511 / 134	299 / 632 / 109						
	25	2	276 / 646 / 28	241 / 799 / 23	328 / 537 / 62	282 / 658 / 50	281 / 540 / 129	268 / 660 / 104	261 / 688 / 26	234 / 839 / 21	307 / 566 / 58	278 / 699 / 47	275 / 568 / 121	268 / 702 / 98						
	25	3	232 / 763 / 23	202 / 937 / 19	257 / 695 / 48	221 / 847 / 39	208 / 736 / 95	196 / 882 / 76	218 / 804 / 22	194 / 971 / 18	243 / 738 / 46	214 / 885 / 36	204 / 778 / 90	199 / 954 / 73						
Wind Speed [mph]		190						200												
Exposure Category : B	15	1	250 / 626 / 27	234 / 760 / 22	307 / 498 / 58	289 / 608 / 46	245 / 537 / 85	255 / 670 / 70	246 / 661 / 25	230 / 791 / 20	300 / 521 / 54	287 / 642 / 44	248 / 570 / 81	257 / 704 / 66						
	15	2	213 / 726 / 23	198 / 872 / 18	252 / 603 / 47	238 / 737 / 38	224 / 606 / 77	227 / 739 / 62	207 / 759 / 22	199 / 932 / 18	249 / 638 / 45	235 / 769 / 36	225 / 640 / 74	228 / 770 / 59						
	15	3	175 / 838 / 19	169 / 1038 / 16	197 / 775 / 37	188 / 951 / 30	164 / 814 / 57	165 / 982 / 46	175 / 897 / 18	169 / 1102 / 15	191 / 807 / 35	182 / 974 / 28	161 / 843 / 53	169 / 1044 / 44						
	20	1	293 / 626 / 29	269 / 760 / 23	360 / 498 / 67	331 / 608 / 54	273 / 537 / 105	277 / 670 / 86	287 / 661 / 28	262 / 791 / 22	349 / 521 / 63	327 / 642 / 51	274 / 570 / 100	278 / 704 / 82						
	20	2	249 / 726 / 25	227 / 872 / 20	295 / 603 / 55	273 / 737 / 44	249 / 606 / 96	247 / 739 / 77	242 / 759 / 23	227 / 932 / 19	290 / 638 / 52	267 / 769 / 42	249 / 640 / 91	247 / 770 / 72						
	20	3	205 / 838 / 21	193 / 1038 / 17	230 / 775 / 43	215 / 951 / 35	182 / 814 / 70	180 / 982 / 56	204 / 897 / 20	193 / 1102 / 16	223 / 807 / 40	207 / 974 / 32	179 / 843 / 65	183 / 1044 / 54						
	25	1	293 / 626 / 29	269 / 760 / 23	360 / 498 / 67	331 / 608 / 54	300 / 537 / 126	300 / 670 / 104	287 / 661 / 28	262 / 791 / 22	349 / 521 / 63	327 / 642 / 51	300 / 570 / 121	300 / 704 / 98						
	25	2	249 / 726 / 25	227 / 872 / 20	295 / 603 / 55	273 / 737 / 44	274 / 606 / 115	268 / 739 / 93	242 / 759 / 23	227 / 932 / 19	290 / 638 / 52	267 / 769 / 42	272 / 640 / 109	266 / 770 / 87						
	25	3	205 / 838 / 21	193 / 1038 / 17	230 / 775 / 43	215 / 951 / 35	200 / 814 / 84	195 / 982 / 67	204 / 897 / 20	193 / 1102 / 16	223 / 807 / 40	207 / 974 / 32	196 / 843 / 79	197 / 1044 / 65						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	509 / 153 / 49	447 / 434 / 43	500 / 195 / 93	500 / 309 / 93	443 / 252 / 222	430 / 381 / 216	509 / 171 / 49	423 / 452 / 41	500 / 216 / 93	500 / 341 / 93	443 / 278 / 222	404 / 394 / 203	509 / 189 / 49	408 / 476 / 39	500 / 238 / 93	500 / 374 / 93	443 / 305 / 222	391 / 417 / 196
30	2	470 / 409 / 45	376 / 503 / 36	500 / 299 / 93	454 / 422 / 85	443 / 317 / 222	384 / 425 / 193	447 / 428 / 43	361 / 529 / 35	500 / 330 / 93	431 / 440 / 80	443 / 349 / 222	365 / 443 / 183	431 / 452 / 41	345 / 553 / 33	500 / 362 / 93	415 / 464 / 77	430 / 371 / 216	345 / 459 / 173
	3	392 / 485 / 38	321 / 606 / 31	431 / 436 / 80	346 / 537 / 65	345 / 467 / 173	280 / 577 / 141	376 / 511 / 36	306 / 632 / 30	415 / 462 / 77	331 / 563 / 62	332 / 493 / 167	267 / 603 / 134	361 / 535 / 35	290 / 655 / 28	392 / 477 / 73	315 / 586 / 59	313 / 507 / 157	254 / 626 / 128
	1	545 / 149 / 50	493 / 434 / 45	534 / 189 / 99	534 / 300 / 99	477 / 248 / 251	470 / 381 / 247	545 / 165 / 50	467 / 452 / 43	534 / 210 / 99	534 / 330 / 99	477 / 274 / 251	442 / 394 / 232	545 / 183 / 50	450 / 476 / 41	534 / 231 / 99	534 / 363 / 99	477 / 301 / 251	427 / 417 / 225
35	2	519 / 409 / 48	415 / 503 / 38	534 / 290 / 99	500 / 422 / 93	477 / 312 / 251	420 / 425 / 221	493 / 428 / 45	398 / 529 / 37	534 / 319 / 99	475 / 440 / 88	477 / 344 / 251	399 / 443 / 210	476 / 452 / 44	381 / 553 / 35	534 / 351 / 99	458 / 464 / 85	470 / 371 / 247	377 / 459 / 198
	3	433 / 485 / 40	355 / 606 / 33	475 / 436 / 88	382 / 537 / 71	377 / 467 / 198	306 / 577 / 161	415 / 511 / 38	338 / 632 / 31	458 / 462 / 85	365 / 563 / 68	363 / 493 / 191	292 / 603 / 154	398 / 535 / 37	320 / 655 / 30	433 / 477 / 80	348 / 586 / 65	342 / 507 / 180	278 / 626 / 146
	1	583 / 144 / 112	545 / 434 / 105	568 / 183 / 157	568 / 290 / 157	503 / 241 / 281	503 / 375 / 281	583 / 160 / 112	516 / 452 / 99	568 / 203 / 157	568 / 320 / 157	503 / 266 / 281	480 / 394 / 268	583 / 177 / 112	497 / 476 / 95	568 / 224 / 157	568 / 351 / 157	503 / 292 / 281	464 / 417 / 260
40	2	574 / 409 / 110	459 / 503 / 88	568 / 280 / 157	549 / 422 / 152	503 / 303 / 281	456 / 425 / 255	545 / 428 / 105	440 / 529 / 84	568 / 309 / 157	522 / 440 / 145	503 / 334 / 281	433 / 443 / 242	526 / 452 / 101	421 / 553 / 81	568 / 340 / 157	503 / 464 / 139	503 / 366 / 281	410 / 459 / 229
	3	478 / 485 / 92	392 / 606 / 75	522 / 436 / 145	419 / 537 / 116	410 / 467 / 229	333 / 577 / 186	459 / 511 / 88	373 / 632 / 72	503 / 462 / 139	401 / 563 / 111	395 / 493 / 221	317 / 603 / 178	440 / 535 / 84	354 / 655 / 68	475 / 477 / 132	382 / 586 / 106	371 / 507 / 208	302 / 626 / 169

Wind Speed [mph]		110				115							
30	1	486 / 402 / 47	392 / 499 / 38	500 / 262 / 93	484 / 396 / 90	443 / 334 / 222	371 / 432 / 186	462 / 416 / 44	376 / 520 / 36	500 / 286 / 93	461 / 411 / 86	443 / 363 / 222	358 / 453 / 180
	2	415 / 475 / 40	329 / 575 / 32	492 / 389 / 92	392 / 478 / 73	417 / 393 / 209	332 / 481 / 167	392 / 486 / 38	321 / 609 / 31	469 / 404 / 87	377 / 499 / 70	397 / 408 / 200	319 / 502 / 160
	3	345 / 557 / 33	282 / 693 / 27	377 / 500 / 70	308 / 622 / 58	300 / 529 / 151	241 / 646 / 121	329 / 577 / 32	267 / 709 / 26	361 / 520 / 67	292 / 641 / 55	287 / 549 / 144	235 / 681 / 118
35	1	536 / 402 / 49	433 / 499 / 40	534 / 254 / 99	534 / 396 / 99	477 / 329 / 251	406 / 432 / 213	510 / 416 / 47	415 / 520 / 38	534 / 277 / 99	509 / 411 / 94	477 / 358 / 251	392 / 453 / 206
	2	459 / 475 / 42	363 / 575 / 34	534 / 383 / 99	433 / 478 / 80	456 / 393 / 239	363 / 481 / 191	433 / 486 / 40	355 / 609 / 33	517 / 404 / 96	416 / 499 / 77	434 / 408 / 228	349 / 502 / 183
	3	381 / 557 / 35	312 / 693 / 29	416 / 500 / 77	339 / 622 / 63	328 / 529 / 172	264 / 646 / 139	363 / 577 / 34	294 / 709 / 27	399 / 520 / 74	322 / 641 / 60	313 / 549 / 165	257 / 681 / 135
40	1	583 / 195 / 112	478 / 499 / 92	568 / 245 / 157	568 / 384 / 157	503 / 319 / 281	441 / 432 / 247	564 / 416 / 108	459 / 520 / 88	568 / 268 / 157	559 / 411 / 155	503 / 347 / 281	425 / 453 / 238
	2	507 / 475 / 97	402 / 575 / 77	568 / 371 / 157	475 / 478 / 132	495 / 393 / 277	395 / 481 / 221	478 / 486 / 92	392 / 609 / 75	568 / 404 / 157	456 / 499 / 127	472 / 408 / 264	379 / 502 / 212
	3	421 / 557 / 81	344 / 693 / 66	456 / 500 / 127	373 / 622 / 103	356 / 529 / 199	286 / 646 / 160	402 / 577 / 77	325 / 709 / 63	438 / 520 / 121	354 / 641 / 98	340 / 549 / 190	279 / 681 / 156

Wind Speed [mph]		120				130							
30	1	447 / 436 / 43	361 / 540 / 35	500 / 311 / 93	446 / 430 / 83	423 / 377 / 213	350 / 473 / 173	462 / 416 / 44	376 / 520 / 36	500 / 286 / 93	461 / 411 / 86	443 / 363 / 222	358 / 453 / 180
	2	376 / 506 / 36	306 / 626 / 30	454 / 423 / 85	361 / 518 / 67	378 / 420 / 190	310 / 521 / 154	392 / 486 / 38	321 / 609 / 31	469 / 404 / 87	377 / 499 / 70	397 / 408 / 200	319 / 502 / 160
	3	321 / 609 / 31	259 / 744 / 25	346 / 539 / 65	285 / 674 / 53	280 / 580 / 141	231 / 716 / 115	329 / 577 / 32	267 / 709 / 26	361 / 520 / 67	292 / 641 / 55	287 / 549 / 144	235 / 681 / 118
35	1	493 / 436 / 45	398 / 540 / 37	534 / 301 / 99	492 / 430 / 91	463 / 377 / 243	382 / 473 / 198	510 / 416 / 47	415 / 520 / 38	534 / 277 / 99	509 / 411 / 94	477 / 358 / 251	392 / 453 / 206
	2	415 / 506 / 38	338 / 626 / 31	500 / 423 / 93	399 / 518 / 74	413 / 420 / 217	339 / 521 / 176	433 / 486 / 40	355 / 609 / 33	517 / 404 / 96	416 / 499 / 77	434 / 408 / 228	349 / 502 / 183
	3	355 / 609 / 33	286 / 744 / 26	382 / 539 / 71	314 / 674 / 58	306 / 580 / 161	252 / 716 / 131	363 / 577 / 34	294 / 709 / 27	399 / 520 / 74	322 / 641 / 60	313 / 549 / 165	257 / 681 / 135
40	1	545 / 436 / 105	440 / 540 / 84	568 / 291 / 157	540 / 430 / 150	503 / 377 / 281	414 / 473 / 229	564 / 416 / 108	459 / 520 / 88	568 / 268 / 157	559 / 411 / 155	503 / 347 / 281	425 / 453 / 238
	2	459 / 506 / 88	373 / 626 / 72	549 / 423 / 152	438 / 518 / 121	449 / 420 / 251	368 / 521 / 203	478 / 486 / 92	392 / 609 / 75	568 / 404 / 157	456 / 499 / 127	472 / 408 / 264	379 / 502 / 212
	3	392 / 609 / 75	316 / 744 / 61	419 / 539 / 116	345 / 674 / 96	333 / 580 / 186	274 / 716 / 152	402 / 577 / 77	325 / 709 / 63	438 / 520 / 121	354 / 641 / 98	340 / 549 / 190	279 / 681 / 156

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	431 / 455 / 41	345 / 557 / 33	500 / 336 / 93	431 / 449 / 80	410 / 395 / 206	345 / 491 / 167	400 / 488 / 38	321 / 599 / 31	492 / 385 / 92	400 / 482 / 75	378 / 421 / 190	334 / 523 / 154	368 / 515 / 35	306 / 634 / 29	461 / 415 / 86	379 / 510 / 69	352 / 450 / 177	329 / 559 / 144
30	2	368 / 534 / 35	298 / 658 / 29	431 / 434 / 80	354 / 547 / 66	365 / 438 / 183	304 / 538 / 147	337 / 564 / 33	274 / 698 / 27	400 / 467 / 75	323 / 576 / 60	339 / 470 / 170	298 / 579 / 138	314 / 600 / 30	265 / 751 / 25	377 / 504 / 70	316 / 627 / 58	319 / 507 / 160	291 / 614 / 128
	3	306 / 625 / 30	251 / 777 / 24	338 / 569 / 63	269 / 687 / 50	267 / 596 / 134	223 / 727 / 108	282 / 665 / 27	235 / 838 / 23	315 / 611 / 59	254 / 746 / 48	248 / 636 / 124	220 / 786 / 102	267 / 716 / 26	225 / 892 / 21	292 / 647 / 55	245 / 800 / 45	235 / 688 / 118	217 / 838 / 95
	1	476 / 455 / 44	381 / 557 / 35	534 / 326 / 99	475 / 449 / 88	449 / 395 / 236	376 / 491 / 191	441 / 488 / 41	355 / 599 / 33	534 / 379 / 99	441 / 482 / 82	413 / 421 / 217	363 / 523 / 176	407 / 515 / 38	337 / 634 / 30	509 / 415 / 94	417 / 510 / 76	385 / 450 / 202	356 / 559 / 165
35	2	407 / 534 / 38	329 / 658 / 30	475 / 434 / 88	390 / 547 / 73	399 / 438 / 210	332 / 538 / 169	372 / 564 / 34	303 / 698 / 28	441 / 467 / 82	356 / 576 / 66	370 / 470 / 195	324 / 579 / 157	346 / 600 / 32	292 / 751 / 26	416 / 504 / 77	347 / 627 / 63	349 / 507 / 183	315 / 614 / 146
	3	338 / 625 / 31	277 / 777 / 26	373 / 569 / 69	297 / 687 / 55	292 / 596 / 154	243 / 727 / 124	312 / 665 / 29	260 / 838 / 24	348 / 611 / 65	280 / 746 / 52	271 / 636 / 142	239 / 786 / 116	294 / 716 / 27	248 / 892 / 23	322 / 647 / 60	269 / 800 / 49	257 / 688 / 135	235 / 838 / 109
	1	526 / 455 / 101	421 / 557 / 81	568 / 316 / 157	522 / 449 / 145	487 / 395 / 273	407 / 491 / 221	488 / 488 / 94	392 / 599 / 75	568 / 367 / 157	484 / 482 / 134	449 / 421 / 251	391 / 523 / 203	450 / 515 / 86	367 / 634 / 70	559 / 415 / 155	455 / 510 / 124	418 / 450 / 234	383 / 559 / 190
40	2	450 / 534 / 86	364 / 658 / 70	522 / 434 / 145	428 / 547 / 119	433 / 438 / 242	359 / 538 / 195	411 / 564 / 79	335 / 698 / 64	484 / 467 / 134	391 / 576 / 109	402 / 470 / 225	350 / 579 / 182	383 / 600 / 74	319 / 751 / 61	456 / 504 / 127	379 / 627 / 103	379 / 507 / 212	339 / 614 / 169
	3	373 / 625 / 72	306 / 777 / 59	410 / 569 / 114	326 / 687 / 91	317 / 596 / 178	264 / 727 / 143	344 / 665 / 66	287 / 838 / 55	382 / 611 / 106	308 / 746 / 85	294 / 636 / 165	258 / 786 / 134	325 / 716 / 63	271 / 892 / 52	354 / 647 / 98	294 / 800 / 80	279 / 688 / 156	252 / 838 / 126
	1	345 / 547 / 33	300 / 681 / 27	431 / 441 / 80	368 / 543 / 65	343 / 482 / 167	322 / 591 / 134	329 / 588 / 32	294 / 723 / 26	408 / 471 / 76	365 / 584 / 62	336 / 511 / 157	323 / 632 / 128						
30	2	298 / 646 / 29	258 / 799 / 24	354 / 537 / 66	303 / 658 / 53	309 / 540 / 151	291 / 660 / 121	282 / 688 / 27	251 / 839 / 22	331 / 566 / 62	298 / 699 / 50	301 / 568 / 141	290 / 702 / 115						
	3	251 / 763 / 24	217 / 937 / 20	277 / 695 / 52	238 / 847 / 42	229 / 736 / 111	212 / 882 / 89	235 / 804 / 23	208 / 971 / 18	262 / 738 / 49	230 / 885 / 39	224 / 778 / 105	215 / 954 / 85						
	1	381 / 547 / 35	329 / 681 / 29	475 / 441 / 88	404 / 543 / 71	374 / 482 / 191	348 / 591 / 154	363 / 588 / 34	322 / 723 / 27	450 / 471 / 83	399 / 584 / 68	365 / 511 / 180	347 / 632 / 146						
35	2	329 / 646 / 30	284 / 799 / 25	390 / 537 / 73	332 / 658 / 58	337 / 540 / 172	314 / 660 / 139	312 / 688 / 29	274 / 839 / 23	365 / 566 / 68	325 / 699 / 55	327 / 568 / 161	311 / 702 / 131						
	3	277 / 763 / 26	238 / 937 / 21	306 / 695 / 57	261 / 847 / 46	249 / 736 / 127	229 / 882 / 101	260 / 804 / 24	227 / 971 / 19	289 / 738 / 54	251 / 885 / 43	244 / 778 / 120	231 / 954 / 98						
	1	421 / 547 / 81	359 / 681 / 66	522 / 441 / 145	440 / 543 / 116	405 / 482 / 221	373 / 591 / 178	402 / 588 / 77	349 / 723 / 63	494 / 471 / 137	434 / 584 / 111	395 / 511 / 208	371 / 632 / 169						
40	2	364 / 646 / 70	309 / 799 / 57	428 / 537 / 119	362 / 658 / 96	365 / 540 / 199	336 / 660 / 160	344 / 688 / 66	298 / 839 / 53	401 / 566 / 111	353 / 699 / 91	354 / 568 / 186	333 / 702 / 152						
	3	306 / 763 / 59	259 / 937 / 48	335 / 695 / 93	284 / 847 / 75	270 / 736 / 147	246 / 882 / 117	287 / 804 / 55	247 / 971 / 44	317 / 738 / 88	272 / 885 / 70	263 / 778 / 139	247 / 954 / 113						
	1	316 / 626 / 30	287 / 760 / 24	388 / 498 / 72	353 / 608 / 58	328 / 537 / 147	323 / 670 / 121	309 / 661 / 29	280 / 791 / 23	375 / 521 / 67	349 / 642 / 55	327 / 570 / 141	321 / 704 / 115						
30	2	269 / 726 / 26	242 / 872 / 21	318 / 603 / 59	291 / 737 / 48	299 / 606 / 134	288 / 739 / 108	260 / 759 / 24	243 / 932 / 20	312 / 638 / 56	285 / 769 / 45	296 / 640 / 128	285 / 770 / 102						
	3	221 / 838 / 21	207 / 1038 / 18	248 / 775 / 46	230 / 951 / 38	219 / 814 / 98	209 / 982 / 79	220 / 897 / 21	205 / 1102 / 17	240 / 807 / 43	220 / 974 / 35	213 / 843 / 92	211 / 1044 / 76						
	1	349 / 626 / 32	313 / 760 / 26	427 / 498 / 79	385 / 608 / 63	356 / 537 / 169	345 / 670 / 139	340 / 661 / 30	304 / 791 / 24	413 / 521 / 74	379 / 642 / 60	353 / 570 / 161	343 / 704 / 131						
35	2	297 / 726 / 27	264 / 872 / 22	351 / 603 / 65	318 / 737 / 52	324 / 606 / 154	308 / 739 / 124	286 / 759 / 26	264 / 932 / 21	342 / 638 / 62	309 / 769 / 49	320 / 640 / 146	304 / 770 / 116						
	3	244 / 838 / 23	225 / 1038 / 19	274 / 775 / 51	250 / 951 / 41	237 / 814 / 113	224 / 982 / 90	242 / 897 / 22	223 / 1102 / 18	264 / 807 / 47	239 / 974 / 38	230 / 843 / 105	225 / 1044 / 86						
	1	383 / 626 / 74	339 / 760 / 59	467 / 498 / 129	416 / 608 / 103	383 / 537 / 195	368 / 670 / 160	371 / 661 / 70	329 / 791 / 55	450 / 521 / 121	409 / 642 / 98	379 / 570 / 186	364 / 704 / 152						
40	2	325 / 726 / 63	286 / 872 / 50	383 / 603 / 106	344 / 737 / 85	349 / 606 / 178	328 / 739 / 143	313 / 759 / 59	285 / 932 / 48	373 / 638 / 101	334 / 769 / 80	344 / 640 / 169	323 / 770 / 134						
	3	268 / 838 / 52	244 / 1038 / 42	299 / 775 / 83	271 / 951 / 67	256 / 814 / 130	239 / 982 / 104	264 / 897 / 50	241 / 1102 / 41	287 / 807 / 78	258 / 974 / 62	247 / 843 / 121	240 / 1044 / 100						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in

Exposure Category : B	Wind Speed [mph]																			
	95						100						105							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																	
45	1	628 / 139 / 117	607 / 434 / 113	612 / 177 / 167	612 / 281 / 167	534 / 237 / 305	534 / 369 / 305	628 / 155 / 117	575 / 452 / 107	612 / 196 / 167	612 / 309 / 167	534 / 262 / 305	518 / 394 / 295	628 / 171 / 117	554 / 476 / 103	612 / 217 / 167	612 / 340 / 167	534 / 287 / 305	501 / 417 / 286	
	2	628 / 402 / 117	511 / 503 / 95	612 / 271 / 167	612 / 422 / 167	534 / 298 / 305	492 / 425 / 281	607 / 428 / 113	490 / 529 / 91	612 / 299 / 167	581 / 440 / 158	534 / 328 / 305	467 / 443 / 267	586 / 452 / 109	469 / 553 / 87	612 / 328 / 167	560 / 464 / 153	534 / 360 / 305	442 / 459 / 253	
	3	533 / 485 / 99	437 / 606 / 81	581 / 436 / 158	467 / 537 / 127	442 / 467 / 253	359 / 577 / 205	511 / 511 / 95	415 / 632 / 78	560 / 462 / 153	446 / 563 / 122	426 / 493 / 243	342 / 603 / 195	490 / 535 / 91	394 / 655 / 74	529 / 477 / 144	425 / 586 / 116	401 / 507 / 229	326 / 626 / 186	
	50	1	669 / 134 / 122	669 / 216 / 122	651 / 171 / 175	651 / 271 / 175	555 / 230 / 322	555 / 358 / 322	669 / 150 / 122	634 / 452 / 115	651 / 190 / 175	651 / 299 / 175	555 / 253 / 322	555 / 394 / 322	669 / 166 / 122	610 / 476 / 111	651 / 209 / 175	651 / 328 / 175	555 / 278 / 322	538 / 417 / 312
		2	669 / 389 / 122	563 / 503 / 102	651 / 262 / 175	651 / 407 / 175	555 / 289 / 322	529 / 425 / 307	669 / 428 / 122	540 / 529 / 98	651 / 289 / 175	640 / 440 / 172	555 / 318 / 322	502 / 443 / 291	646 / 452 / 117	517 / 553 / 94	651 / 317 / 175	617 / 464 / 166	555 / 349 / 322	475 / 459 / 276
		3	587 / 485 / 107	481 / 606 / 88	640 / 436 / 172	514 / 537 / 139	475 / 467 / 276	385 / 577 / 224	563 / 511 / 102	458 / 632 / 83	617 / 462 / 166	491 / 563 / 132	457 / 493 / 265	368 / 603 / 213	540 / 535 / 98	434 / 655 / 79	583 / 477 / 157	469 / 586 / 126	430 / 507 / 250	350 / 626 / 203
	60	1	737 / 125 / 129	737 / 201 / 129	718 / 159 / 189	718 / 252 / 189	623 / 218 / 360	623 / 341 / 360	737 / 139 / 129	737 / 222 / 129	718 / 176 / 189	718 / 278 / 189	623 / 241 / 360	623 / 375 / 360	737 / 154 / 129	723 / 476 / 126	718 / 195 / 189	718 / 305 / 189	623 / 265 / 360	623 / 410 / 360
		2	737 / 362 / 129	668 / 503 / 117	718 / 244 / 189	718 / 379 / 189	623 / 275 / 360	623 / 425 / 360	737 / 398 / 129	640 / 529 / 112	718 / 269 / 189	718 / 416 / 189	623 / 303 / 360	591 / 443 / 342	737 / 435 / 129	612 / 553 / 107	718 / 295 / 189	718 / 456 / 189	623 / 332 / 360	560 / 459 / 323
		3	696 / 485 / 122	570 / 606 / 100	718 / 413 / 189	609 / 537 / 161	560 / 467 / 323	454 / 577 / 262	668 / 511 / 117	543 / 632 / 95	718 / 453 / 189	582 / 563 / 154	539 / 493 / 311	433 / 603 / 250	640 / 535 / 112	515 / 655 / 90	691 / 477 / 182	555 / 586 / 147	507 / 507 / 293	412 / 626 / 238
45	Wind Speed [mph]																			
	110						115													
	1	628 / 188 / 117	533 / 499 / 99	612 / 237 / 167	612 / 371 / 167	534 / 314 / 305	476 / 432 / 272	628 / 206 / 117	511 / 520 / 95	612 / 259 / 167	612 / 404 / 167	534 / 342 / 305	459 / 453 / 262	ASCE Group Zone						
	45	2	564 / 475 / 105	447 / 575 / 83	612 / 359 / 167	529 / 478 / 144	534 / 393 / 305	426 / 481 / 243	533 / 486 / 99	437 / 609 / 81	612 / 391 / 167	508 / 499 / 139	509 / 408 / 291	409 / 502 / 234	Panal Angle		Mono Slope			
		3	469 / 557 / 87	384 / 693 / 72	508 / 500 / 139	415 / 622 / 113	384 / 529 / 219	309 / 646 / 176	447 / 577 / 83	362 / 709 / 68	487 / 520 / 133	394 / 641 / 108	367 / 549 / 210	301 / 681 / 172	0 - 3		1 = 1' / 1			
		1	669 / 182 / 122	587 / 499 / 107	651 / 229 / 175	651 / 358 / 175	555 / 304 / 322	511 / 432 / 297	669 / 199 / 122	563 / 520 / 102	651 / 250 / 175	651 / 390 / 175	555 / 331 / 322	493 / 453 / 286	3 - 10		2 = 2' / 2			
	50	2	622 / 475 / 113	493 / 575 / 90	651 / 347 / 175	583 / 478 / 157	555 / 381 / 322	457 / 481 / 265	587 / 486 / 107	481 / 609 / 88	651 / 377 / 175	560 / 499 / 151	547 / 408 / 317	439 / 502 / 255	10 - 30		1 = 1			
		3	517 / 557 / 94	423 / 693 / 77	560 / 500 / 151	457 / 622 / 123	412 / 529 / 239	332 / 646 / 193	493 / 577 / 90	399 / 709 / 73	537 / 520 / 145	434 / 641 / 117	394 / 549 / 229	323 / 681 / 187	1 = 1					
		1	737 / 169 / 129	696 / 499 / 122	718 / 213 / 189	718 / 333 / 189	623 / 290 / 360	602 / 432 / 348	737 / 185 / 129	668 / 520 / 117	718 / 233 / 189	718 / 363 / 189	623 / 315 / 360	581 / 453 / 336	2 = 2					
60	2	737 / 475 / 129	584 / 575 / 102	718 / 322 / 189	691 / 478 / 182	623 / 362 / 360	539 / 481 / 311	696 / 486 / 122	570 / 609 / 100	718 / 351 / 189	663 / 499 / 175	623 / 394 / 360	518 / 502 / 299	2 = 2						
	3	612 / 557 / 107	501 / 693 / 88	663 / 500 / 175	542 / 622 / 143	486 / 529 / 281	391 / 646 / 226	584 / 577 / 102	473 / 709 / 83	636 / 520 / 168	515 / 641 / 136	465 / 549 / 269	380 / 681 / 220	3 = 3						
	1	607 / 436 / 113	490 / 540 / 91	612 / 282 / 167	601 / 430 / 164	534 / 371 / 305	447 / 473 / 253	628 / 206 / 117	511 / 520 / 95	612 / 259 / 167	612 / 404 / 167	534 / 342 / 305	459 / 453 / 262	1 = 1						
45	2	511 / 506 / 95	415 / 626 / 78	612 / 423 / 167	487 / 518 / 133	484 / 420 / 276	396 / 521 / 224	533 / 486 / 99	437 / 609 / 81	612 / 391 / 167	508 / 499 / 139	509 / 408 / 291	409 / 502 / 234	2 = 2						
	3	437 / 609 / 81	352 / 744 / 66	467 / 539 / 127	384 / 674 / 105	359 / 580 / 205	295 / 716 / 167	447 / 577 / 83	362 / 709 / 68	487 / 520 / 133	394 / 641 / 108	367 / 549 / 210	301 / 681 / 172	3 = 3						
	1	669 / 217 / 122	540 / 540 / 98	651 / 272 / 175	651 / 423 / 175	555 / 360 / 322	479 / 473 / 276	669 / 199 / 122	563 / 520 / 102	651 / 250 / 175	651 / 390 / 175	555 / 331 / 322	493 / 453 / 286	1 = 1						
50	2	563 / 506 / 102	458 / 626 / 83	651 / 409 / 175	537 / 518 / 145	520 / 420 / 302	425 / 521 / 245	587 / 486 / 107	481 / 609 / 88	651 / 377 / 175	560 / 499 / 151	547 / 408 / 317	439 / 502 / 255	2 = 2						
	3	481 / 609 / 88	388 / 744 / 71	514 / 539 / 139	423 / 674 / 114	385 / 580 / 224	317 / 716 / 182	493 / 577 / 90	399 / 709 / 73	537 / 520 / 145	434 / 641 / 117	394 / 549 / 229	323 / 681 / 187	3 = 3						
	1	737 / 202 / 129	640 / 540 / 112	718 / 253 / 189	718 / 393 / 189	623 / 342 / 360	560 / 473 / 323	737 / 185 / 129	668 / 520 / 117	718 / 233 / 189	718 / 363 / 189	623 / 315 / 360	581 / 453 / 336	1 = 1						
60	2	668 / 506 / 117	543 / 626 / 95	718 / 380 / 189	636 / 518 / 168	613 / 420 / 354	496 / 521 / 287	696 / 486 / 122	570 / 609 / 100	718 / 351 / 189	663 / 499 / 175	623 / 394 / 360	518 / 502 / 299	2 = 2						
	3	570 / 609 / 100	459 / 744 / 80	609 / 539 / 161	501 / 674 / 132	454 / 580 / 262	370 / 716 / 214	584 / 577 / 102	473 / 709 / 83	636 / 520 / 168	515 / 641 / 136	465 / 549 / 269	380 / 681 / 220	3 = 3						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
	45	1	586 / 455 / 109	469 / 557 / 87	612 / 305 / 167	581 / 449 / 158	526 / 395 / 300	438 / 491 / 243	543 / 488 / 101	437 / 599 / 81	612 / 355 / 167	539 / 482 / 147	484 / 421 / 276	420 / 523 / 224	501 / 515 / 93	405 / 634 / 76	612 / 408 / 167	498 / 510 / 136	451 / 450 / 257	410 / 559 / 210															
2		501 / 534 / 93	405 / 658 / 76	581 / 434 / 158	477 / 547 / 130	467 / 438 / 267	387 / 538 / 215	458 / 564 / 85	373 / 698 / 70	539 / 467 / 147	436 / 576 / 119	434 / 470 / 248	376 / 579 / 200	426 / 600 / 79	352 / 751 / 66	508 / 504 / 139	415 / 627 / 113	409 / 507 / 234	363 / 614 / 186																
3		415 / 625 / 78	341 / 777 / 64	456 / 569 / 125	363 / 687 / 99	342 / 596 / 195	284 / 727 / 157	384 / 665 / 72	320 / 838 / 60	425 / 611 / 116	342 / 746 / 94	317 / 636 / 181	277 / 786 / 148	362 / 716 / 68	298 / 892 / 56	394 / 647 / 108	322 / 800 / 88	301 / 688 / 172	270 / 838 / 138																
50		1	646 / 455 / 117	517 / 557 / 94	651 / 295 / 175	640 / 449 / 172	555 / 389 / 322	470 / 491 / 265	599 / 488 / 109	481 / 599 / 88	651 / 343 / 175	594 / 482 / 160	520 / 421 / 302	449 / 523 / 245	552 / 515 / 100	446 / 634 / 81	651 / 394 / 175	549 / 510 / 148	484 / 450 / 281	437 / 559 / 229															
		2	552 / 534 / 100	446 / 658 / 81	640 / 434 / 172	526 / 547 / 142	502 / 438 / 291	414 / 538 / 234	505 / 564 / 92	411 / 698 / 75	594 / 467 / 160	480 / 576 / 129	466 / 470 / 271	401 / 579 / 219	470 / 600 / 85	388 / 751 / 71	560 / 504 / 151	457 / 627 / 123	439 / 507 / 255	387 / 614 / 203															
		3	458 / 625 / 83	376 / 777 / 68	503 / 569 / 136	400 / 687 / 108	368 / 596 / 213	304 / 727 / 172	423 / 665 / 77	352 / 838 / 64	469 / 611 / 126	377 / 746 / 102	341 / 636 / 198	296 / 786 / 161	399 / 716 / 73	329 / 892 / 60	434 / 647 / 117	354 / 800 / 96	323 / 688 / 187	288 / 838 / 151															
60		1	737 / 219 / 129	612 / 557 / 107	718 / 274 / 189	718 / 425 / 189	623 / 370 / 360	539 / 491 / 311	709 / 488 / 124	570 / 599 / 100	718 / 319 / 189	704 / 482 / 186	613 / 421 / 354	507 / 523 / 287	654 / 515 / 114	529 / 634 / 92	718 / 367 / 189	650 / 510 / 172	570 / 450 / 330	490 / 559 / 269															
		2	654 / 534 / 114	529 / 658 / 92	718 / 411 / 189	623 / 547 / 165	591 / 438 / 342	475 / 538 / 275	598 / 564 / 105	487 / 698 / 85	704 / 467 / 186	569 / 576 / 150	549 / 470 / 317	453 / 579 / 256	557 / 600 / 97	459 / 751 / 80	663 / 504 / 175	542 / 627 / 143	518 / 507 / 299	435 / 614 / 238															
		3	543 / 625 / 95	445 / 777 / 78	596 / 569 / 157	474 / 687 / 125	433 / 596 / 250	349 / 727 / 202	501 / 665 / 88	418 / 838 / 73	555 / 611 / 147	447 / 746 / 118	402 / 636 / 232	334 / 786 / 189	473 / 716 / 83	390 / 892 / 68	515 / 647 / 136	420 / 800 / 111	380 / 688 / 220	323 / 838 / 177															
Wind Speed [mph]		170						180																											
45	1	469 / 547 / 87	388 / 681 / 72	581 / 441 / 158	475 / 543 / 127	436 / 482 / 243	398 / 591 / 195	447 / 588 / 83	377 / 723 / 68	550 / 471 / 150	468 / 584 / 122	424 / 511 / 229	395 / 632 / 186	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
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2	405 / 646 / 76	334 / 799 / 62	477 / 537 / 130	391 / 658 / 105	394 / 540 / 219	359 / 660 / 176	384 / 688 / 72	322 / 839 / 58	446 / 566 / 122	381 / 699 / 99	380 / 568 / 205	354 / 702 / 167																							
3	341 / 763 / 64	280 / 937 / 52	373 / 695 / 102	307 / 847 / 82	291 / 736 / 162	262 / 882 / 129	320 / 804 / 60	266 / 971 / 48	353 / 738 / 96	294 / 885 / 77	283 / 778 / 153	263 / 954 / 124																							
50	1	517 / 547 / 94	423 / 681 / 77	640 / 441 / 172	514 / 543 / 139	468 / 482 / 265	423 / 591 / 213	493 / 588 / 90	405 / 723 / 73	606 / 471 / 163	502 / 584 / 132	453 / 511 / 250	418 / 632 / 203																						
	2	446 / 646 / 81	364 / 799 / 66	526 / 537 / 142	423 / 658 / 114	422 / 540 / 239	382 / 660 / 193	423 / 688 / 77	345 / 839 / 62	491 / 566 / 132	408 / 699 / 108	406 / 568 / 224	376 / 702 / 182																						
	3	376 / 763 / 68	305 / 937 / 56	412 / 695 / 111	332 / 847 / 90	312 / 736 / 177	279 / 882 / 141	352 / 804 / 64	286 / 971 / 51	389 / 738 / 105	315 / 885 / 83	302 / 778 / 167	279 / 954 / 136																						
60	1	612 / 547 / 107	501 / 681 / 88	718 / 417 / 189	609 / 543 / 161	539 / 482 / 311	473 / 591 / 250	584 / 588 / 102	473 / 723 / 83	718 / 471 / 189	582 / 584 / 154	512 / 511 / 293	466 / 632 / 238																						
	2	529 / 646 / 92	431 / 799 / 76	623 / 537 / 165	501 / 658 / 132	486 / 540 / 281	427 / 660 / 226	501 / 688 / 88	404 / 839 / 71	582 / 566 / 154	474 / 699 / 125	459 / 568 / 262	418 / 702 / 214																						
	3	445 / 763 / 78	362 / 937 / 63	488 / 695 / 129	393 / 847 / 104	359 / 736 / 208	312 / 882 / 165	418 / 804 / 73	334 / 971 / 59	461 / 738 / 122	366 / 885 / 97	342 / 778 / 195	311 / 954 / 159																						
Wind Speed [mph]		190						200																											
45	1	426 / 626 / 79	365 / 760 / 64	519 / 498 / 142	448 / 608 / 113	411 / 537 / 215	391 / 670 / 176	405 / 661 / 76	353 / 791 / 60	487 / 521 / 133	439 / 642 / 108	406 / 570 / 205	386 / 704 / 167																						
	2	362 / 726 / 68	308 / 872 / 54	425 / 603 / 116	370 / 737 / 94	374 / 606 / 195	348 / 739 / 157	341 / 759 / 64	306 / 932 / 52	405 / 638 / 111	358 / 769 / 88	368 / 640 / 186	342 / 770 / 148																						
	3	298 / 838 / 56	263 / 1038 / 46	332 / 775 / 91	291 / 951 / 74	274 / 814 / 143	254 / 982 / 115	288 / 897 / 54	259 / 1102 / 44	311 / 807 / 85	277 / 974 / 68	264 / 843 / 134	254 / 1044 / 110																						
	50	1	470 / 626 / 85	392 / 760 / 68	571 / 498 / 154	480 / 608 / 123	438 / 537 / 234	413 / 670 / 193	446 / 661 / 81	378 / 791 / 64	537 / 521 / 145	469 / 642 / 117	432 / 570 / 224	407 / 704 / 182																					
		2	399 / 726 / 73	330 / 872 / 58	469 / 603 / 126	396 / 737 / 102	399 / 606 / 213	369 / 739 / 172	376 / 759 / 68	327 / 932 / 56	446 / 638 / 120	383 / 769 / 96	392 / 640 / 203	361 / 770 / 161																					
		3	329 / 838 / 60	282 / 1038 / 49	366 / 775 / 99	312 / 951 / 80	292 / 814 / 156	268 / 982 / 125	317 / 897 / 58	277 / 1102 / 47	343 / 807 / 93	296 / 974 / 74	282 / 843 / 146	268 / 1044 / 120																					
	60	1	557 / 626 / 97	445 / 760 / 78	677 / 498 / 179	543 / 608 / 143	493 / 537 / 275	459 / 670 / 226	529 / 661 / 92	426 / 791 / 73	636 / 521 / 168	529 / 642 / 136	485 / 570 / 262	450 / 704 / 214																					
		2	473 / 726 / 83	376 / 872 / 66	555 / 603 / 147	448 / 737 / 118	450 / 606 / 250	409 / 739 / 202	445 / 759 / 78	370 / 932 / 63	528 / 638 / 140	432 / 769 / 111	440 / 640 / 238	399 / 770 / 189																					
		3	390 / 838 / 68	320 / 1038 / 56	433 / 775 / 115	353 / 951 / 93	329 / 814 / 183	298 / 982 / 147	376 / 897 / 66	313 / 1102 / 54	406 / 807 / 107	334 / 974 / 86	316 / 843 / 171	296 / 1044 / 141																					

Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																													
Wind Speed [mph]	95						100						105																						
Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
70	1	788 / 116 / 134	788 / 186 / 134	783 / 150 / 204	783 / 238 / 204	683 / 207 / 395	683 / 323 / 395	788 / 129 / 134	788 / 206 / 134	783 / 167 / 204	783 / 262 / 204	683 / 229 / 395	683 / 356 / 395	788 / 142 / 134	788 / 226 / 134	783 / 184 / 204	783 / 288 / 204	683 / 251 / 395	683 / 390 / 395																
	2	788 / 334 / 134	772 / 503 / 131	783 / 230 / 204	783 / 357 / 204	683 / 261 / 395	683 / 404 / 395	788 / 368 / 134	740 / 529 / 126	783 / 254 / 204	783 / 393 / 204	683 / 287 / 395	683 / 443 / 395	788 / 403 / 134	708 / 553 / 120	783 / 278 / 204	783 / 430 / 204	683 / 315 / 395	646 / 459 / 373																
	3	788 / 475 / 134	659 / 606 / 112	783 / 389 / 204	704 / 537 / 183	646 / 467 / 373	525 / 577 / 303	772 / 511 / 131	627 / 632 / 107	783 / 428 / 204	673 / 563 / 175	622 / 493 / 359	500 / 603 / 289	740 / 535 / 126	595 / 655 / 101	783 / 468 / 204	642 / 586 / 167	585 / 507 / 338	476 / 626 / 275																
	80	1	840 / 109 / 139	840 / 175 / 139	835 / 141 / 215	835 / 224 / 215	733 / 196 / 423	733 / 306 / 423	840 / 121 / 139	840 / 193 / 139	835 / 157 / 215	835 / 247 / 215	733 / 217 / 423	733 / 337 / 423	840 / 134 / 139	840 / 212 / 139	835 / 173 / 215	835 / 271 / 215	733 / 238 / 423	733 / 369 / 423															
		2	840 / 314 / 139	840 / 482 / 139	835 / 216 / 215	835 / 336 / 215	733 / 247 / 423	733 / 382 / 423	840 / 345 / 139	840 / 529 / 139	835 / 238 / 215	835 / 369 / 215	733 / 272 / 423	733 / 420 / 423	840 / 378 / 139	803 / 553 / 133	835 / 262 / 215	835 / 404 / 215	733 / 298 / 423	733 / 459 / 423															
		3	840 / 446 / 139	749 / 606 / 124	835 / 366 / 215	800 / 537 / 206	733 / 467 / 423	595 / 577 / 344	840 / 489 / 139	712 / 632 / 118	835 / 402 / 215	764 / 563 / 196	705 / 493 / 407	567 / 603 / 328	840 / 535 / 139	676 / 655 / 112	835 / 440 / 215	728 / 586 / 187	664 / 507 / 384	540 / 626 / 312															
	90	1	899 / 104 / 146	899 / 167 / 146	875 / 132 / 223	875 / 209 / 223	773 / 185 / 447	773 / 289 / 447	899 / 116 / 146	899 / 185 / 146	875 / 147 / 223	875 / 231 / 223	773 / 204 / 447	773 / 318 / 447	899 / 128 / 146	899 / 203 / 146	875 / 162 / 223	875 / 253 / 223	773 / 225 / 447	773 / 348 / 447															
		2	899 / 300 / 146	899 / 461 / 146	875 / 202 / 223	875 / 315 / 223	773 / 233 / 447	773 / 360 / 447	899 / 330 / 146	899 / 506 / 146	875 / 223 / 223	875 / 346 / 223	773 / 257 / 447	773 / 396 / 447	899 / 362 / 146	899 / 553 / 146	875 / 245 / 223	875 / 379 / 223	773 / 281 / 447	773 / 433 / 447															
		3	899 / 426 / 146	838 / 606 / 136	875 / 343 / 223	875 / 525 / 223	773 / 440 / 447	665 / 577 / 384	899 / 468 / 146	797 / 632 / 130	875 / 377 / 223	855 / 563 / 218	773 / 483 / 447	634 / 603 / 366	899 / 512 / 146	756 / 655 / 123	875 / 412 / 223	815 / 586 / 208	742 / 507 / 429	603 / 626 / 349															
70	1	788 / 157 / 134	788 / 247 / 134	783 / 201 / 204	783 / 314 / 204	683 / 275 / 395	683 / 425 / 395	788 / 171 / 134	772 / 520 / 131	783 / 220 / 204	783 / 342 / 204	683 / 299 / 395	671 / 453 / 387	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panel Angle	Mono Slope																																	
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2	788 / 439 / 134	676 / 575 / 115	783 / 304 / 204	783 / 469 / 204	683 / 344 / 395	622 / 481 / 359	788 / 477 / 134	659 / 609 / 112	783 / 331 / 204	767 / 499 / 200	683 / 374 / 395	598 / 502 / 345																							
3	708 / 557 / 120	579 / 693 / 98	767 / 500 / 200	626 / 622 / 163	561 / 529 / 324	451 / 646 / 261	676 / 577 / 115	547 / 709 / 93	736 / 520 / 191	595 / 641 / 155	537 / 549 / 310	439 / 681 / 254																							
80	1	840 / 147 / 139	840 / 232 / 139	835 / 189 / 215	835 / 296 / 215	733 / 260 / 423	733 / 402 / 423	840 / 161 / 139	840 / 253 / 139	835 / 207 / 215	835 / 322 / 215	733 / 283 / 423	733 / 437 / 423																						
	2	840 / 412 / 139	767 / 575 / 127	835 / 286 / 215	835 / 441 / 215	733 / 326 / 423	705 / 481 / 407	840 / 448 / 139	749 / 609 / 124	835 / 311 / 215	835 / 479 / 215	733 / 354 / 423	678 / 502 / 392																						
	3	803 / 557 / 133	657 / 693 / 109	835 / 479 / 215	711 / 622 / 183	636 / 529 / 368	512 / 646 / 296	767 / 577 / 127	621 / 709 / 103	835 / 520 / 215	675 / 641 / 174	609 / 549 / 352	498 / 681 / 288																						
90	1	899 / 141 / 146	899 / 222 / 146	875 / 177 / 223	875 / 277 / 223	773 / 246 / 447	773 / 379 / 447	899 / 154 / 146	899 / 242 / 146	875 / 193 / 223	875 / 301 / 223	773 / 267 / 447	773 / 412 / 447																						
	2	899 / 394 / 146	858 / 575 / 140	875 / 268 / 223	875 / 413 / 223	773 / 307 / 447	773 / 472 / 447	899 / 428 / 146	838 / 609 / 136	875 / 291 / 223	875 / 448 / 223	773 / 334 / 447	758 / 502 / 438																						
	3	899 / 557 / 146	736 / 693 / 120	875 / 449 / 223	795 / 622 / 203	711 / 529 / 411	572 / 646 / 331	858 / 577 / 140	695 / 709 / 113	875 / 487 / 223	756 / 641 / 193	681 / 549 / 393	557 / 681 / 322																						
70	1	788 / 187 / 134	740 / 540 / 126	783 / 239 / 204	783 / 371 / 204	683 / 325 / 395	646 / 473 / 373	788 / 171 / 134	772 / 520 / 131	783 / 220 / 204	783 / 342 / 204	683 / 299 / 395	671 / 453 / 387	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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3	659 / 609 / 112	531 / 744 / 90	704 / 539 / 183	579 / 674 / 151	525 / 580 / 303	427 / 716 / 247	676 / 577 / 115	547 / 709 / 93	736 / 520 / 191	595 / 641 / 155	537 / 549 / 310	439 / 681 / 254																							
80	1	840 / 175 / 139	840 / 275 / 139	835 / 225 / 215	835 / 349 / 215	733 / 307 / 423	733 / 473 / 423	840 / 161 / 139	840 / 253 / 139	835 / 207 / 215	835 / 322 / 215	733 / 283 / 423	733 / 437 / 423																						
	2	840 / 485 / 139	712 / 626 / 118	835 / 337 / 215	835 / 518 / 215	733 / 384 / 423	650 / 521 / 376	840 / 448 / 139	749 / 609 / 124	835 / 311 / 215	835 / 479 / 215	733 / 354 / 423	678 / 502 / 392																						
	3	749 / 609 / 124	603 / 744 / 100	800 / 539 / 206	657 / 674 / 169	595 / 580 / 344	484 / 716 / 280	767 / 577 / 127	621 / 709 / 103	835 / 520 / 215	675 / 641 / 174	609 / 549 / 352	498 / 681 / 288																						
90	1	899 / 168 / 146	899 / 263 / 146	875 / 210 / 223	875 / 327 / 223	773 / 290 / 447	773 / 446 / 447	899 / 154 / 146	899 / 242 / 146	875 / 193 / 223	875 / 301 / 223	773 / 267 / 447	773 / 412 / 447																						
	2	899 / 463 / 146	797 / 626 / 130	875 / 316 / 223	875 / 485 / 223	773 / 362 / 447	727 / 521 / 420	899 / 428 / 146	838 / 609 / 136	875 / 291 / 223	875 / 448 / 223	773 / 334 / 447	758 / 502 / 438																						
	3	838 / 609 / 136	674 / 744 / 110	875 / 527 / 223	736 / 674 / 188	665 / 580 / 384	541 / 716 / 313	858 / 577 / 140	695 / 709 / 113	875 / 487 / 223	756 / 641 / 193	681 / 549 / 393	557 / 681 / 322																						

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θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs																						
Wind Speed [mph]		140						150						160																						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																
		70	1	788 / 203 / 134	708 / 557 / 120	783 / 259 / 204	783 / 401 / 204	683 / 351 / 395	622 / 491 / 359	788 / 236 / 134	659 / 599 / 112	783 / 301 / 204	783 / 464 / 204	683 / 407 / 395	573 / 523 / 331	756 / 515 / 128	611 / 634 / 104	783 / 346 / 204	751 / 510 / 195	659 / 450 / 380	544 / 559 / 310															
70	2	756 / 534 / 128	611 / 658 / 104	783 / 388 / 204	720 / 547 / 187	683 / 438 / 395	549 / 538 / 317	692 / 564 / 117	563 / 698 / 96	783 / 449 / 204	657 / 576 / 171	634 / 470 / 366	512 / 579 / 296	643 / 600 / 109	531 / 751 / 90	767 / 504 / 200	626 / 627 / 163	598 / 507 / 345	483 / 614 / 275																	
70	3	627 / 625 / 107	515 / 777 / 87	689 / 569 / 179	548 / 687 / 143	500 / 596 / 289	403 / 727 / 233	579 / 665 / 98	483 / 838 / 82	642 / 611 / 167	517 / 746 / 135	464 / 636 / 268	378 / 786 / 219	547 / 716 / 93	451 / 892 / 77	595 / 647 / 155	485 / 800 / 126	439 / 688 / 254	359 / 838 / 205																	
80	1	840 / 190 / 139	803 / 557 / 133	835 / 243 / 215	835 / 377 / 215	733 / 332 / 423	705 / 491 / 407	840 / 222 / 139	749 / 599 / 124	835 / 283 / 215	835 / 436 / 215	733 / 385 / 423	650 / 523 / 376	840 / 256 / 139	694 / 634 / 115	835 / 325 / 215	835 / 499 / 215	733 / 441 / 423	609 / 559 / 352																	
80	2	840 / 523 / 139	694 / 658 / 115	835 / 365 / 215	817 / 547 / 210	733 / 414 / 423	622 / 538 / 360	785 / 564 / 130	639 / 698 / 106	835 / 422 / 215	746 / 576 / 192	719 / 470 / 415	581 / 579 / 336	730 / 600 / 121	603 / 751 / 100	835 / 484 / 215	711 / 627 / 183	678 / 507 / 392	540 / 614 / 312																	
80	3	712 / 625 / 118	584 / 777 / 97	782 / 569 / 201	622 / 687 / 160	567 / 596 / 328	457 / 727 / 264	657 / 665 / 109	548 / 838 / 91	728 / 611 / 187	586 / 746 / 151	526 / 636 / 304	429 / 786 / 248	621 / 716 / 103	511 / 892 / 85	675 / 647 / 174	551 / 800 / 142	498 / 688 / 288	401 / 838 / 232																	
90	1	899 / 182 / 146	899 / 284 / 146	875 / 228 / 223	875 / 353 / 223	773 / 314 / 447	773 / 481 / 447	899 / 212 / 146	838 / 599 / 136	875 / 265 / 223	875 / 408 / 223	773 / 363 / 447	727 / 523 / 420	899 / 245 / 146	776 / 634 / 126	875 / 304 / 223	875 / 468 / 223	773 / 416 / 447	681 / 559 / 393																	
90	2	899 / 500 / 146	776 / 658 / 126	875 / 341 / 223	875 / 523 / 223	773 / 391 / 447	696 / 538 / 402	878 / 564 / 143	715 / 698 / 116	875 / 395 / 223	835 / 576 / 213	773 / 452 / 447	650 / 579 / 375	817 / 600 / 133	674 / 751 / 110	875 / 453 / 223	795 / 627 / 203	758 / 507 / 438	603 / 614 / 349																	
90	3	797 / 625 / 130	654 / 777 / 107	875 / 569 / 223	696 / 687 / 177	634 / 596 / 366	511 / 727 / 295	736 / 665 / 120	613 / 838 / 100	815 / 611 / 208	656 / 746 / 167	588 / 636 / 340	480 / 786 / 277	695 / 716 / 113	572 / 892 / 93	756 / 647 / 193	616 / 800 / 157	557 / 688 / 322	449 / 838 / 259																	
Wind Speed [mph]		170						180																												
Exposure Category : B	70	1	708 / 547 / 120	579 / 681 / 98	783 / 394 / 204	704 / 543 / 183	622 / 482 / 359	523 / 591 / 289	676 / 588 / 115	547 / 723 / 93	783 / 444 / 204	673 / 584 / 175	585 / 511 / 338	514 / 632 / 275	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
70	2	611 / 646 / 104	499 / 799 / 85	720 / 537 / 187	579 / 658 / 151	561 / 540 / 324	472 / 660 / 261	579 / 688 / 98	467 / 839 / 79	673 / 566 / 175	548 / 699 / 143	525 / 568 / 303	461 / 702 / 247																							
70	3	515 / 763 / 87	418 / 937 / 71	564 / 695 / 147	454 / 847 / 118	415 / 736 / 240	345 / 882 / 190	483 / 804 / 82	386 / 971 / 66	532 / 738 / 139	423 / 885 / 110	390 / 778 / 226	343 / 954 / 183																							
80	1	803 / 547 / 133	657 / 681 / 109	835 / 370 / 215	800 / 543 / 206	705 / 482 / 407	574 / 591 / 328	767 / 588 / 127	621 / 723 / 103	835 / 418 / 215	764 / 584 / 196	664 / 511 / 384	562 / 632 / 312																							
	80	2	694 / 646 / 115	566 / 799 / 94	817 / 537 / 210	657 / 658 / 169	636 / 540 / 368	518 / 660 / 296	657 / 688 / 109	530 / 839 / 88	764 / 566 / 196	622 / 699 / 160	595 / 568 / 344	504 / 702 / 280																						
	80	3	584 / 763 / 97	475 / 937 / 79	640 / 695 / 165	515 / 847 / 133	470 / 736 / 272	378 / 882 / 216	548 / 804 / 91	438 / 971 / 73	604 / 738 / 155	480 / 885 / 124	443 / 778 / 256	375 / 954 / 208																						
90	1	899 / 279 / 146	736 / 681 / 120	875 / 346 / 223	875 / 531 / 223	773 / 473 / 447	634 / 591 / 366	858 / 588 / 140	695 / 723 / 113	875 / 391 / 223	855 / 584 / 218	742 / 511 / 429	610 / 632 / 349																							
	90	2	776 / 646 / 126	633 / 799 / 103	875 / 514 / 223	736 / 658 / 188	711 / 540 / 411	572 / 660 / 331	736 / 688 / 120	593 / 839 / 97	855 / 566 / 218	696 / 699 / 177	665 / 568 / 384	547 / 702 / 313																						
	90	3	654 / 763 / 107	531 / 937 / 87	716 / 695 / 182	577 / 847 / 147	526 / 736 / 304	418 / 882 / 241	613 / 804 / 100	491 / 971 / 80	676 / 738 / 172	537 / 885 / 137	495 / 778 / 286	407 / 954 / 233																						
Wind Speed [mph]		190						200																												
Exposure Category : B	70	1	643 / 626 / 109	515 / 760 / 87	783 / 498 / 204	626 / 608 / 163	549 / 537 / 317	504 / 670 / 261	611 / 661 / 104	483 / 791 / 82	736 / 521 / 191	595 / 642 / 155	537 / 570 / 303	493 / 704 / 247	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
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	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
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10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
70	2	547 / 726 / 93	434 / 872 / 74	642 / 603 / 167	517 / 737 / 135	500 / 606 / 289	450 / 739 / 233	515 / 759 / 87	418 / 932 / 71	611 / 638 / 159	485 / 769 / 126	488 / 640 / 275	437 / 770 / 219																							
70	3	451 / 838 / 77	370 / 1038 / 63	501 / 775 / 130	407 / 951 / 106	366 / 814 / 212	327 / 982 / 169	434 / 897 / 74	354 / 1102 / 60	470 / 807 / 122	376 / 974 / 98	350 / 843 / 198	324 / 1044 / 162																							
80	1	730 / 626 / 121	584 / 760 / 97	835 / 468 / 215	711 / 608 / 183	622 / 537 / 360	549 / 670 / 296	694 / 661 / 115	548 / 791 / 91	835 / 521 / 215	675 / 642 / 174	595 / 570 / 344	536 / 704 / 280																							
	80	2	621 / 726 / 103	493 / 872 / 82	728 / 603 / 187	586 / 737 / 151	567 / 606 / 328	490 / 739 / 264	584 / 759 / 97	475 / 932 / 79	693 / 638 / 178	551 / 769 / 142	540 / 640 / 312	475 / 770 / 248																						
	80	3	511 / 838 / 85	420 / 1038 / 70	569 / 775 / 146	462 / 951 / 119	415 / 814 / 240	356 / 982 / 192	493 / 897 / 82	402 / 1102 / 67	533 / 807 / 137	427 / 974 / 110	387 / 843 / 224	352 / 1044 / 184																						
90	1	817 / 626 / 133	654 / 760 / 107	875 / 438 / 223	795 / 608 / 203	696 / 537 / 402	595 / 670 / 331	776 / 661 / 126	613 / 791 / 100	875 / 488 / 223	756 / 642 / 193	665 / 570 / 384	579 / 704 / 313																							
	90	2	695 / 726 / 113	552 / 872 / 90	815 / 603 / 208	656 / 737 / 167	634 / 606 / 366	530 / 739 / 295	654 / 759 / 107	531 / 932 / 87	775 / 638 / 198	616 / 769 / 157	603 / 640 / 349	513 / 770 / 277																						
	90	3	572 / 838 / 93	470 / 1038 / 77	636 / 775 / 162	517 / 951 / 132	464 / 814 / 268	386 / 982 / 215	552 / 897 / 90	450 / 1102 / 73	597 / 807 / 152	477 / 974 / 122	433 / 843 / 250	380 / 1044 / 206																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																					
Ground Snow	Wind Speed [mph]	95				100				105																	
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30									
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
	1	927 / 97 / 149	927 / 156 / 149	924 / 126 / 234	924 / 200 / 234	821 / 178 / 474	821 / 277 / 474	927 / 108 / 149	927 / 172 / 149	924 / 140 / 234	924 / 220 / 234	821 / 196 / 474	821 / 305 / 474	927 / 119 / 149	927 / 189 / 149	924 / 154 / 234	924 / 242 / 234	821 / 216 / 474	821 / 334 / 474								
	2	927 / 280 / 149	927 / 430 / 149	924 / 193 / 234	924 / 300 / 234	821 / 224 / 474	821 / 346 / 474	927 / 308 / 149	927 / 472 / 149	924 / 213 / 234	924 / 330 / 234	821 / 246 / 474	821 / 380 / 474	927 / 337 / 149	927 / 516 / 149	924 / 234 / 234	924 / 361 / 234	821 / 270 / 474	821 / 416 / 474								
	3	927 / 397 / 149	927 / 606 / 149	924 / 327 / 234	924 / 501 / 234	821 / 423 / 474	735 / 577 / 425	927 / 436 / 149	882 / 632 / 141	924 / 359 / 234	924 / 550 / 234	821 / 464 / 474	701 / 603 / 405	927 / 477 / 149	836 / 655 / 134	924 / 393 / 234	902 / 586 / 228	821 / 507 / 474	667 / 626 / 385								
	100	1	927 / 131 / 149	927 / 207 / 149	924 / 169 / 234	924 / 264 / 234	821 / 236 / 474	821 / 364 / 474	927 / 144 / 149	927 / 226 / 149	924 / 185 / 234	924 / 288 / 234	821 / 257 / 474	821 / 396 / 474	2	927 / 367 / 149	927 / 561 / 149	924 / 256 / 234	924 / 394 / 234	821 / 295 / 474	821 / 453 / 474	927 / 399 / 149	927 / 609 / 149	924 / 278 / 234	924 / 428 / 234	821 / 321 / 474	821 / 492 / 474
	3	927 / 519 / 149	814 / 693 / 130	924 / 428 / 234	880 / 622 / 223	787 / 529 / 454	633 / 646 / 366	927 / 563 / 149	769 / 709 / 123	924 / 465 / 234	836 / 641 / 211	752 / 549 / 435	616 / 681 / 356	100	1	927 / 156 / 149	927 / 245 / 149	924 / 201 / 234	924 / 312 / 234	821 / 278 / 474	821 / 428 / 474	927 / 144 / 149	927 / 226 / 149	924 / 185 / 234	924 / 288 / 234	821 / 257 / 474	821 / 396 / 474
	2	927 / 432 / 149	882 / 626 / 141	924 / 302 / 234	924 / 463 / 234	821 / 348 / 474	804 / 521 / 464	927 / 399 / 149	927 / 609 / 149	924 / 278 / 234	924 / 428 / 234	821 / 321 / 474	821 / 492 / 474	3	927 / 609 / 149	746 / 744 / 120	924 / 503 / 234	814 / 674 / 206	735 / 580 / 425	599 / 716 / 346	927 / 563 / 149	769 / 709 / 123	924 / 465 / 234	836 / 641 / 211	752 / 549 / 435	616 / 681 / 356	
	100	1	927 / 156 / 149	927 / 245 / 149	924 / 201 / 234	924 / 312 / 234	821 / 278 / 474	821 / 428 / 474	927 / 144 / 149	927 / 226 / 149	924 / 185 / 234	924 / 288 / 234	821 / 257 / 474	821 / 396 / 474	2	927 / 432 / 149	882 / 626 / 141	924 / 302 / 234	924 / 463 / 234	821 / 348 / 474	804 / 521 / 464	927 / 399 / 149	927 / 609 / 149	924 / 278 / 234	924 / 428 / 234	821 / 321 / 474	821 / 492 / 474
3	927 / 609 / 149	746 / 744 / 120	924 / 503 / 234	814 / 674 / 206	735 / 580 / 425	599 / 716 / 346	927 / 563 / 149	769 / 709 / 123	924 / 465 / 234	836 / 641 / 211	752 / 549 / 435	616 / 681 / 356															

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof				0-30ft				83in x 41.5in				Load: Up / Down / Side , lbs									
Wind Speed [mph]				140				150				160									
Panal Angle				0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
	1	927 / 170 / 149	927 / 265 / 149	924 / 218 / 234	924 / 337 / 234	821 / 301 / 474	821 / 462 / 474	927 / 198 / 149	927 / 307 / 149	924 / 253 / 234	924 / 390 / 234	821 / 349 / 474	804 / 523 / 464	927 / 228 / 149	859 / 634 / 138	924 / 291 / 234	924 / 446 / 234	821 / 400 / 474	752 / 559 / 435		
	100	2	927 / 466 / 149	859 / 658 / 138	924 / 326 / 234	924 / 499 / 234	821 / 375 / 474	770 / 538 / 444	927 / 538 / 149	791 / 698 / 127	924 / 377 / 234	924 / 576 / 234	821 / 434 / 474	718 / 579 / 415	904 / 600 / 145	746 / 751 / 120	924 / 432 / 234	880 / 627 / 223	821 / 497 / 474	667 / 614 / 385	
	3	882 / 625 / 141	723 / 777 / 116	924 / 543 / 234	770 / 687 / 195	701 / 596 / 405	564 / 727 / 326	814 / 665 / 130	678 / 838 / 109	902 / 611 / 228	726 / 746 / 184	650 / 636 / 375	530 / 786 / 306	769 / 716 / 123	633 / 892 / 102	836 / 647 / 211	682 / 800 / 173	616 / 688 / 356	496 / 838 / 287		
Wind Speed [mph]				170				180													
100	1	927 / 260 / 149	814 / 681 / 130	924 / 331 / 234	924 / 507 / 234	821 / 454 / 474	701 / 591 / 405	927 / 294 / 149	769 / 723 / 123	924 / 373 / 234	924 / 570 / 234	821 / 511 / 474	667 / 632 / 385								
	2	859 / 646 / 138	701 / 799 / 112	924 / 491 / 234	814 / 658 / 206	787 / 540 / 454	633 / 660 / 366	814 / 688 / 130	656 / 839 / 105	924 / 553 / 234	770 / 699 / 195	735 / 568 / 425	599 / 702 / 346								
	3	723 / 763 / 116	588 / 937 / 94	792 / 695 / 200	638 / 847 / 161	582 / 736 / 336	462 / 882 / 267	678 / 804 / 109	543 / 971 / 87	748 / 738 / 189	594 / 885 / 150	547 / 778 / 316	445 / 954 / 257								
Wind Speed [mph]				190				200													
100	1	904 / 626 / 145	723 / 760 / 116	924 / 418 / 234	880 / 608 / 223	770 / 537 / 444	640 / 670 / 366	859 / 661 / 138	678 / 791 / 109	924 / 466 / 234	836 / 642 / 211	735 / 570 / 425	622 / 704 / 346								
	2	769 / 726 / 123	610 / 872 / 98	902 / 603 / 228	726 / 737 / 184	701 / 606 / 405	571 / 739 / 326	723 / 759 / 116	588 / 932 / 94	858 / 638 / 217	682 / 769 / 173	667 / 640 / 385	551 / 770 / 306								
	3	633 / 838 / 102	520 / 1038 / 84	704 / 775 / 178	572 / 951 / 145	513 / 814 / 296	415 / 982 / 237	610 / 897 / 98	498 / 1102 / 80	660 / 807 / 167	528 / 974 / 134	479 / 843 / 277	409 / 1044 / 227								

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs														
Exposure Category : C	Wind Speed [mph]	95						100						105						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	215 / 417 / 38	175 / 522 / 31	265 / 321 / 54	218 / 412 / 44	240 / 364 / 65	194 / 454 / 52	204 / 436 / 36	164 / 537 / 29	257 / 345 / 53	207 / 430 / 42	229 / 383 / 62	192 / 472 / 50	197 / 460 / 35	157 / 560 / 28	247 / 363 / 50	199 / 454 / 41	218 / 401 / 59	197 / 496 / 48
	0	2	182 / 488 / 32	149 / 610 / 27	221 / 405 / 45	178 / 500 / 36	215 / 409 / 58	173 / 503 / 47	175 / 514 / 31	142 / 636 / 25	210 / 423 / 43	171 / 527 / 35	204 / 427 / 55	173 / 529 / 45	167 / 538 / 30	135 / 659 / 24	203 / 448 / 42	163 / 551 / 33	194 / 443 / 52	178 / 554 / 43
	0	3	153 / 578 / 27	124 / 711 / 22	171 / 522 / 35	138 / 642 / 28	155 / 550 / 42	127 / 683 / 35	146 / 604 / 26	120 / 756 / 21	163 / 548 / 33	131 / 667 / 27	148 / 576 / 40	125 / 706 / 33	142 / 643 / 25	113 / 775 / 20	156 / 572 / 32	127 / 707 / 26	145 / 613 / 39	130 / 748 / 32
	5	1	237 / 417 / 38	193 / 522 / 31	291 / 321 / 57	239 / 412 / 47	240 / 364 / 80	194 / 454 / 65	225 / 436 / 36	181 / 537 / 29	283 / 345 / 55	227 / 430 / 45	229 / 383 / 77	192 / 472 / 61	217 / 460 / 35	173 / 560 / 28	271 / 363 / 53	219 / 454 / 43	218 / 401 / 73	197 / 496 / 59
	5	2	201 / 488 / 32	165 / 610 / 27	243 / 405 / 48	195 / 500 / 38	215 / 409 / 72	173 / 503 / 58	193 / 514 / 31	157 / 636 / 25	231 / 423 / 45	187 / 527 / 37	204 / 427 / 68	173 / 529 / 56	185 / 538 / 30	149 / 659 / 24	223 / 448 / 44	179 / 551 / 35	194 / 443 / 65	178 / 554 / 53
	5	3	169 / 578 / 27	137 / 711 / 22	187 / 522 / 37	152 / 642 / 30	155 / 550 / 52	127 / 683 / 43	161 / 604 / 26	133 / 756 / 21	179 / 548 / 35	144 / 667 / 28	148 / 576 / 50	125 / 706 / 40	157 / 643 / 25	125 / 775 / 20	171 / 572 / 34	140 / 707 / 28	145 / 613 / 48	130 / 748 / 39
	10	1	301 / 417 / 38	245 / 522 / 31	367 / 321 / 70	302 / 412 / 58	276 / 364 / 104	223 / 454 / 84	286 / 436 / 36	230 / 537 / 29	357 / 345 / 68	287 / 430 / 55	264 / 383 / 100	217 / 472 / 80	276 / 460 / 35	220 / 560 / 28	342 / 363 / 66	277 / 454 / 53	252 / 401 / 95	219 / 496 / 77
10	2	255 / 488 / 32	209 / 610 / 27	307 / 405 / 59	247 / 500 / 47	248 / 409 / 93	199 / 503 / 75	245 / 514 / 31	199 / 636 / 25	292 / 423 / 56	237 / 527 / 45	235 / 427 / 89	196 / 529 / 72	235 / 538 / 30	189 / 659 / 24	282 / 448 / 54	227 / 551 / 44	223 / 443 / 84	197 / 554 / 69	
10	3	214 / 578 / 27	174 / 711 / 22	237 / 522 / 45	191 / 642 / 37	179 / 550 / 68	146 / 683 / 55	204 / 604 / 26	169 / 756 / 21	227 / 548 / 44	181 / 667 / 35	171 / 576 / 65	142 / 706 / 52	199 / 643 / 25	158 / 775 / 20	216 / 572 / 42	176 / 707 / 34	167 / 613 / 63	145 / 748 / 51	
Exposure Category : C	Wind Speed [mph]	110						115												
	0	1	189 / 483 / 34	153 / 596 / 27	236 / 379 / 48	189 / 468 / 39	208 / 416 / 56	202 / 518 / 46	178 / 494 / 32	147 / 615 / 26	225 / 394 / 46	183 / 489 / 37	201 / 437 / 54	207 / 539 / 44						
	0	2	160 / 561 / 28	131 / 697 / 23	192 / 462 / 39	156 / 573 / 32	187 / 465 / 51	181 / 576 / 41	153 / 581 / 27	125 / 714 / 22	185 / 483 / 38	150 / 593 / 31	180 / 486 / 49	184 / 595 / 39						
	0	3	135 / 664 / 24	109 / 815 / 20	149 / 594 / 31	120 / 725 / 25	138 / 635 / 37	131 / 764 / 30	128 / 680 / 23	107 / 853 / 19	145 / 628 / 30	117 / 762 / 24	131 / 653 / 35	135 / 800 / 29						
	5	1	209 / 483 / 34	169 / 596 / 27	259 / 379 / 51	207 / 468 / 41	208 / 416 / 70	202 / 518 / 57	197 / 494 / 32	162 / 615 / 26	247 / 394 / 48	201 / 489 / 39	201 / 437 / 67	207 / 539 / 54						
	5	2	177 / 561 / 28	145 / 697 / 23	211 / 462 / 41	171 / 573 / 34	187 / 465 / 63	181 / 576 / 51	169 / 581 / 27	138 / 714 / 22	203 / 483 / 40	165 / 593 / 32	180 / 486 / 60	184 / 595 / 48						
	5	3	149 / 664 / 24	121 / 815 / 20	163 / 594 / 32	132 / 725 / 26	138 / 635 / 46	131 / 764 / 37	141 / 680 / 23	118 / 853 / 19	159 / 628 / 31	129 / 762 / 25	131 / 653 / 44	135 / 800 / 36						
	10	1	265 / 483 / 34	214 / 596 / 27	327 / 379 / 63	262 / 468 / 50	239 / 416 / 90	220 / 518 / 74	250 / 494 / 32	205 / 615 / 26	312 / 394 / 60	253 / 489 / 48	231 / 437 / 87	220 / 539 / 71						
	10	2	225 / 561 / 28	184 / 697 / 23	267 / 462 / 51	216 / 573 / 42	215 / 465 / 81	197 / 576 / 66	214 / 581 / 27	175 / 714 / 22	257 / 483 / 49	208 / 593 / 40	207 / 486 / 78	196 / 595 / 63						
	10	3	189 / 664 / 24	153 / 815 / 20	206 / 594 / 40	166 / 725 / 32	158 / 635 / 60	142 / 764 / 48	179 / 680 / 23	149 / 853 / 19	201 / 628 / 39	162 / 762 / 31	150 / 653 / 57	144 / 800 / 46						
Exposure Category : C	Wind Speed [mph]	120						130												
	0	1	175 / 524 / 31	148 / 632 / 25	218 / 413 / 44	187 / 508 / 36	194 / 456 / 52	211 / 557 / 42	178 / 494 / 32	147 / 615 / 26	225 / 394 / 46	183 / 489 / 37	201 / 437 / 54	207 / 539 / 44						
	0	2	149 / 613 / 27	129 / 749 / 21	178 / 502 / 36	156 / 625 / 30	173 / 505 / 47	192 / 628 / 38	153 / 581 / 27	125 / 714 / 22	185 / 483 / 38	150 / 593 / 31	180 / 486 / 49	184 / 595 / 39						
	0	3	124 / 714 / 22	109 / 889 / 18	138 / 645 / 28	121 / 797 / 23	127 / 686 / 35	139 / 835 / 28	128 / 680 / 23	107 / 853 / 19	145 / 628 / 30	117 / 762 / 24	131 / 653 / 35	135 / 800 / 29						
	5	1	193 / 524 / 31	160 / 632 / 25	239 / 413 / 47	201 / 508 / 38	194 / 456 / 65	211 / 557 / 52	197 / 494 / 32	162 / 615 / 26	247 / 394 / 48	201 / 489 / 39	201 / 437 / 67	207 / 539 / 54						
	5	2	165 / 613 / 27	139 / 749 / 21	195 / 502 / 38	167 / 625 / 31	173 / 505 / 58	192 / 628 / 47	169 / 581 / 27	138 / 714 / 22	203 / 483 / 40	165 / 593 / 32	180 / 486 / 60	184 / 595 / 48						
	5	3	137 / 714 / 22	118 / 889 / 18	152 / 645 / 30	130 / 797 / 24	127 / 686 / 43	139 / 835 / 34	141 / 680 / 23	118 / 853 / 19	159 / 628 / 31	129 / 762 / 25	131 / 653 / 44	135 / 800 / 36						
	10	1	245 / 524 / 31	201 / 632 / 25	302 / 413 / 58	251 / 508 / 46	223 / 456 / 84	220 / 557 / 68	250 / 494 / 32	205 / 615 / 26	312 / 394 / 60	253 / 489 / 48	231 / 437 / 87	220 / 539 / 71						
	10	2	209 / 613 / 27	175 / 749 / 21	247 / 502 / 47	209 / 625 / 39	199 / 505 / 75	200 / 628 / 61	214 / 581 / 27	175 / 714 / 22	257 / 483 / 49	208 / 593 / 40	207 / 486 / 78	196 / 595 / 63						
	10	3	174 / 714 / 22	149 / 889 / 18	191 / 645 / 37	162 / 797 / 30	146 / 686 / 55	145 / 835 / 45	179 / 680 / 23	149 / 853 / 19	201 / 628 / 39	162 / 762 / 31	150 / 653 / 57	144 / 800 / 46						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge													
0	1	167 / 542 / 30	153 / 663 / 24	210 / 432 / 43	189 / 526 / 34	193 / 475 / 51	214 / 574 / 40	157 / 585 / 28	157 / 702 / 22	196 / 466 / 40	198 / 567 / 32	200 / 507 / 47	224 / 614 / 37	148 / 622 / 26	164 / 754 / 21	185 / 494 / 37	204 / 603 / 30	209 / 544 / 44	238 / 665 / 35	
	2	142 / 629 / 25	132 / 782 / 21	171 / 520 / 35	156 / 640 / 28	172 / 523 / 45	194 / 643 / 36	131 / 669 / 23	134 / 816 / 19	160 / 562 / 33	161 / 680 / 26	179 / 565 / 42	201 / 682 / 34	126 / 721 / 22	144 / 898 / 18	152 / 599 / 31	169 / 731 / 25	186 / 601 / 39	212 / 733 / 32	
	3	120 / 747 / 21	112 / 923 / 18	134 / 677 / 28	124 / 831 / 22	128 / 718 / 34	143 / 868 / 27	113 / 807 / 20	115 / 983 / 16	124 / 717 / 25	129 / 892 / 21	131 / 756 / 31	149 / 927 / 25	108 / 861 / 19	118 / 1031 / 15	118 / 770 / 24	133 / 944 / 20	136 / 808 / 29	154 / 975 / 23	
	5	1	185 / 542 / 30	163 / 663 / 24	231 / 432 / 45	200 / 526 / 36	193 / 475 / 63	214 / 574 / 50	173 / 585 / 28	162 / 702 / 22	215 / 466 / 42	203 / 567 / 34	200 / 507 / 58	224 / 614 / 46	163 / 622 / 26	165 / 754 / 21	202 / 494 / 39	204 / 603 / 31	209 / 544 / 54	238 / 665 / 44
		2	157 / 629 / 25	141 / 782 / 21	187 / 520 / 37	165 / 640 / 30	172 / 523 / 56	194 / 643 / 45	145 / 669 / 23	138 / 816 / 19	175 / 562 / 34	165 / 680 / 28	179 / 565 / 52	201 / 682 / 41	139 / 721 / 22	144 / 898 / 18	165 / 599 / 32	169 / 731 / 26	186 / 601 / 48	212 / 733 / 39
		3	133 / 747 / 21	119 / 923 / 18	148 / 677 / 29	131 / 831 / 24	128 / 718 / 41	143 / 868 / 33	125 / 807 / 20	119 / 983 / 16	136 / 717 / 27	132 / 892 / 22	131 / 756 / 38	149 / 927 / 31	118 / 861 / 19	118 / 1031 / 15	129 / 770 / 25	133 / 944 / 21	136 / 808 / 36	154 / 975 / 29
	10	1	235 / 542 / 30	202 / 663 / 24	292 / 432 / 56	248 / 526 / 45	220 / 475 / 81	220 / 574 / 65	220 / 585 / 28	198 / 702 / 22	272 / 466 / 52	248 / 567 / 42	219 / 507 / 75	224 / 614 / 60	206 / 622 / 26	199 / 754 / 21	254 / 494 / 48	246 / 603 / 39	222 / 544 / 71	238 / 665 / 57
		2	199 / 629 / 25	175 / 782 / 21	237 / 520 / 45	205 / 640 / 37	195 / 523 / 72	199 / 643 / 58	184 / 669 / 23	169 / 816 / 19	222 / 562 / 43	202 / 680 / 34	197 / 565 / 68	201 / 682 / 54	175 / 721 / 22	174 / 898 / 18	208 / 599 / 40	203 / 731 / 32	198 / 601 / 63	212 / 733 / 51
		3	169 / 747 / 21	148 / 923 / 18	186 / 677 / 36	162 / 831 / 29	145 / 718 / 54	147 / 868 / 43	158 / 807 / 20	146 / 983 / 16	171 / 717 / 33	161 / 892 / 27	143 / 756 / 49	149 / 927 / 40	150 / 861 / 19	143 / 1031 / 15	163 / 770 / 31	160 / 944 / 25	145 / 808 / 46	154 / 975 / 37
0	Wind Speed [mph]																			
	170						180													
	1	151 / 652 / 24	170 / 800 / 20	191 / 527 / 35	215 / 649 / 28	216 / 577 / 41	250 / 712 / 34	156 / 693 / 23	175 / 839 / 18	196 / 556 / 33	225 / 692 / 27	222 / 604 / 38	262 / 754 / 32							
	2	130 / 768 / 21	148 / 943 / 17	154 / 629 / 28	176 / 778 / 23	191 / 631 / 36	222 / 779 / 30	134 / 809 / 20	150 / 977 / 16	160 / 670 / 27	181 / 817 / 22	199 / 672 / 35	230 / 819 / 28							
	3	110 / 907 / 18	125 / 1114 / 14	122 / 816 / 22	136 / 986 / 18	141 / 853 / 27	165 / 1056 / 22	112 / 943 / 16	132 / 1194 / 14	125 / 856 / 21	144 / 1060 / 17	150 / 924 / 26	175 / 1134 / 21							
	5	1	161 / 652 / 24	170 / 800 / 20	202 / 527 / 37	215 / 649 / 30	216 / 577 / 51	250 / 712 / 41	163 / 693 / 23	175 / 839 / 18	202 / 556 / 34	225 / 692 / 28	222 / 604 / 47	262 / 754 / 39						
		2	139 / 768 / 21	148 / 943 / 17	164 / 629 / 30	176 / 778 / 24	191 / 631 / 45	222 / 779 / 37	139 / 809 / 20	150 / 977 / 16	166 / 670 / 28	181 / 817 / 23	199 / 672 / 43	230 / 819 / 34						
		3	118 / 907 / 18	125 / 1114 / 14	129 / 816 / 24	136 / 986 / 19	141 / 853 / 33	165 / 1056 / 27	116 / 943 / 16	132 / 1194 / 14	129 / 856 / 22	144 / 1060 / 18	150 / 924 / 32	175 / 1134 / 26						
	10	1	201 / 652 / 24	199 / 800 / 20	252 / 527 / 45	249 / 649 / 37	223 / 577 / 66	250 / 712 / 54	200 / 693 / 23	198 / 839 / 18	248 / 556 / 43	252 / 692 / 35	223 / 604 / 61	262 / 754 / 51						
2		174 / 768 / 21	173 / 943 / 17	204 / 629 / 37	203 / 778 / 30	197 / 631 / 58	222 / 779 / 48	172 / 809 / 20	170 / 977 / 16	203 / 670 / 35	203 / 817 / 28	201 / 672 / 55	230 / 819 / 45							
3		147 / 907 / 18	146 / 1114 / 14	161 / 816 / 29	158 / 986 / 23	145 / 853 / 43	165 / 1056 / 36	143 / 943 / 16	149 / 1194 / 14	158 / 856 / 27	161 / 1060 / 23	151 / 924 / 42	175 / 1134 / 34							
0	Wind Speed [mph]																			
	190						200													
	1	161 / 730 / 21	186 / 903 / 18	204 / 594 / 31	233 / 730 / 25	231 / 641 / 36	271 / 791 / 30	164 / 762 / 20	196 / 965 / 17	206 / 613 / 29	240 / 763 / 24	240 / 675 / 35	279 / 822 / 28							
	2	136 / 843 / 18	158 / 1045 / 15	165 / 707 / 25	192 / 881 / 21	207 / 709 / 33	245 / 882 / 27	143 / 902 / 18	166 / 1109 / 14	169 / 739 / 24	195 / 908 / 20	213 / 741 / 31	250 / 909 / 25							
	3	117 / 1010 / 16	131 / 1205 / 13	131 / 921 / 20	151 / 1131 / 17	152 / 954 / 24	175 / 1150 / 19	122 / 1074 / 15	136 / 1266 / 12	132 / 946 / 19	150 / 1141 / 15	160 / 1016 / 23	183 / 1211 / 18							
	5	1	163 / 730 / 21	186 / 903 / 18	206 / 594 / 33	233 / 730 / 27	231 / 641 / 45	271 / 791 / 37	164 / 762 / 20	196 / 965 / 17	206 / 613 / 31	240 / 763 / 25	240 / 675 / 43	279 / 822 / 34						
		2	139 / 843 / 18	158 / 1045 / 15	167 / 707 / 27	192 / 881 / 22	207 / 709 / 40	245 / 882 / 33	143 / 902 / 18	166 / 1109 / 14	169 / 739 / 25	195 / 908 / 21	213 / 741 / 38	250 / 909 / 31						
		3	119 / 1010 / 16	131 / 1205 / 13	133 / 921 / 21	151 / 1131 / 17	152 / 954 / 30	175 / 1150 / 24	122 / 1074 / 15	136 / 1266 / 12	132 / 946 / 20	150 / 1141 / 16	160 / 1016 / 29	183 / 1211 / 23						
	10	1	199 / 730 / 21	203 / 903 / 18	250 / 594 / 41	253 / 730 / 33	231 / 641 / 58	271 / 791 / 48	197 / 762 / 20	208 / 965 / 17	245 / 613 / 38	254 / 763 / 31	240 / 675 / 55	279 / 822 / 45						
2		169 / 843 / 18	173 / 1045 / 15	203 / 707 / 33	209 / 881 / 27	207 / 709 / 52	245 / 882 / 43	172 / 902 / 18	176 / 1109 / 14	201 / 739 / 31	207 / 908 / 25	213 / 741 / 49	250 / 909 / 40							
3		145 / 1010 / 16	143 / 1205 / 13	161 / 921 / 26	164 / 1131 / 22	152 / 954 / 39	175 / 1150 / 31	146 / 1074 / 15	144 / 1266 / 12	157 / 946 / 24	159 / 1141 / 20	160 / 1016 / 37	183 / 1211 / 29							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
Ground Snow	15	1	365 / 417 / 39	297 / 522 / 32	419 / 304 / 79	365 / 412 / 69	318 / 364 / 128	257 / 454 / 104	346 / 436 / 37	278 / 537 / 30	419 / 335 / 79	347 / 430 / 66	304 / 383 / 123	249 / 472 / 98	334 / 460 / 36	266 / 560 / 29	413 / 363 / 78	334 / 454 / 63	290 / 401 / 117	249 / 496 / 94
		2	309 / 488 / 33	254 / 610 / 27	371 / 405 / 70	298 / 500 / 56	285 / 409 / 115	229 / 503 / 93	297 / 514 / 32	241 / 636 / 26	353 / 423 / 67	286 / 527 / 54	271 / 427 / 109	225 / 529 / 89	284 / 538 / 31	229 / 659 / 25	340 / 448 / 64	274 / 551 / 52	257 / 443 / 104	224 / 554 / 85
		3	260 / 578 / 28	210 / 711 / 23	286 / 522 / 54	231 / 642 / 44	206 / 550 / 83	168 / 683 / 68	247 / 604 / 27	204 / 756 / 22	274 / 548 / 52	219 / 667 / 42	196 / 576 / 79	163 / 706 / 64	241 / 643 / 26	192 / 775 / 21	262 / 572 / 50	213 / 707 / 40	192 / 613 / 77	165 / 748 / 62
	20	1	428 / 417 / 43	348 / 522 / 35	470 / 291 / 88	428 / 412 / 80	359 / 364 / 158	291 / 454 / 128	406 / 436 / 41	327 / 537 / 33	470 / 321 / 88	406 / 430 / 76	343 / 383 / 151	281 / 472 / 121	392 / 460 / 39	312 / 560 / 31	470 / 352 / 88	392 / 454 / 73	328 / 401 / 144	280 / 496 / 116
		2	363 / 488 / 36	298 / 610 / 30	435 / 405 / 81	349 / 500 / 65	322 / 409 / 142	259 / 503 / 114	348 / 514 / 35	283 / 636 / 28	413 / 423 / 77	335 / 527 / 63	306 / 427 / 135	254 / 529 / 109	334 / 538 / 33	269 / 659 / 27	399 / 448 / 75	321 / 551 / 60	291 / 443 / 128	252 / 554 / 105
		3	305 / 578 / 31	247 / 711 / 25	335 / 522 / 63	271 / 642 / 51	233 / 550 / 103	190 / 683 / 84	290 / 604 / 29	240 / 756 / 24	321 / 548 / 60	257 / 667 / 48	222 / 576 / 98	184 / 706 / 79	283 / 643 / 28	225 / 775 / 23	307 / 572 / 58	250 / 707 / 47	217 / 613 / 96	185 / 748 / 77
	25	1	428 / 417 / 43	348 / 522 / 35	470 / 291 / 88	428 / 412 / 80	401 / 364 / 190	324 / 454 / 154	406 / 436 / 41	327 / 537 / 33	470 / 321 / 88	406 / 430 / 76	383 / 383 / 182	313 / 472 / 146	392 / 460 / 39	312 / 560 / 31	470 / 352 / 88	392 / 454 / 73	366 / 401 / 174	311 / 496 / 140
		2	363 / 488 / 36	298 / 610 / 30	435 / 405 / 81	349 / 500 / 65	360 / 409 / 171	289 / 503 / 137	348 / 514 / 35	283 / 636 / 28	413 / 423 / 77	335 / 527 / 63	342 / 427 / 162	283 / 529 / 132	334 / 538 / 33	269 / 659 / 27	399 / 448 / 75	321 / 551 / 60	324 / 443 / 154	280 / 554 / 126
		3	305 / 578 / 31	247 / 711 / 25	335 / 522 / 63	271 / 642 / 51	260 / 550 / 123	212 / 683 / 101	290 / 604 / 29	240 / 756 / 24	321 / 548 / 60	257 / 667 / 48	248 / 576 / 118	205 / 706 / 95	283 / 643 / 28	225 / 775 / 23	307 / 572 / 58	250 / 707 / 47	242 / 613 / 115	205 / 748 / 93
ASCE Group Zone	Wind Speed [mph]		110						115											
	15	1	321 / 483 / 35	260 / 596 / 28	395 / 379 / 75	316 / 468 / 60	276 / 416 / 111	249 / 518 / 91	303 / 494 / 33	248 / 615 / 27	377 / 394 / 71	305 / 489 / 58	266 / 437 / 108	249 / 539 / 87						
		2	272 / 561 / 29	223 / 697 / 24	322 / 462 / 61	262 / 573 / 50	248 / 465 / 100	223 / 576 / 81	260 / 581 / 28	211 / 714 / 23	310 / 483 / 59	251 / 593 / 47	238 / 486 / 96	222 / 595 / 77						
		3	229 / 664 / 25	186 / 815 / 20	249 / 594 / 47	201 / 725 / 38	182 / 635 / 74	161 / 764 / 59	217 / 680 / 24	180 / 853 / 20	243 / 628 / 46	196 / 762 / 37	173 / 653 / 70	162 / 800 / 57						
	20	1	377 / 483 / 38	305 / 596 / 31	463 / 379 / 87	371 / 468 / 69	312 / 416 / 137	279 / 518 / 112	356 / 494 / 36	292 / 615 / 29	442 / 394 / 83	358 / 489 / 67	301 / 437 / 133	277 / 539 / 107						
		2	319 / 561 / 32	261 / 697 / 26	378 / 462 / 71	307 / 573 / 58	280 / 465 / 123	250 / 576 / 100	305 / 581 / 31	248 / 714 / 25	364 / 483 / 68	294 / 593 / 55	270 / 486 / 119	247 / 595 / 96						
		3	269 / 664 / 27	218 / 815 / 22	292 / 594 / 55	235 / 725 / 44	206 / 635 / 91	180 / 764 / 72	254 / 680 / 26	212 / 853 / 21	285 / 628 / 54	229 / 762 / 43	196 / 653 / 86	181 / 800 / 70						
	25	1	377 / 483 / 38	305 / 596 / 31	463 / 379 / 87	371 / 468 / 69	348 / 416 / 165	308 / 518 / 134	356 / 494 / 36	292 / 615 / 29	442 / 394 / 83	358 / 489 / 67	336 / 437 / 160	305 / 539 / 129						
		2	319 / 561 / 32	261 / 697 / 26	378 / 462 / 71	307 / 573 / 58	313 / 465 / 148	276 / 576 / 121	305 / 581 / 31	248 / 714 / 25	364 / 483 / 68	294 / 593 / 55	301 / 486 / 143	272 / 595 / 115						
3		269 / 664 / 27	218 / 815 / 22	292 / 594 / 55	235 / 725 / 44	230 / 635 / 109	199 / 764 / 87	254 / 680 / 26	212 / 853 / 21	285 / 628 / 54	229 / 762 / 43	218 / 653 / 104	199 / 800 / 84							
ASCE Group Zone	Wind Speed [mph]		120						130											
	15	1	297 / 524 / 32	242 / 632 / 25	365 / 413 / 69	301 / 508 / 55	257 / 456 / 104	247 / 557 / 83	303 / 494 / 33	248 / 615 / 27	377 / 394 / 71	305 / 489 / 58	266 / 437 / 108	249 / 539 / 87						
		2	254 / 613 / 27	211 / 749 / 22	298 / 502 / 56	251 / 625 / 46	229 / 505 / 93	225 / 628 / 76	260 / 581 / 28	211 / 714 / 23	310 / 483 / 59	251 / 593 / 47	238 / 486 / 96	222 / 595 / 77						
		3	210 / 714 / 23	179 / 889 / 19	231 / 645 / 44	195 / 797 / 36	168 / 686 / 68	163 / 835 / 55	217 / 680 / 24	180 / 853 / 20	243 / 628 / 46	196 / 762 / 37	173 / 653 / 70	162 / 800 / 57						
	20	1	348 / 524 / 35	283 / 632 / 28	428 / 413 / 80	351 / 508 / 64	291 / 456 / 128	274 / 557 / 103	356 / 494 / 36	292 / 615 / 29	442 / 394 / 83	358 / 489 / 67	301 / 437 / 133	277 / 539 / 107						
		2	298 / 613 / 30	246 / 749 / 24	349 / 502 / 65	293 / 625 / 54	259 / 505 / 114	249 / 628 / 93	305 / 581 / 31	248 / 714 / 25	364 / 483 / 68	294 / 593 / 55	270 / 486 / 119	247 / 595 / 96						
		3	247 / 714 / 25	209 / 889 / 21	271 / 645 / 51	227 / 797 / 42	190 / 686 / 84	181 / 835 / 68	254 / 680 / 26	212 / 853 / 21	285 / 628 / 54	229 / 762 / 43	196 / 653 / 86	181 / 800 / 70						
	25	1	348 / 524 / 35	283 / 632 / 28	428 / 413 / 80	351 / 508 / 64	324 / 456 / 154	301 / 557 / 123	356 / 494 / 36	292 / 615 / 29	442 / 394 / 83	358 / 489 / 67	336 / 437 / 160	305 / 539 / 129						
		2	298 / 613 / 30	246 / 749 / 24	349 / 502 / 65	293 / 625 / 54	289 / 505 / 137	274 / 628 / 112	305 / 581 / 31	248 / 714 / 25	364 / 483 / 68	294 / 593 / 55	301 / 486 / 143	272 / 595 / 115						
3		247 / 714 / 25	209 / 889 / 21	271 / 645 / 51	227 / 797 / 42	212 / 686 / 101	199 / 835 / 81	254 / 680 / 26	212 / 853 / 21	285 / 628 / 54	229 / 762 / 43	218 / 653 / 104	199 / 800 / 84							

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs																						
Wind Speed [mph]		140						150						160																						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
	15	1	284 / 542 / 31	242 / 663 / 25	353 / 432 / 67	297 / 526 / 53	253 / 475 / 100	246 / 574 / 79	266 / 585 / 29	235 / 702 / 23	328 / 466 / 62	293 / 567 / 50	249 / 507 / 93	247 / 614 / 74	249 / 622 / 27	234 / 754 / 22	306 / 494 / 58	288 / 603 / 46	250 / 544 / 87	253 / 665 / 70																
15	2	241 / 629 / 26	210 / 782 / 22	286 / 520 / 54	245 / 640 / 44	224 / 523 / 89	222 / 643 / 72	223 / 669 / 24	201 / 816 / 20	268 / 562 / 51	238 / 680 / 40	224 / 565 / 83	222 / 682 / 66	212 / 721 / 23	204 / 898 / 19	251 / 599 / 47	237 / 731 / 38	223 / 601 / 77	226 / 733 / 62																	
15	3	204 / 747 / 22	177 / 923 / 18	225 / 677 / 43	194 / 831 / 35	167 / 718 / 66	164 / 868 / 53	192 / 807 / 21	173 / 983 / 17	207 / 717 / 39	191 / 892 / 32	163 / 756 / 61	165 / 927 / 49	181 / 861 / 20	168 / 1031 / 16	196 / 770 / 37	187 / 944 / 30	163 / 808 / 57	165 / 975 / 46																	
20	1	334 / 542 / 33	282 / 663 / 27	413 / 432 / 77	345 / 526 / 62	285 / 475 / 123	271 / 574 / 98	312 / 585 / 31	272 / 702 / 25	385 / 466 / 72	338 / 567 / 58	279 / 507 / 114	271 / 614 / 91	292 / 622 / 29	268 / 754 / 23	359 / 494 / 67	330 / 603 / 54	278 / 544 / 107	276 / 665 / 86																	
20	2	283 / 629 / 28	244 / 782 / 23	335 / 520 / 63	285 / 640 / 51	253 / 523 / 109	246 / 643 / 89	261 / 669 / 26	232 / 816 / 21	314 / 562 / 59	275 / 680 / 47	251 / 565 / 103	243 / 682 / 82	249 / 721 / 25	235 / 898 / 21	294 / 599 / 55	272 / 731 / 44	248 / 601 / 96	246 / 733 / 77																	
20	3	240 / 747 / 24	206 / 923 / 20	264 / 677 / 50	225 / 831 / 40	188 / 718 / 82	181 / 868 / 65	225 / 807 / 23	200 / 983 / 18	243 / 717 / 46	220 / 892 / 38	183 / 756 / 75	181 / 927 / 61	212 / 861 / 21	193 / 1031 / 17	230 / 770 / 43	214 / 944 / 35	181 / 808 / 70	179 / 975 / 56																	
25	1	334 / 542 / 33	282 / 663 / 27	413 / 432 / 77	345 / 526 / 62	317 / 475 / 148	297 / 574 / 118	312 / 585 / 31	272 / 702 / 25	385 / 466 / 72	338 / 567 / 58	309 / 507 / 137	295 / 614 / 109	292 / 622 / 29	268 / 754 / 23	359 / 494 / 67	330 / 603 / 54	306 / 544 / 129	299 / 665 / 104																	
25	2	283 / 629 / 28	244 / 782 / 23	335 / 520 / 63	285 / 640 / 51	282 / 523 / 132	269 / 643 / 107	261 / 669 / 26	232 / 816 / 21	314 / 562 / 59	275 / 680 / 47	278 / 565 / 123	265 / 682 / 98	249 / 721 / 25	235 / 898 / 21	294 / 599 / 55	272 / 731 / 44	273 / 601 / 115	266 / 733 / 93																	
25	3	240 / 747 / 24	206 / 923 / 20	264 / 677 / 50	225 / 831 / 40	210 / 718 / 98	198 / 868 / 79	225 / 807 / 23	200 / 983 / 18	243 / 717 / 46	220 / 892 / 38	202 / 756 / 90	197 / 927 / 73	212 / 861 / 21	193 / 1031 / 17	230 / 770 / 43	214 / 944 / 35	200 / 808 / 84	194 / 975 / 67																	
Wind Speed [mph]		170						180																												
Exposure Category : C	15	1	241 / 652 / 25	231 / 800 / 20	301 / 527 / 54	289 / 649 / 44	249 / 577 / 81	259 / 712 / 66	238 / 693 / 24	228 / 839 / 19	295 / 556 / 51	290 / 692 / 42	247 / 604 / 76	263 / 754 / 62	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																			
	Panal Angle	Mono Slope																																		
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
15	2	208 / 768 / 22	201 / 943 / 18	243 / 629 / 44	236 / 778 / 36	220 / 631 / 72	229 / 779 / 59	204 / 809 / 20	196 / 977 / 16	241 / 670 / 42	233 / 817 / 34	223 / 672 / 68	231 / 819 / 55																							
15	3	176 / 907 / 18	170 / 1114 / 15	192 / 816 / 35	183 / 986 / 28	162 / 853 / 53	170 / 1056 / 44	170 / 943 / 17	171 / 1194 / 14	188 / 856 / 32	185 / 1060 / 27	167 / 924 / 51	176 / 1134 / 42																							
20	1	281 / 652 / 27	264 / 800 / 22	350 / 527 / 63	329 / 649 / 51	276 / 577 / 100	280 / 712 / 82	276 / 693 / 26	258 / 839 / 21	341 / 556 / 59	327 / 692 / 48	272 / 604 / 93	284 / 754 / 77																							
20	2	243 / 768 / 23	229 / 943 / 19	283 / 629 / 51	268 / 778 / 42	244 / 631 / 89	248 / 779 / 72	236 / 809 / 22	221 / 977 / 18	279 / 670 / 48	264 / 817 / 39	245 / 672 / 84	249 / 819 / 68																							
20	3	205 / 907 / 20	193 / 1114 / 16	224 / 816 / 40	208 / 986 / 32	180 / 853 / 65	184 / 1056 / 54	197 / 943 / 18	194 / 1194 / 16	217 / 856 / 38	209 / 1060 / 31	184 / 924 / 63	189 / 1134 / 52																							
25	1	281 / 652 / 27	264 / 800 / 22	350 / 527 / 63	329 / 649 / 51	302 / 577 / 121	302 / 712 / 98	276 / 693 / 26	258 / 839 / 21	341 / 556 / 59	327 / 692 / 48	296 / 604 / 112	304 / 754 / 93																							
25	2	243 / 768 / 23	229 / 943 / 19	283 / 629 / 51	268 / 778 / 42	267 / 631 / 107	267 / 779 / 87	236 / 809 / 22	221 / 977 / 18	279 / 670 / 48	264 / 817 / 39	267 / 672 / 101	267 / 819 / 81																							
25	3	205 / 907 / 20	193 / 1114 / 16	224 / 816 / 40	208 / 986 / 32	197 / 853 / 79	198 / 1056 / 65	197 / 943 / 18	194 / 1194 / 16	217 / 856 / 38	209 / 1060 / 31	200 / 924 / 76	203 / 1134 / 62																							
Wind Speed [mph]		190						200																												
Exposure Category : C	15	1	235 / 730 / 22	232 / 903 / 18	294 / 594 / 48	289 / 730 / 39	251 / 641 / 72	271 / 791 / 59	230 / 762 / 21	236 / 965 / 18	286 / 613 / 45	288 / 763 / 37	253 / 675 / 68	279 / 822 / 55																						
	15	2	199 / 843 / 19	198 / 1045 / 16	238 / 707 / 39	238 / 881 / 32	224 / 709 / 64	245 / 882 / 53	201 / 902 / 18	200 / 1109 / 15	235 / 739 / 37	234 / 908 / 30	225 / 741 / 61	250 / 909 / 49																						
	15	3	171 / 1010 / 16	164 / 1205 / 13	189 / 921 / 31	187 / 1131 / 26	165 / 954 / 47	175 / 1150 / 38	171 / 1074 / 16	164 / 1266 / 12	183 / 946 / 29	180 / 1141 / 23	169 / 1016 / 46	183 / 1211 / 36																						
	20	1	270 / 730 / 24	262 / 903 / 20	338 / 594 / 56	325 / 730 / 46	274 / 641 / 89	285 / 791 / 72	264 / 762 / 23	264 / 965 / 19	327 / 613 / 52	321 / 763 / 43	275 / 675 / 84	286 / 822 / 68																						
	20	2	229 / 843 / 21	223 / 1045 / 17	274 / 707 / 46	268 / 881 / 38	245 / 709 / 79	258 / 882 / 65	230 / 902 / 20	224 / 1109 / 16	268 / 739 / 43	261 / 908 / 35	244 / 741 / 75	256 / 909 / 61																						
	20	3	197 / 1010 / 18	184 / 1205 / 14	218 / 921 / 36	210 / 1131 / 30	180 / 954 / 58	184 / 1150 / 47	196 / 1074 / 17	183 / 1266 / 13	210 / 946 / 34	201 / 1141 / 27	183 / 1016 / 56	187 / 1211 / 45																						
	25	1	270 / 730 / 24	262 / 903 / 20	338 / 594 / 56	325 / 730 / 46	297 / 641 / 107	304 / 791 / 87	264 / 762 / 23	264 / 965 / 19	327 / 613 / 52	321 / 763 / 43	297 / 675 / 101	304 / 822 / 81																						
	25	2	229 / 843 / 21	223 / 1045 / 17	274 / 707 / 46	268 / 881 / 38	266 / 709 / 95	275 / 882 / 79	230 / 902 / 20	224 / 1109 / 16	268 / 739 / 43	261 / 908 / 35	264 / 741 / 90	272 / 909 / 73																						
	25	3	197 / 1010 / 18	184 / 1205 / 14	218 / 921 / 36	210 / 1131 / 30	196 / 954 / 70	197 / 1150 / 56	196 / 1074 / 17	183 / 1266 / 13	210 / 946 / 34	201 / 1141 / 27	198 / 1016 / 67	199 / 1211 / 54																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 83in x 41.5in Load: Up / Down / Side , lbs

Main table containing wind speed data for Exposure Category : C. It is divided into three sections based on wind speed (95, 100, 105, 110, 115, 120, 130 mph) and further categorized by ground snow and panel angle (0-3, 3-10, 10-30 degrees). Each cell contains load values for different array interior and edge configurations.

Exposure Category : C

ASCE Group Zone

Table mapping Panel Angle to Mono Slope ratios. For 0-3 degrees, Mono Slope is 1=1', 2=2, 3=3. For 3-10 degrees, Mono Slope is 1=1, 2=2'/2, 3=3'/3. For 10-30 degrees, Mono Slope is 1=1, 2=2, 3=3.

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Color-coded span ranges: x >= 72" (green), 64" to 71" (blue), 48" to 63" (yellow), x <= 47" (grey).

Notation (ASCE 7-22): a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances. B=Horizontal dimension of building measured normal to wind direction, in ft(m). h=Mean roof height, in ft(m). Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : C

Wind Speed [mph]	140							150							160						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	361 / 542 / 35	304 / 663 / 28	446 / 432 / 83	371 / 526 / 66	350 / 475 / 173	323 / 574 / 138	337 / 585 / 33	291 / 702 / 26	415 / 466 / 77	362 / 567 / 62	339 / 507 / 160	319 / 614 / 128	316 / 622 / 30	287 / 754 / 24	387 / 494 / 72	352 / 603 / 58	334 / 544 / 151	321 / 665 / 121		
	2	306 / 629 / 30	263 / 782 / 24	361 / 520 / 67	306 / 640 / 55	310 / 523 / 154	292 / 643 / 124	282 / 669 / 27	249 / 816 / 22	338 / 562 / 63	295 / 680 / 50	305 / 565 / 144	286 / 682 / 115	268 / 721 / 26	251 / 898 / 21	317 / 599 / 59	291 / 731 / 48	298 / 601 / 134	287 / 733 / 108		
	3	259 / 747 / 25	222 / 923 / 21	285 / 677 / 53	242 / 831 / 43	231 / 718 / 115	215 / 868 / 92	243 / 807 / 24	214 / 983 / 19	262 / 717 / 49	236 / 892 / 40	222 / 756 / 105	213 / 927 / 85	229 / 861 / 22	206 / 1031 / 18	248 / 770 / 46	229 / 944 / 38	218 / 808 / 98	209 / 975 / 79		
35	1	398 / 542 / 37	334 / 663 / 30	492 / 432 / 91	407 / 526 / 73	382 / 475 / 198	349 / 574 / 157	372 / 585 / 34	319 / 702 / 27	458 / 466 / 85	396 / 567 / 68	369 / 507 / 183	343 / 614 / 146	348 / 622 / 32	313 / 754 / 26	427 / 494 / 79	384 / 603 / 63	363 / 544 / 172	344 / 665 / 139		
	2	338 / 629 / 31	289 / 782 / 26	399 / 520 / 74	336 / 640 / 60	339 / 523 / 176	316 / 643 / 142	312 / 669 / 29	272 / 816 / 23	373 / 562 / 69	322 / 680 / 55	332 / 565 / 165	308 / 682 / 131	296 / 721 / 27	274 / 898 / 23	350 / 599 / 65	317 / 731 / 52	323 / 601 / 154	307 / 733 / 124		
	3	286 / 747 / 26	244 / 923 / 22	314 / 677 / 58	266 / 831 / 47	253 / 718 / 131	233 / 868 / 105	268 / 807 / 25	235 / 983 / 20	289 / 717 / 54	258 / 892 / 44	241 / 756 / 120	229 / 927 / 98	253 / 861 / 23	225 / 1031 / 19	273 / 770 / 51	250 / 944 / 41	237 / 808 / 113	223 / 975 / 90		
40	1	440 / 542 / 84	364 / 663 / 68	540 / 432 / 150	443 / 526 / 119	415 / 475 / 229	374 / 574 / 182	411 / 585 / 79	347 / 702 / 63	503 / 466 / 139	430 / 567 / 111	399 / 507 / 212	366 / 614 / 169	383 / 622 / 74	339 / 754 / 59	466 / 494 / 129	416 / 603 / 103	391 / 544 / 199	367 / 665 / 160		
	2	373 / 629 / 72	315 / 782 / 59	438 / 520 / 121	366 / 640 / 98	368 / 523 / 203	339 / 643 / 165	344 / 669 / 66	296 / 816 / 53	410 / 562 / 114	350 / 680 / 91	359 / 565 / 190	329 / 682 / 152	325 / 721 / 63	296 / 898 / 52	382 / 599 / 106	343 / 731 / 85	348 / 601 / 178	327 / 733 / 143		
	3	316 / 747 / 61	266 / 923 / 50	345 / 677 / 96	289 / 831 / 78	274 / 718 / 152	250 / 868 / 121	297 / 807 / 57	255 / 983 / 46	317 / 717 / 88	280 / 892 / 73	261 / 756 / 139	244 / 927 / 113	278 / 861 / 53	244 / 1031 / 42	299 / 770 / 83	270 / 944 / 67	255 / 808 / 130	238 / 975 / 104		
30	1	302 / 652 / 28	281 / 800 / 23	377 / 527 / 67	350 / 649 / 55	328 / 577 / 141	323 / 712 / 115	296 / 693 / 27	274 / 839 / 21	365 / 556 / 63	347 / 692 / 52	321 / 604 / 131	324 / 754 / 108								
	2	261 / 768 / 24	244 / 943 / 20	305 / 629 / 55	286 / 778 / 45	290 / 631 / 124	286 / 779 / 102	254 / 809 / 23	235 / 977 / 18	299 / 670 / 52	280 / 817 / 42	289 / 672 / 118	285 / 819 / 95								
	3	221 / 907 / 21	206 / 1114 / 17	241 / 816 / 43	221 / 986 / 35	214 / 853 / 92	213 / 1056 / 76	212 / 943 / 19	206 / 1194 / 16	233 / 856 / 40	222 / 1060 / 33	217 / 924 / 89	216 / 1134 / 72								
35	1	332 / 652 / 30	305 / 800 / 24	414 / 527 / 74	380 / 649 / 60	355 / 577 / 161	345 / 712 / 131	324 / 693 / 28	297 / 839 / 23	400 / 556 / 69	376 / 692 / 57	345 / 604 / 150	344 / 754 / 124								
	2	287 / 768 / 26	265 / 943 / 21	335 / 629 / 60	310 / 778 / 49	313 / 631 / 142	305 / 779 / 116	278 / 809 / 24	255 / 977 / 19	328 / 670 / 57	303 / 817 / 46	311 / 672 / 135	303 / 819 / 109								
	3	243 / 907 / 22	224 / 1114 / 18	264 / 816 / 47	240 / 986 / 38	231 / 853 / 105	227 / 1056 / 86	232 / 943 / 20	223 / 1194 / 17	255 / 856 / 44	240 / 1060 / 37	233 / 924 / 101	230 / 1134 / 83								
40	1	362 / 652 / 68	330 / 800 / 55	451 / 527 / 121	410 / 649 / 98	381 / 577 / 186	366 / 712 / 152	353 / 693 / 64	320 / 839 / 52	435 / 556 / 114	405 / 692 / 93	370 / 604 / 173	364 / 754 / 143								
	2	313 / 768 / 59	286 / 943 / 48	365 / 629 / 98	335 / 778 / 80	337 / 631 / 165	324 / 779 / 134	303 / 809 / 55	274 / 977 / 44	356 / 670 / 93	326 / 817 / 75	333 / 672 / 156	320 / 819 / 126								
	3	265 / 907 / 50	242 / 1114 / 41	288 / 816 / 78	259 / 986 / 62	248 / 853 / 121	241 / 1056 / 100	252 / 943 / 46	240 / 1194 / 39	277 / 856 / 73	259 / 1060 / 60	250 / 924 / 117	243 / 1134 / 95								
30	1	289 / 730 / 25	277 / 903 / 21	362 / 594 / 60	344 / 730 / 49	320 / 641 / 124	323 / 791 / 102	282 / 762 / 24	279 / 965 / 20	349 / 613 / 56	339 / 763 / 46	319 / 675 / 118	321 / 822 / 95								
	2	245 / 843 / 21	236 / 1045 / 18	293 / 707 / 49	283 / 881 / 40	287 / 709 / 111	292 / 882 / 92	245 / 902 / 21	237 / 1109 / 17	286 / 739 / 46	276 / 908 / 38	284 / 741 / 105	288 / 909 / 85								
	3	210 / 1010 / 18	195 / 1205 / 15	233 / 921 / 39	223 / 1131 / 32	211 / 954 / 82	209 / 1150 / 66	209 / 1074 / 18	194 / 1266 / 14	224 / 946 / 36	212 / 1141 / 29	213 / 1016 / 79	211 / 1211 / 62								
35	1	316 / 730 / 26	299 / 903 / 22	395 / 594 / 66	371 / 730 / 54	344 / 641 / 142	342 / 791 / 116	307 / 762 / 25	301 / 965 / 21	379 / 613 / 62	365 / 763 / 51	341 / 675 / 135	339 / 822 / 109								
	2	268 / 843 / 23	255 / 1045 / 19	320 / 707 / 54	305 / 881 / 44	308 / 709 / 127	309 / 882 / 105	267 / 902 / 22	254 / 1109 / 18	311 / 739 / 51	296 / 908 / 41	303 / 741 / 120	304 / 909 / 98								
	3	230 / 1010 / 19	211 / 1205 / 15	254 / 921 / 43	240 / 1131 / 35	226 / 954 / 94	221 / 1150 / 75	228 / 1074 / 19	208 / 1266 / 15	243 / 946 / 40	228 / 1141 / 32	228 / 1016 / 90	222 / 1211 / 71								
40	1	343 / 730 / 61	321 / 903 / 50	428 / 594 / 109	398 / 730 / 88	367 / 641 / 165	361 / 791 / 134	332 / 762 / 57	322 / 965 / 48	410 / 613 / 101	390 / 763 / 83	363 / 675 / 156	357 / 822 / 126								
	2	291 / 843 / 52	274 / 1045 / 42	347 / 707 / 88	328 / 881 / 73	328 / 709 / 147	326 / 882 / 121	289 / 902 / 50	272 / 1109 / 41	337 / 739 / 83	317 / 908 / 67	323 / 741 / 139	320 / 909 / 113								
	3	250 / 1010 / 44	226 / 1205 / 35	276 / 921 / 70	258 / 1131 / 57	242 / 954 / 108	233 / 1150 / 87	247 / 1074 / 42	223 / 1266 / 33	263 / 946 / 65	244 / 1141 / 52	242 / 1016 / 104	234 / 1211 / 83								

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	Exposure Category : C	45	1	628 / 207 / 117	511 / 522 / 95	612 / 260 / 167	612 / 405 / 167	534 / 343 / 305	459 / 454 / 262	596 / 436 / 111	479 / 537 / 89	612 / 287 / 167	591 / 430 / 161	534 / 377 / 305	440 / 472 / 248	575 / 460 / 107	458 / 560 / 85	612 / 315 / 167	570 / 454 / 156	518 / 401 / 295
2			533 / 488 / 99	437 / 610 / 81	612 / 392 / 167	508 / 500 / 139	509 / 409 / 291	409 / 503 / 234	511 / 514 / 95	415 / 636 / 78	601 / 423 / 164	487 / 527 / 133	484 / 427 / 276	398 / 529 / 224	490 / 538 / 91	394 / 659 / 74	581 / 448 / 158	467 / 551 / 127	459 / 443 / 262	390 / 554 / 215
3			447 / 578 / 83	362 / 711 / 68	487 / 522 / 133	394 / 642 / 108	367 / 550 / 210	301 / 683 / 172	426 / 604 / 79	352 / 756 / 66	467 / 548 / 127	373 / 667 / 102	351 / 576 / 200	288 / 706 / 162	415 / 643 / 78	330 / 775 / 62	446 / 572 / 122	363 / 707 / 99	342 / 613 / 195	286 / 748 / 157
50		1	669 / 200 / 122	563 / 522 / 102	651 / 251 / 175	651 / 391 / 175	555 / 332 / 322	493 / 454 / 286	657 / 436 / 119	528 / 537 / 96	651 / 277 / 175	651 / 430 / 175	555 / 366 / 322	472 / 472 / 271	634 / 460 / 115	505 / 560 / 92	651 / 304 / 175	628 / 454 / 169	555 / 401 / 322	464 / 496 / 260
		2	587 / 488 / 107	481 / 610 / 88	651 / 378 / 175	560 / 500 / 151	547 / 409 / 317	439 / 503 / 255	563 / 514 / 102	458 / 636 / 83	651 / 416 / 175	537 / 527 / 145	520 / 427 / 302	427 / 529 / 245	540 / 538 / 98	434 / 659 / 79	640 / 448 / 172	514 / 551 / 139	493 / 443 / 286	417 / 554 / 234
		3	493 / 578 / 90	399 / 711 / 73	537 / 522 / 145	434 / 642 / 117	394 / 550 / 229	323 / 683 / 187	470 / 604 / 85	388 / 756 / 71	514 / 548 / 139	412 / 667 / 111	376 / 576 / 219	309 / 706 / 177	458 / 643 / 83	364 / 775 / 66	491 / 572 / 132	400 / 707 / 108	368 / 613 / 213	306 / 748 / 172
60		1	737 / 186 / 129	668 / 522 / 117	718 / 234 / 189	718 / 364 / 189	623 / 316 / 360	581 / 454 / 336	737 / 206 / 129	626 / 537 / 109	718 / 258 / 189	718 / 400 / 189	623 / 348 / 360	549 / 472 / 317	737 / 226 / 129	598 / 560 / 105	718 / 283 / 189	718 / 438 / 189	623 / 381 / 360	528 / 496 / 305
		2	696 / 488 / 122	570 / 610 / 100	718 / 352 / 189	663 / 500 / 175	623 / 395 / 360	518 / 503 / 299	668 / 514 / 117	543 / 636 / 95	718 / 387 / 189	636 / 527 / 168	613 / 427 / 354	496 / 529 / 287	640 / 538 / 112	515 / 659 / 90	718 / 424 / 189	609 / 551 / 161	581 / 443 / 336	475 / 554 / 275
		3	584 / 578 / 102	473 / 711 / 83	636 / 522 / 168	515 / 642 / 136	465 / 550 / 269	380 / 683 / 220	557 / 604 / 97	459 / 756 / 80	609 / 548 / 161	488 / 667 / 129	444 / 576 / 256	359 / 706 / 208	543 / 643 / 95	431 / 775 / 76	582 / 572 / 154	474 / 707 / 125	433 / 613 / 250	349 / 748 / 202
Exposure Category : C	45	1	554 / 483 / 103	447 / 596 / 83	612 / 344 / 167	539 / 468 / 147	492 / 416 / 281	426 / 518 / 229	522 / 494 / 97	426 / 615 / 79	612 / 375 / 167	519 / 489 / 142	476 / 437 / 272	418 / 539 / 219	ASCE Group Zone					
		2	469 / 561 / 87	384 / 697 / 72	550 / 462 / 150	446 / 573 / 122	442 / 465 / 253	381 / 576 / 205	447 / 581 / 83	362 / 714 / 68	529 / 483 / 144	425 / 593 / 116	426 / 486 / 243	372 / 595 / 195	Panal Angle					
		3	394 / 664 / 74	320 / 815 / 60	425 / 594 / 116	342 / 725 / 94	326 / 635 / 186	275 / 764 / 148	373 / 680 / 70	309 / 853 / 58	415 / 628 / 113	332 / 762 / 91	309 / 653 / 176	273 / 800 / 143	Mono Slope					
	50	1	610 / 483 / 111	493 / 596 / 90	651 / 333 / 175	594 / 468 / 160	529 / 416 / 307	455 / 518 / 250	575 / 494 / 105	470 / 615 / 85	651 / 362 / 175	571 / 489 / 154	511 / 437 / 297	446 / 539 / 239	1 = 1' / 1					
		2	517 / 561 / 94	423 / 697 / 77	606 / 462 / 163	491 / 573 / 132	475 / 465 / 276	408 / 576 / 224	493 / 581 / 90	399 / 714 / 73	583 / 483 / 157	469 / 593 / 126	457 / 486 / 265	397 / 595 / 213	2 = 2					
		3	434 / 664 / 79	352 / 815 / 64	469 / 594 / 126	377 / 725 / 102	350 / 635 / 203	294 / 764 / 161	411 / 680 / 75	341 / 853 / 62	457 / 628 / 123	366 / 762 / 99	332 / 653 / 193	291 / 800 / 156	3 = 3					
	60	1	723 / 483 / 126	584 / 596 / 102	718 / 309 / 189	704 / 468 / 186	623 / 416 / 360	514 / 518 / 293	682 / 494 / 119	557 / 615 / 97	718 / 337 / 189	677 / 489 / 179	602 / 437 / 348	502 / 539 / 281	1 = 1					
		2	612 / 561 / 107	501 / 697 / 88	718 / 462 / 189	582 / 573 / 154	560 / 465 / 323	460 / 576 / 262	584 / 581 / 102	473 / 714 / 83	691 / 483 / 182	555 / 593 / 147	539 / 486 / 311	448 / 595 / 250	2 = 2' / 2					
		3	515 / 664 / 90	418 / 815 / 73	555 / 594 / 147	447 / 725 / 118	412 / 635 / 238	332 / 764 / 189	487 / 680 / 85	404 / 853 / 71	542 / 628 / 143	433 / 762 / 115	391 / 653 / 226	328 / 800 / 183	3 = 3' / 3					
Exposure Category : C	45	1	511 / 524 / 95	405 / 632 / 76	612 / 407 / 167	498 / 508 / 136	459 / 456 / 262	409 / 557 / 210	522 / 494 / 97	426 / 615 / 79	612 / 375 / 167	519 / 489 / 142	476 / 437 / 272	418 / 539 / 219	10 - 30					
		2	437 / 613 / 81	352 / 749 / 66	508 / 502 / 139	415 / 625 / 113	409 / 505 / 234	372 / 628 / 191	447 / 581 / 83	362 / 714 / 68	529 / 483 / 144	425 / 593 / 116	426 / 486 / 243	372 / 595 / 195	2 = 2					
		3	362 / 714 / 68	298 / 889 / 56	394 / 645 / 108	322 / 797 / 88	301 / 686 / 172	270 / 835 / 138	373 / 680 / 70	309 / 853 / 58	415 / 628 / 113	332 / 762 / 91	309 / 653 / 176	273 / 800 / 143	3 = 3					
	50	1	563 / 524 / 102	446 / 632 / 81	651 / 393 / 175	549 / 508 / 148	493 / 456 / 286	436 / 557 / 229	575 / 494 / 105	470 / 615 / 85	651 / 362 / 175	571 / 489 / 154	511 / 437 / 297	446 / 539 / 239	ASCE Group Zone					
		2	481 / 613 / 88	388 / 749 / 71	560 / 502 / 151	457 / 625 / 123	439 / 505 / 255	397 / 628 / 208	493 / 581 / 90	399 / 714 / 73	583 / 483 / 157	469 / 593 / 126	457 / 486 / 265	397 / 595 / 213	Panal Angle					
		3	399 / 714 / 73	329 / 889 / 60	434 / 645 / 117	354 / 797 / 96	323 / 686 / 187	288 / 835 / 151	411 / 680 / 75	341 / 853 / 62	457 / 628 / 123	366 / 762 / 99	332 / 653 / 193	291 / 800 / 156	Mono Slope					
	60	1	668 / 524 / 117	529 / 632 / 92	718 / 365 / 189	650 / 508 / 172	581 / 456 / 336	490 / 557 / 269	682 / 494 / 119	557 / 615 / 97	718 / 337 / 189	677 / 489 / 179	602 / 437 / 348	502 / 539 / 281	1 = 1					
		2	570 / 613 / 100	459 / 749 / 80	663 / 502 / 175	542 / 625 / 143	518 / 505 / 299	446 / 628 / 244	584 / 581 / 102	473 / 714 / 83	691 / 483 / 182	555 / 593 / 147	539 / 486 / 311	448 / 595 / 250	2 = 2					
		3	473 / 714 / 83	390 / 889 / 68	515 / 645 / 136	420 / 797 / 111	380 / 686 / 220	323 / 835 / 177	487 / 680 / 85	404 / 853 / 71	542 / 628 / 143	433 / 762 / 115	391 / 653 / 226	328 / 800 / 183	3 = 3					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																		
	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
45	1	490 / 542 / 91	394 / 663 / 74	601 / 432 / 164	480 / 526 / 130	447 / 475 / 253	400 / 574 / 200	458 / 585 / 85	374 / 702 / 68	560 / 466 / 153	464 / 567 / 122	429 / 507 / 234	390 / 614 / 186	426 / 622 / 79	365 / 754 / 64	519 / 494 / 142	447 / 603 / 113	419 / 544 / 219	389 / 665 / 176
	2	415 / 629 / 78	341 / 782 / 64	487 / 520 / 133	397 / 640 / 108	397 / 523 / 224	362 / 643 / 181	384 / 669 / 72	319 / 816 / 58	456 / 562 / 125	378 / 680 / 99	386 / 565 / 210	350 / 682 / 167	362 / 721 / 68	319 / 898 / 56	425 / 599 / 116	369 / 731 / 94	373 / 601 / 195	347 / 733 / 157
	3	352 / 747 / 66	288 / 923 / 54	384 / 677 / 105	313 / 831 / 85	296 / 718 / 167	267 / 868 / 134	330 / 807 / 62	275 / 983 / 50	353 / 717 / 96	302 / 892 / 79	281 / 756 / 153	260 / 927 / 124	309 / 861 / 58	262 / 1031 / 46	332 / 770 / 91	291 / 944 / 74	273 / 808 / 143	253 / 975 / 115
50	1	540 / 542 / 98	434 / 663 / 79	651 / 425 / 175	526 / 526 / 142	480 / 475 / 276	426 / 574 / 219	505 / 585 / 92	402 / 702 / 73	617 / 466 / 166	498 / 567 / 132	459 / 507 / 255	414 / 614 / 203	470 / 622 / 85	391 / 754 / 68	571 / 494 / 154	479 / 603 / 123	447 / 544 / 239	412 / 665 / 193
	2	458 / 629 / 83	376 / 782 / 68	537 / 520 / 145	434 / 640 / 117	426 / 523 / 245	385 / 643 / 198	423 / 669 / 77	343 / 816 / 62	503 / 562 / 136	406 / 680 / 108	413 / 565 / 229	372 / 682 / 182	399 / 721 / 73	342 / 898 / 60	469 / 599 / 126	395 / 731 / 102	399 / 601 / 213	368 / 733 / 172
	3	388 / 747 / 71	317 / 923 / 58	423 / 677 / 114	343 / 831 / 93	317 / 718 / 182	284 / 868 / 146	364 / 807 / 66	296 / 983 / 54	389 / 717 / 105	325 / 892 / 86	300 / 756 / 167	276 / 927 / 136	341 / 861 / 62	281 / 1031 / 49	366 / 770 / 99	311 / 944 / 80	292 / 808 / 156	267 / 975 / 125
60	1	640 / 542 / 112	515 / 663 / 90	718 / 395 / 189	623 / 526 / 165	560 / 475 / 323	477 / 574 / 256	598 / 585 / 105	473 / 702 / 83	718 / 457 / 189	582 / 567 / 154	519 / 507 / 299	462 / 614 / 238	557 / 622 / 97	445 / 754 / 78	677 / 494 / 179	542 / 603 / 143	503 / 544 / 281	457 / 665 / 226
	2	543 / 629 / 95	445 / 782 / 78	636 / 520 / 168	515 / 640 / 136	496 / 523 / 287	432 / 643 / 232	501 / 669 / 88	404 / 816 / 71	596 / 562 / 157	474 / 680 / 125	467 / 565 / 269	415 / 682 / 214	473 / 721 / 83	390 / 898 / 68	555 / 599 / 147	448 / 731 / 118	449 / 601 / 250	408 / 733 / 202
	3	459 / 747 / 80	376 / 923 / 66	501 / 677 / 132	406 / 831 / 107	370 / 718 / 214	318 / 868 / 171	431 / 807 / 76	348 / 983 / 61	461 / 717 / 122	379 / 892 / 100	339 / 756 / 195	308 / 927 / 159	404 / 861 / 71	320 / 1031 / 56	433 / 770 / 115	353 / 944 / 93	329 / 808 / 183	297 / 975 / 147
45	Wind Speed [mph]																		
	170									180									
	1	394 / 652 / 74	354 / 800 / 60	488 / 527 / 133	441 / 649 / 108	407 / 577 / 205	388 / 712 / 167	381 / 693 / 70	343 / 839 / 56	470 / 556 / 125	433 / 692 / 102	394 / 604 / 191	385 / 754 / 157						
50	2	341 / 768 / 64	307 / 943 / 52	395 / 629 / 108	359 / 778 / 88	360 / 631 / 181	343 / 779 / 148	327 / 809 / 60	294 / 977 / 48	385 / 670 / 102	349 / 817 / 82	355 / 672 / 172	338 / 819 / 138						
	3	288 / 907 / 54	260 / 1114 / 44	312 / 816 / 85	278 / 986 / 68	265 / 853 / 134	255 / 1056 / 110	273 / 943 / 50	257 / 1194 / 42	299 / 856 / 79	277 / 1060 / 65	266 / 924 / 129	257 / 1134 / 105						
	60	1	434 / 652 / 79	379 / 800 / 64	537 / 527 / 145	471 / 649 / 117	434 / 577 / 224	409 / 712 / 182	411 / 693 / 75	366 / 839 / 60	505 / 556 / 136	462 / 692 / 111	419 / 604 / 208	405 / 754 / 172					
2		376 / 768 / 68	328 / 943 / 56	434 / 629 / 117	384 / 778 / 96	383 / 631 / 198	362 / 779 / 161	352 / 809 / 64	314 / 977 / 51	413 / 670 / 111	372 / 817 / 90	377 / 672 / 187	356 / 819 / 151						
3		317 / 907 / 58	278 / 1114 / 47	343 / 816 / 93	297 / 986 / 74	283 / 853 / 146	269 / 1056 / 120	294 / 943 / 54	274 / 1194 / 45	321 / 856 / 86	295 / 1060 / 71	283 / 924 / 141	270 / 1134 / 115						
45	Wind Speed [mph]																		
	190									200									
	1	370 / 730 / 66	343 / 903 / 54	462 / 594 / 119	425 / 730 / 96	390 / 641 / 181	380 / 791 / 148	357 / 762 / 62	343 / 965 / 52	441 / 613 / 111	415 / 763 / 91	385 / 675 / 172	375 / 822 / 138						
50	2	314 / 843 / 56	292 / 1045 / 46	374 / 707 / 96	350 / 881 / 79	349 / 709 / 162	344 / 882 / 134	311 / 902 / 54	290 / 1109 / 44	362 / 739 / 91	337 / 908 / 74	343 / 741 / 153	336 / 909 / 124						
	3	269 / 1010 / 48	242 / 1205 / 38	297 / 921 / 77	275 / 1131 / 63	257 / 954 / 119	246 / 1150 / 96	265 / 1074 / 46	238 / 1266 / 36	283 / 946 / 71	260 / 1141 / 57	257 / 1016 / 115	246 / 1211 / 91						
	60	1	397 / 730 / 71	365 / 903 / 58	495 / 594 / 129	452 / 730 / 105	414 / 641 / 198	399 / 791 / 161	383 / 762 / 66	364 / 965 / 56	472 / 613 / 120	441 / 763 / 99	407 / 675 / 187	392 / 822 / 151					
2		337 / 843 / 60	311 / 1045 / 49	401 / 707 / 105	372 / 881 / 86	370 / 709 / 177	361 / 882 / 146	333 / 902 / 58	308 / 1109 / 47	388 / 739 / 99	358 / 908 / 80	362 / 741 / 167	352 / 909 / 136						
3		289 / 1010 / 51	257 / 1205 / 41	318 / 921 / 83	292 / 1131 / 68	272 / 954 / 130	258 / 1150 / 104	284 / 1074 / 49	252 / 1266 / 39	303 / 946 / 77	276 / 1141 / 62	272 / 1016 / 125	257 / 1211 / 99						
45	Wind Speed [mph]																		
	190									200									
	1	459 / 730 / 80	409 / 903 / 66	569 / 594 / 150	505 / 730 / 122	460 / 641 / 232	437 / 791 / 189	433 / 762 / 76	407 / 965 / 63	534 / 613 / 140	491 / 763 / 115	451 / 675 / 220	428 / 822 / 177						
50	2	390 / 843 / 68	349 / 1045 / 56	461 / 707 / 122	416 / 881 / 100	412 / 709 / 208	395 / 882 / 171	377 / 902 / 66	344 / 1109 / 54	438 / 739 / 115	399 / 908 / 93	401 / 741 / 195	384 / 909 / 159						
	3	334 / 1010 / 59	288 / 1205 / 46	366 / 921 / 97	327 / 1131 / 79	303 / 954 / 153	282 / 1150 / 122	322 / 1074 / 56	282 / 1266 / 44	342 / 946 / 90	307 / 1141 / 72	301 / 1016 / 147	281 / 1211 / 116						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																													
Wind Speed [mph]		95				100				105																									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	70	1	788 / 172 / 134	772 / 522 / 131	783 / 220 / 204	783 / 343 / 204	683 / 300 / 395	671 / 454 / 387	788 / 190 / 134	724 / 537 / 123	783 / 243 / 204	783 / 377 / 204	683 / 330 / 395	634 / 472 / 366	788 / 209 / 134	692 / 560 / 117	783 / 267 / 204	783 / 413 / 204	683 / 362 / 395	610 / 496 / 352															
2		788 / 478 / 134	659 / 610 / 112	783 / 332 / 204	767 / 500 / 200	683 / 375 / 395	598 / 503 / 345	772 / 514 / 131	627 / 636 / 107	783 / 365 / 204	736 / 527 / 191	683 / 412 / 395	573 / 529 / 331	740 / 538 / 126	595 / 659 / 101	783 / 400 / 204	704 / 551 / 183	671 / 443 / 387	549 / 554 / 317																
3		676 / 578 / 115	547 / 711 / 93	736 / 522 / 191	595 / 642 / 155	537 / 550 / 310	439 / 683 / 254	643 / 604 / 109	531 / 756 / 90	704 / 548 / 183	564 / 667 / 147	512 / 576 / 296	415 / 706 / 240	627 / 643 / 107	499 / 775 / 85	673 / 572 / 175	548 / 707 / 143	500 / 613 / 289	403 / 748 / 233																
80	1	840 / 161 / 139	840 / 254 / 139	835 / 207 / 215	835 / 322 / 215	733 / 284 / 423	733 / 438 / 423	840 / 179 / 139	822 / 537 / 136	835 / 229 / 215	835 / 355 / 215	733 / 313 / 423	719 / 472 / 415	840 / 196 / 139	785 / 560 / 130	835 / 251 / 215	835 / 388 / 215	733 / 343 / 423	692 / 496 / 399																
	2	840 / 449 / 139	749 / 610 / 124	835 / 312 / 215	835 / 480 / 215	733 / 355 / 423	678 / 503 / 392	840 / 493 / 139	712 / 636 / 118	835 / 343 / 215	835 / 527 / 215	733 / 390 / 423	650 / 529 / 376	840 / 538 / 139	676 / 659 / 112	835 / 376 / 215	800 / 551 / 206	733 / 427 / 423	622 / 554 / 360																
	3	767 / 578 / 127	621 / 711 / 103	835 / 522 / 215	675 / 642 / 174	609 / 550 / 352	498 / 683 / 288	730 / 604 / 121	603 / 756 / 100	800 / 548 / 206	640 / 667 / 165	581 / 576 / 336	470 / 706 / 272	712 / 643 / 118	566 / 775 / 94	764 / 572 / 196	622 / 707 / 160	567 / 613 / 328	457 / 748 / 264																
90	1	899 / 154 / 146	899 / 243 / 146	875 / 194 / 223	875 / 302 / 223	773 / 268 / 447	773 / 413 / 447	899 / 171 / 146	899 / 267 / 146	875 / 214 / 223	875 / 332 / 223	773 / 295 / 447	773 / 454 / 447	899 / 188 / 146	878 / 560 / 143	875 / 235 / 223	875 / 364 / 223	773 / 323 / 447	773 / 496 / 447																
	2	899 / 429 / 146	838 / 610 / 136	875 / 292 / 223	875 / 449 / 223	773 / 335 / 447	758 / 503 / 438	899 / 471 / 146	797 / 636 / 130	875 / 321 / 223	875 / 493 / 223	773 / 368 / 447	727 / 529 / 420	899 / 515 / 146	756 / 659 / 123	875 / 352 / 223	875 / 539 / 223	773 / 403 / 447	696 / 554 / 402																
	3	858 / 578 / 140	695 / 711 / 113	875 / 488 / 223	756 / 642 / 193	681 / 550 / 393	557 / 683 / 322	817 / 604 / 133	674 / 756 / 110	875 / 536 / 223	716 / 667 / 182	650 / 576 / 375	526 / 706 / 304	797 / 643 / 130	633 / 775 / 103	855 / 572 / 218	696 / 707 / 177	634 / 613 / 366	511 / 748 / 295																
Wind Speed [mph]		110				115																													
70	1	788 / 229 / 134	676 / 596 / 115	783 / 292 / 204	783 / 450 / 204	683 / 395 / 395	585 / 518 / 338	788 / 250 / 134	643 / 615 / 109	783 / 318 / 204	783 / 489 / 204	683 / 429 / 395	561 / 539 / 324	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
0 - 3	1 = 1' / 1																																		
	2 = 2																																		
	3 = 3																																		
3 - 10	1 = 1																																		
	2 = 2' / 2																																		
	3 = 3' / 3																																		
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	708 / 561 / 120	579 / 697 / 98	783 / 436 / 204	673 / 573 / 175	646 / 465 / 373	525 / 576 / 303	676 / 581 / 115	547 / 714 / 93	783 / 473 / 204	642 / 593 / 167	622 / 486 / 359	500 / 595 / 289																							
3	595 / 664 / 101	483 / 815 / 82	642 / 594 / 167	517 / 725 / 135	476 / 635 / 275	378 / 764 / 219	563 / 680 / 96	467 / 853 / 79	626 / 628 / 163	501 / 762 / 130	451 / 653 / 261	366 / 800 / 212																							
80	1	840 / 215 / 139	767 / 596 / 127	835 / 274 / 215	835 / 423 / 215	733 / 374 / 423	664 / 518 / 384	840 / 235 / 139	730 / 615 / 121	835 / 299 / 215	835 / 460 / 215	733 / 406 / 423	636 / 539 / 368																						
	2	803 / 561 / 133	657 / 697 / 109	835 / 410 / 215	764 / 573 / 196	733 / 465 / 423	595 / 576 / 344	767 / 581 / 127	621 / 714 / 103	835 / 445 / 215	728 / 593 / 187	705 / 486 / 407	567 / 595 / 328																						
	3	676 / 664 / 112	548 / 815 / 91	728 / 594 / 187	586 / 725 / 151	540 / 635 / 312	429 / 764 / 248	639 / 680 / 106	530 / 853 / 88	711 / 628 / 183	569 / 762 / 146	512 / 653 / 296	415 / 800 / 240																						
90	1	899 / 206 / 146	858 / 596 / 140	875 / 257 / 223	875 / 396 / 223	773 / 353 / 447	742 / 518 / 429	899 / 224 / 146	817 / 615 / 133	875 / 280 / 223	875 / 430 / 223	773 / 383 / 447	711 / 539 / 411																						
	2	899 / 561 / 146	736 / 697 / 120	875 / 384 / 223	855 / 573 / 218	773 / 439 / 447	665 / 576 / 384	858 / 581 / 140	695 / 714 / 113	875 / 417 / 223	815 / 593 / 208	773 / 477 / 447	634 / 595 / 366																						
	3	756 / 664 / 123	613 / 815 / 100	815 / 594 / 208	656 / 725 / 167	603 / 635 / 349	480 / 764 / 277	715 / 680 / 116	593 / 853 / 97	795 / 628 / 203	636 / 762 / 162	572 / 653 / 331	464 / 800 / 268																						
Wind Speed [mph]		120				130																													
70	1	772 / 524 / 131	611 / 632 / 104	783 / 345 / 204	751 / 508 / 195	671 / 456 / 387	544 / 557 / 310	788 / 250 / 134	643 / 615 / 109	783 / 318 / 204	783 / 489 / 204	683 / 429 / 395	561 / 539 / 324																						
	2	659 / 613 / 112	531 / 749 / 90	767 / 502 / 200	626 / 625 / 163	598 / 505 / 345	495 / 628 / 282	676 / 581 / 115	547 / 714 / 93	783 / 473 / 204	642 / 593 / 167	622 / 486 / 359	500 / 595 / 289																						
	3	547 / 714 / 93	451 / 889 / 77	595 / 645 / 155	485 / 797 / 126	439 / 686 / 254	359 / 835 / 205	563 / 680 / 96	467 / 853 / 79	626 / 628 / 163	501 / 762 / 130	451 / 653 / 261	366 / 800 / 212																						
80	1	840 / 255 / 139	694 / 632 / 115	835 / 324 / 215	835 / 498 / 215	733 / 440 / 423	609 / 557 / 352	840 / 235 / 139	730 / 615 / 121	835 / 299 / 215	835 / 460 / 215	733 / 406 / 423	636 / 539 / 368																						
	2	749 / 613 / 124	603 / 749 / 100	835 / 482 / 215	711 / 625 / 183	678 / 505 / 392	553 / 628 / 320	767 / 581 / 127	621 / 714 / 103	835 / 445 / 215	728 / 593 / 187	705 / 486 / 407	567 / 595 / 328																						
	3	621 / 714 / 103	511 / 889 / 85	675 / 645 / 174	551 / 797 / 142	498 / 686 / 288	401 / 835 / 232	639 / 680 / 106	530 / 853 / 88	711 / 628 / 183	569 / 762 / 146	512 / 653 / 296	415 / 800 / 240																						
90	1	899 / 244 / 146	776 / 632 / 126	875 / 303 / 223	875 / 466 / 223	773 / 415 / 447	681 / 557 / 393	899 / 224 / 146	817 / 615 / 133	875 / 280 / 223	875 / 430 / 223	773 / 383 / 447	711 / 539 / 411																						
	2	838 / 613 / 136	674 / 749 / 110	875 / 451 / 223	795 / 625 / 203	758 / 505 / 438	619 / 628 / 357	858 / 581 / 140	695 / 714 / 113	875 / 417 / 223	815 / 593 / 208	773 / 477 / 447	634 / 595 / 366																						
	3	695 / 714 / 113	572 / 889 / 93	756 / 645 / 193	616 / 797 / 157	557 / 686 / 322	449 / 835 / 259	715 / 680 / 116	593 / 853 / 97	795 / 628 / 203	636 / 762 / 162	572 / 653 / 331	464 / 800 / 268																						

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	740 / 542 / 126	595 / 663 / 101	783 / 372 / 204	720 / 526 / 187	646 / 475 / 373	529 / 574 / 296	692 / 585 / 117	547 / 702 / 93	783 / 431 / 204	673 / 567 / 175	598 / 507 / 345	510 / 614 / 275	643 / 622 / 109	515 / 754 / 87	783 / 494 / 204	626 / 603 / 163	561 / 544 / 324
2		627 / 629 / 107	515 / 782 / 87	736 / 520 / 191	595 / 640 / 155	573 / 523 / 331	479 / 643 / 268	579 / 669 / 98	467 / 816 / 79	689 / 562 / 179	548 / 680 / 143	537 / 565 / 310	458 / 682 / 247	547 / 721 / 93	451 / 898 / 77	642 / 599 / 167	517 / 731 / 135	500 / 601 / 289	448 / 733 / 233
3		531 / 747 / 90	434 / 923 / 74	579 / 677 / 151	470 / 831 / 122	427 / 718 / 247	353 / 868 / 198	499 / 807 / 85	402 / 983 / 68	532 / 717 / 139	438 / 892 / 114	390 / 756 / 226	340 / 927 / 183	467 / 861 / 79	370 / 1031 / 63	501 / 770 / 130	407 / 944 / 106	366 / 808 / 212	326 / 975 / 169
80	1	840 / 276 / 139	676 / 663 / 112	835 / 350 / 215	817 / 526 / 210	733 / 475 / 423	581 / 574 / 336	785 / 585 / 130	621 / 702 / 103	835 / 405 / 215	764 / 567 / 196	678 / 507 / 392	558 / 614 / 312	730 / 622 / 121	584 / 754 / 97	835 / 465 / 215	711 / 603 / 183	636 / 544 / 368	548 / 665 / 296
	2	712 / 629 / 118	584 / 782 / 97	835 / 520 / 215	675 / 640 / 174	650 / 523 / 376	526 / 643 / 304	657 / 669 / 109	530 / 816 / 88	782 / 562 / 201	622 / 680 / 160	609 / 565 / 352	501 / 682 / 280	621 / 721 / 103	511 / 898 / 85	728 / 599 / 187	586 / 731 / 151	567 / 601 / 328	489 / 733 / 264
	3	603 / 747 / 100	493 / 923 / 82	657 / 677 / 169	533 / 831 / 137	484 / 718 / 280	387 / 868 / 224	566 / 807 / 94	457 / 983 / 76	604 / 717 / 155	498 / 892 / 128	443 / 756 / 256	372 / 927 / 208	530 / 861 / 88	420 / 1031 / 70	569 / 770 / 146	462 / 944 / 119	415 / 808 / 240	356 / 975 / 192
90	1	899 / 264 / 146	756 / 663 / 123	875 / 328 / 223	875 / 503 / 223	773 / 448 / 447	650 / 574 / 375	878 / 585 / 143	695 / 702 / 113	875 / 380 / 223	855 / 567 / 218	758 / 507 / 438	605 / 614 / 349	817 / 622 / 133	654 / 754 / 107	875 / 435 / 223	795 / 603 / 203	711 / 544 / 411	593 / 665 / 331
	2	797 / 629 / 130	654 / 782 / 107	875 / 487 / 223	756 / 640 / 193	727 / 523 / 420	588 / 643 / 340	736 / 669 / 120	593 / 816 / 97	875 / 562 / 223	696 / 680 / 177	681 / 565 / 393	543 / 682 / 313	695 / 721 / 113	572 / 898 / 93	815 / 599 / 208	656 / 731 / 167	634 / 601 / 366	529 / 733 / 295
	3	674 / 747 / 110	552 / 923 / 90	736 / 677 / 188	597 / 831 / 152	541 / 718 / 313	433 / 868 / 250	633 / 807 / 103	511 / 983 / 83	676 / 717 / 172	557 / 892 / 142	495 / 756 / 286	404 / 927 / 233	593 / 861 / 97	470 / 1031 / 77	636 / 770 / 162	517 / 944 / 132	464 / 808 / 268	385 / 975 / 215
Wind Speed [mph]		170						180											
70	1	595 / 652 / 101	483 / 800 / 82	736 / 527 / 191	595 / 649 / 155	539 / 577 / 303	495 / 712 / 247	563 / 693 / 96	457 / 839 / 77	689 / 556 / 179	576 / 692 / 147	517 / 604 / 282	486 / 754 / 233						
	2	515 / 768 / 87	418 / 943 / 71	595 / 629 / 155	485 / 778 / 126	476 / 631 / 268	438 / 779 / 219	483 / 809 / 82	392 / 977 / 66	564 / 670 / 147	464 / 817 / 118	465 / 672 / 254	427 / 819 / 205						
	3	434 / 907 / 74	354 / 1114 / 60	470 / 816 / 122	376 / 986 / 98	351 / 853 / 198	325 / 1056 / 162	402 / 943 / 68	343 / 1194 / 58	438 / 856 / 114	368 / 1060 / 94	349 / 924 / 190	324 / 1134 / 155						
80	1	676 / 652 / 112	548 / 800 / 91	835 / 527 / 215	675 / 649 / 174	595 / 577 / 344	538 / 712 / 280	639 / 693 / 106	511 / 839 / 85	782 / 556 / 201	640 / 692 / 165	566 / 604 / 320	526 / 754 / 264						
	2	584 / 768 / 97	475 / 943 / 79	675 / 629 / 174	551 / 778 / 142	526 / 631 / 304	476 / 779 / 248	548 / 809 / 91	438 / 977 / 73	640 / 670 / 165	515 / 817 / 133	509 / 672 / 288	462 / 819 / 232						
	3	493 / 907 / 82	402 / 1114 / 67	533 / 816 / 137	427 / 986 / 110	387 / 853 / 224	354 / 1056 / 184	457 / 943 / 76	384 / 1194 / 64	498 / 856 / 128	409 / 1060 / 105	382 / 924 / 216	351 / 1134 / 176						
90	1	756 / 652 / 123	613 / 800 / 100	875 / 494 / 223	756 / 649 / 193	665 / 577 / 384	581 / 712 / 313	715 / 693 / 116	572 / 839 / 93	875 / 556 / 223	716 / 692 / 182	619 / 604 / 357	567 / 754 / 295						
	2	654 / 768 / 107	531 / 943 / 87	756 / 629 / 193	616 / 778 / 157	588 / 631 / 340	514 / 779 / 277	613 / 809 / 100	491 / 977 / 80	716 / 670 / 182	577 / 817 / 147	557 / 672 / 322	498 / 819 / 259						
	3	552 / 907 / 90	450 / 1114 / 73	597 / 816 / 152	477 / 986 / 122	433 / 853 / 250	382 / 1056 / 206	511 / 943 / 83	429 / 1194 / 70	557 / 856 / 142	457 / 1060 / 117	418 / 924 / 241	378 / 1134 / 197						
Wind Speed [mph]		190						200											
70	1	531 / 730 / 90	453 / 903 / 74	657 / 594 / 171	559 / 730 / 139	507 / 641 / 268	475 / 791 / 219	499 / 762 / 85	449 / 965 / 71	611 / 613 / 159	542 / 763 / 130	496 / 675 / 254	463 / 822 / 205						
	2	451 / 843 / 77	386 / 1045 / 63	532 / 707 / 139	461 / 881 / 114	453 / 709 / 240	429 / 882 / 198	434 / 902 / 74	380 / 1109 / 60	501 / 739 / 130	440 / 908 / 106	441 / 741 / 226	416 / 909 / 183						
	3	386 / 1010 / 66	319 / 1205 / 52	423 / 921 / 110	362 / 1131 / 90	334 / 954 / 176	307 / 1150 / 141	370 / 1074 / 63	311 / 1266 / 49	392 / 946 / 102	339 / 1141 / 82	331 / 1016 / 169	304 / 1211 / 134						
80	1	603 / 730 / 100	497 / 903 / 82	746 / 594 / 192	613 / 730 / 155	553 / 641 / 304	513 / 791 / 248	566 / 762 / 94	491 / 965 / 79	693 / 613 / 178	593 / 763 / 146	540 / 675 / 288	499 / 822 / 232						
	2	511 / 843 / 85	424 / 1045 / 70	604 / 707 / 155	505 / 881 / 128	495 / 709 / 272	464 / 882 / 224	493 / 902 / 82	416 / 1109 / 67	569 / 739 / 146	482 / 908 / 119	480 / 741 / 256	447 / 909 / 208						
	3	438 / 1010 / 73	350 / 1205 / 58	480 / 921 / 124	397 / 1131 / 101	364 / 954 / 200	331 / 1150 / 160	420 / 1074 / 70	340 / 1266 / 55	444 / 946 / 114	371 / 1141 / 92	360 / 1016 / 192	327 / 1211 / 152						
90	1	674 / 730 / 110	552 / 903 / 90	835 / 594 / 213	676 / 730 / 172	600 / 641 / 340	551 / 791 / 277	633 / 762 / 103	534 / 965 / 87	775 / 613 / 198	643 / 763 / 162	584 / 675 / 322	535 / 822 / 259						
	2	572 / 843 / 93	470 / 1045 / 77	676 / 707 / 172	557 / 881 / 142	537 / 709 / 304	498 / 882 / 250	552 / 902 / 90	452 / 1109 / 73	636 / 739 / 162	523 / 908 / 132	519 / 741 / 286	479 / 909 / 233						
	3	491 / 1010 / 80	388 / 1205 / 63	537 / 921 / 137	438 / 1131 / 112	395 / 954 / 224	356 / 1150 / 179	470 / 1074 / 77	370 / 1266 / 60	497 / 946 / 127	402 / 1141 / 102	389 / 1016 / 215	350 / 1211 / 170						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
	0	1	197 / 457 / 35	160 / 570 / 28	247 / 361 / 50	199 / 452 / 41	218 / 398 / 59	196 / 493 / 48	189 / 484 / 34	153 / 597 / 27	236 / 380 / 48	189 / 469 / 39	208 / 417 / 56	203 / 519 / 46	178 / 499 / 32	148 / 621 / 26	225 / 397 / 46	184 / 493 / 37	201 / 441 / 54
2		167 / 535 / 30	135 / 655 / 24	203 / 445 / 42	163 / 548 / 33	197 / 449 / 53	177 / 551 / 43	160 / 562 / 28	131 / 699 / 23	192 / 463 / 39	156 / 574 / 32	187 / 466 / 51	182 / 577 / 41	153 / 586 / 27	126 / 720 / 22	185 / 487 / 38	151 / 598 / 31	180 / 490 / 49	186 / 601 / 39
3		142 / 639 / 25	113 / 770 / 20	156 / 569 / 32	127 / 704 / 26	145 / 610 / 39	130 / 744 / 32	135 / 665 / 24	109 / 816 / 20	149 / 595 / 31	120 / 727 / 25	138 / 636 / 37	131 / 765 / 30	128 / 686 / 23	108 / 860 / 19	142 / 618 / 29	118 / 769 / 24	131 / 658 / 35	136 / 807 / 29
5	1	217 / 457 / 35	177 / 570 / 28	271 / 361 / 53	219 / 452 / 43	218 / 398 / 71	196 / 493 / 57	209 / 484 / 34	169 / 597 / 27	259 / 380 / 51	207 / 469 / 41	208 / 417 / 67	203 / 519 / 55	197 / 499 / 32	163 / 621 / 26	247 / 397 / 48	202 / 493 / 39	201 / 441 / 65	208 / 544 / 53
	2	185 / 535 / 30	149 / 655 / 24	223 / 445 / 44	179 / 548 / 35	197 / 449 / 64	177 / 551 / 51	177 / 562 / 28	145 / 699 / 23	211 / 463 / 41	171 / 574 / 34	187 / 466 / 60	182 / 577 / 49	169 / 586 / 27	139 / 720 / 22	203 / 487 / 40	165 / 598 / 32	180 / 490 / 58	186 / 601 / 47
	3	157 / 639 / 25	125 / 770 / 20	171 / 569 / 34	140 / 704 / 28	145 / 610 / 47	130 / 744 / 38	149 / 665 / 24	121 / 816 / 20	163 / 595 / 32	132 / 727 / 26	138 / 636 / 45	131 / 765 / 36	141 / 686 / 23	118 / 860 / 19	156 / 618 / 31	129 / 769 / 25	131 / 658 / 42	136 / 807 / 34
10	1	276 / 457 / 35	225 / 570 / 28	342 / 361 / 66	277 / 452 / 53	243 / 398 / 90	211 / 493 / 73	265 / 484 / 34	214 / 597 / 27	327 / 380 / 63	262 / 469 / 50	231 / 417 / 86	213 / 519 / 70	250 / 499 / 32	206 / 621 / 26	312 / 397 / 60	254 / 493 / 48	224 / 441 / 83	215 / 544 / 67
	2	235 / 535 / 30	189 / 655 / 24	282 / 445 / 54	227 / 548 / 44	220 / 449 / 81	190 / 551 / 66	225 / 562 / 28	184 / 699 / 23	267 / 463 / 51	216 / 574 / 42	208 / 466 / 77	191 / 577 / 63	214 / 586 / 27	175 / 720 / 22	257 / 487 / 49	208 / 598 / 40	200 / 490 / 74	192 / 601 / 60
	3	199 / 639 / 25	158 / 770 / 20	216 / 569 / 42	176 / 704 / 34	161 / 610 / 60	140 / 744 / 48	189 / 665 / 24	153 / 816 / 20	206 / 595 / 40	166 / 727 / 32	153 / 636 / 57	138 / 765 / 45	179 / 686 / 23	150 / 860 / 19	196 / 618 / 38	163 / 769 / 31	145 / 658 / 54	140 / 807 / 44
0	1	171 / 521 / 30	150 / 642 / 25	214 / 413 / 44	189 / 516 / 36	190 / 455 / 52	213 / 566 / 42	164 / 541 / 29	155 / 677 / 24	207 / 434 / 42	192 / 537 / 34	193 / 476 / 50	218 / 586 / 40						
	2	146 / 607 / 26	130 / 760 / 21	178 / 510 / 36	153 / 619 / 29	173 / 513 / 47	189 / 621 / 37	142 / 642 / 25	130 / 773 / 20	171 / 531 / 35	159 / 654 / 28	174 / 534 / 45	197 / 656 / 36						
	3	124 / 725 / 22	107 / 870 / 18	138 / 655 / 28	122 / 809 / 23	127 / 696 / 35	141 / 848 / 28	117 / 739 / 21	109 / 908 / 17	131 / 673 / 27	121 / 820 / 22	126 / 713 / 33	145 / 886 / 27						
5	1	189 / 521 / 30	162 / 642 / 25	235 / 413 / 46	202 / 516 / 38	190 / 455 / 62	213 / 566 / 50	181 / 541 / 29	164 / 677 / 24	227 / 434 / 45	202 / 537 / 36	193 / 476 / 59	218 / 586 / 48						
	2	161 / 607 / 26	141 / 760 / 21	195 / 510 / 38	164 / 619 / 31	173 / 513 / 56	189 / 621 / 45	157 / 642 / 25	138 / 773 / 20	187 / 531 / 37	167 / 654 / 30	174 / 534 / 54	197 / 656 / 43						
	3	137 / 725 / 22	115 / 870 / 18	152 / 655 / 30	131 / 809 / 24	127 / 696 / 41	141 / 848 / 33	129 / 739 / 21	116 / 908 / 17	144 / 673 / 28	128 / 820 / 23	126 / 713 / 39	145 / 886 / 32						
10	1	240 / 521 / 30	203 / 642 / 25	297 / 413 / 57	252 / 516 / 46	212 / 455 / 79	216 / 566 / 64	230 / 541 / 29	204 / 677 / 24	287 / 434 / 55	251 / 537 / 45	211 / 476 / 76	218 / 586 / 61						
	2	204 / 607 / 26	176 / 760 / 21	247 / 510 / 47	205 / 619 / 38	192 / 513 / 71	192 / 621 / 57	199 / 642 / 25	171 / 773 / 20	237 / 531 / 45	207 / 654 / 37	191 / 534 / 68	197 / 656 / 55						
	3	174 / 725 / 22	144 / 870 / 18	191 / 655 / 37	163 / 809 / 30	141 / 696 / 53	143 / 848 / 42	164 / 739 / 21	144 / 908 / 17	181 / 673 / 35	158 / 820 / 28	138 / 713 / 50	145 / 886 / 41						
0	1	157 / 560 / 28	156 / 692 / 23	199 / 454 / 41	195 / 556 / 33	197 / 495 / 48	221 / 603 / 38	164 / 541 / 29	155 / 677 / 24	207 / 434 / 42	192 / 537 / 34	193 / 476 / 50	218 / 586 / 40						
	2	135 / 658 / 24	134 / 808 / 20	163 / 550 / 33	160 / 669 / 27	177 / 553 / 43	199 / 672 / 35	142 / 642 / 25	130 / 773 / 20	171 / 531 / 35	159 / 654 / 28	174 / 534 / 45	197 / 656 / 36						
	3	113 / 774 / 20	112 / 942 / 16	127 / 706 / 26	125 / 855 / 21	130 / 747 / 32	150 / 923 / 26	117 / 739 / 21	109 / 908 / 17	131 / 673 / 27	121 / 820 / 22	126 / 713 / 33	145 / 886 / 27						
5	1	173 / 560 / 28	162 / 692 / 23	219 / 454 / 43	202 / 556 / 34	197 / 495 / 57	221 / 603 / 46	181 / 541 / 29	164 / 677 / 24	227 / 434 / 45	202 / 537 / 36	193 / 476 / 59	218 / 586 / 48						
	2	149 / 658 / 24	139 / 808 / 20	179 / 550 / 35	166 / 669 / 28	177 / 553 / 51	199 / 672 / 41	157 / 642 / 25	138 / 773 / 20	187 / 531 / 37	167 / 654 / 30	174 / 534 / 54	197 / 656 / 43						
	3	125 / 774 / 20	116 / 942 / 16	140 / 706 / 28	129 / 855 / 22	130 / 747 / 38	150 / 923 / 31	129 / 739 / 21	116 / 908 / 17	144 / 673 / 28	128 / 820 / 23	126 / 713 / 39	145 / 886 / 32						
10	1	220 / 560 / 28	200 / 692 / 23	277 / 454 / 53	248 / 556 / 43	212 / 495 / 73	221 / 603 / 58	230 / 541 / 29	204 / 677 / 24	287 / 434 / 55	251 / 537 / 45	211 / 476 / 76	218 / 586 / 61						
	2	189 / 658 / 24	172 / 808 / 20	227 / 550 / 44	203 / 669 / 35	191 / 553 / 66	199 / 672 / 53	199 / 642 / 25	171 / 773 / 20	237 / 531 / 45	207 / 654 / 37	191 / 534 / 68	197 / 656 / 55						
	3	158 / 774 / 20	143 / 942 / 16	176 / 706 / 34	158 / 855 / 27	140 / 747 / 48	150 / 923 / 40	164 / 739 / 21	144 / 908 / 17	181 / 673 / 35	158 / 820 / 28	138 / 713 / 50	145 / 886 / 41						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	0	1	153 / 590 / 27	161 / 725 / 22	192 / 472 / 39	198 / 572 / 31	201 / 513 / 46	230 / 634 / 37	149 / 631 / 25	170 / 785 / 21	187 / 505 / 36	211 / 628 / 30	211 / 555 / 43	240 / 674 / 35	152 / 666 / 23	171 / 812 / 19	194 / 542 / 34	218 / 664 / 28	220 / 592 / 40	254 / 726 / 33
2		131 / 690 / 23	137 / 841 / 19	156 / 567 / 32	165 / 701 / 26	180 / 570 / 41	206 / 703 / 34	126 / 729 / 21	143 / 901 / 18	152 / 609 / 30	174 / 761 / 25	188 / 611 / 38	213 / 740 / 31	131 / 781 / 20	148 / 951 / 16	160 / 660 / 28	177 / 790 / 22	194 / 645 / 35	224 / 792 / 29	
3		109 / 806 / 20	114 / 974 / 16	124 / 739 / 25	127 / 888 / 20	134 / 780 / 31	153 / 956 / 25	107 / 866 / 18	122 / 1073 / 15	118 / 776 / 23	132 / 945 / 19	136 / 813 / 28	160 / 1015 / 23	110 / 917 / 17	124 / 1116 / 14	122 / 828 / 22	142 / 1034 / 18	147 / 895 / 27	164 / 1060 / 21	
5		1	169 / 590 / 27	165 / 725 / 22	211 / 472 / 41	202 / 572 / 33	201 / 513 / 55	230 / 634 / 45	162 / 631 / 25	170 / 785 / 21	202 / 505 / 38	211 / 628 / 31	211 / 555 / 51	240 / 674 / 41	161 / 666 / 23	171 / 812 / 19	204 / 542 / 36	218 / 664 / 29	220 / 592 / 48	254 / 726 / 39
		2	145 / 690 / 23	141 / 841 / 19	171 / 567 / 34	168 / 701 / 28	180 / 570 / 49	206 / 703 / 40	137 / 729 / 21	143 / 901 / 18	165 / 609 / 31	174 / 761 / 26	188 / 611 / 46	213 / 740 / 37	139 / 781 / 20	148 / 951 / 16	168 / 660 / 30	177 / 790 / 24	194 / 645 / 42	224 / 792 / 34
		3	121 / 806 / 20	116 / 974 / 16	136 / 739 / 27	130 / 888 / 21	134 / 780 / 37	153 / 956 / 30	117 / 866 / 18	122 / 1073 / 15	128 / 776 / 24	132 / 945 / 20	136 / 813 / 33	160 / 1015 / 28	116 / 917 / 17	124 / 1116 / 14	128 / 828 / 23	142 / 1034 / 19	147 / 895 / 32	164 / 1060 / 25
10		1	214 / 590 / 27	201 / 725 / 22	267 / 472 / 51	246 / 572 / 41	212 / 513 / 70	230 / 634 / 57	204 / 631 / 25	203 / 785 / 21	253 / 505 / 47	251 / 628 / 39	216 / 555 / 66	240 / 674 / 53	200 / 666 / 23	197 / 812 / 19	252 / 542 / 45	249 / 664 / 36	220 / 592 / 61	254 / 726 / 50
		2	184 / 690 / 23	172 / 841 / 19	216 / 567 / 42	205 / 701 / 34	190 / 570 / 63	206 / 703 / 51	173 / 729 / 21	172 / 901 / 18	207 / 609 / 39	207 / 761 / 32	192 / 611 / 58	213 / 740 / 47	172 / 781 / 20	170 / 951 / 16	208 / 660 / 37	202 / 790 / 29	194 / 645 / 54	224 / 792 / 44
		3	153 / 806 / 20	142 / 974 / 16	171 / 739 / 33	158 / 888 / 26	141 / 780 / 47	153 / 956 / 38	147 / 866 / 18	146 / 1073 / 15	160 / 776 / 30	157 / 945 / 24	139 / 813 / 42	160 / 1015 / 35	144 / 917 / 17	143 / 1116 / 14	159 / 828 / 28	162 / 1034 / 23	147 / 895 / 41	164 / 1060 / 32
Wind Speed [mph]		170						180												
0	1	159 / 712 / 22	184 / 887 / 18	200 / 575 / 32	229 / 711 / 26	226 / 623 / 37	267 / 773 / 31	164 / 753 / 21	188 / 925 / 17	204 / 602 / 30	239 / 754 / 25	237 / 664 / 35	278 / 814 / 29							
	2	135 / 827 / 19	157 / 1033 / 16	163 / 689 / 26	190 / 864 / 22	203 / 691 / 34	242 / 865 / 28	143 / 897 / 18	159 / 1062 / 14	169 / 730 / 25	195 / 903 / 20	212 / 732 / 32	250 / 905 / 26							
	3	117 / 997 / 16	131 / 1201 / 13	126 / 872 / 20	144 / 1072 / 17	151 / 940 / 25	175 / 1143 / 20	118 / 1029 / 15	138 / 1280 / 13	133 / 943 / 20	152 / 1148 / 16	154 / 974 / 23	185 / 1222 / 19							
	5	1	163 / 712 / 22	184 / 887 / 18	204 / 575 / 34	229 / 711 / 28	226 / 623 / 45	267 / 773 / 37	164 / 753 / 21	188 / 925 / 17	204 / 602 / 31	239 / 754 / 26	237 / 664 / 42	278 / 814 / 34						
		2	139 / 827 / 19	157 / 1033 / 16	166 / 689 / 28	190 / 864 / 23	203 / 691 / 40	242 / 865 / 33	144 / 897 / 18	159 / 1062 / 14	169 / 730 / 26	195 / 903 / 21	212 / 732 / 38	250 / 905 / 31						
		3	120 / 997 / 16	131 / 1201 / 13	128 / 872 / 21	144 / 1072 / 17	151 / 940 / 30	175 / 1143 / 24	118 / 1029 / 15	138 / 1280 / 13	133 / 943 / 21	152 / 1148 / 17	154 / 974 / 28	185 / 1222 / 23						
	10	1	200 / 712 / 22	204 / 887 / 18	249 / 575 / 42	253 / 711 / 34	226 / 623 / 57	267 / 773 / 47	199 / 753 / 21	203 / 925 / 17	246 / 602 / 39	255 / 754 / 32	237 / 664 / 54	278 / 814 / 44						
		2	170 / 827 / 19	175 / 1033 / 16	203 / 689 / 34	209 / 864 / 28	203 / 691 / 51	242 / 865 / 42	174 / 897 / 18	172 / 1062 / 14	203 / 730 / 32	209 / 903 / 26	212 / 732 / 48	250 / 905 / 40						
		3	147 / 997 / 16	146 / 1201 / 13	157 / 872 / 26	159 / 1072 / 22	151 / 940 / 38	175 / 1143 / 31	143 / 1029 / 15	149 / 1280 / 13	160 / 943 / 25	163 / 1148 / 21	154 / 974 / 35	185 / 1222 / 29						
Wind Speed [mph]		190						200												
0	1	168 / 789 / 20	199 / 992 / 16	212 / 640 / 28	247 / 791 / 23	247 / 702 / 34	286 / 848 / 27	177 / 846 / 19	201 / 1013 / 15	220 / 673 / 27	253 / 821 / 22	256 / 735 / 32	304 / 908 / 26							
	2	146 / 929 / 17	168 / 1131 / 14	173 / 766 / 23	199 / 933 / 19	219 / 768 / 30	256 / 935 / 24	153 / 991 / 16	175 / 1195 / 13	183 / 823 / 22	209 / 994 / 18	232 / 825 / 29	270 / 995 / 23							
	3	123 / 1098 / 14	144 / 1353 / 12	134 / 971 / 18	159 / 1219 / 15	163 / 1041 / 22	194 / 1294 / 18	129 / 1163 / 14	149 / 1416 / 11	141 / 1033 / 17	166 / 1284 / 14	171 / 1104 / 21	203 / 1359 / 18							
	5	1	168 / 789 / 20	199 / 992 / 16	212 / 640 / 30	247 / 791 / 24	247 / 702 / 40	286 / 848 / 32	177 / 846 / 19	201 / 1013 / 15	220 / 673 / 28	253 / 821 / 23	256 / 735 / 38	304 / 908 / 31						
		2	146 / 929 / 17	168 / 1131 / 14	173 / 766 / 24	199 / 933 / 20	219 / 768 / 36	256 / 935 / 29	153 / 991 / 16	175 / 1195 / 13	183 / 823 / 24	209 / 994 / 19	232 / 825 / 34	270 / 995 / 28						
		3	123 / 1098 / 14	144 / 1353 / 12	134 / 971 / 19	159 / 1219 / 16	163 / 1041 / 27	194 / 1294 / 22	129 / 1163 / 14	149 / 1416 / 11	141 / 1033 / 18	166 / 1284 / 15	171 / 1104 / 25	203 / 1359 / 21						
	10	1	197 / 789 / 20	209 / 992 / 16	247 / 640 / 37	257 / 791 / 30	247 / 702 / 51	286 / 848 / 41	202 / 846 / 19	205 / 1013 / 15	248 / 673 / 35	257 / 821 / 28	256 / 735 / 48	304 / 908 / 40						
		2	171 / 929 / 17	176 / 1131 / 14	202 / 766 / 30	207 / 933 / 24	219 / 768 / 45	256 / 935 / 37	174 / 991 / 16	179 / 1195 / 13	207 / 823 / 29	213 / 994 / 23	232 / 825 / 44	270 / 995 / 35						
		3	145 / 1098 / 14	151 / 1353 / 12	156 / 971 / 23	166 / 1219 / 20	163 / 1041 / 34	194 / 1294 / 28	146 / 1163 / 14	152 / 1416 / 11	159 / 1033 / 23	168 / 1284 / 19	171 / 1104 / 32	203 / 1359 / 27						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	334 / 457 / 36	272 / 570 / 29	413 / 361 / 78	334 / 452 / 63	277 / 398 / 110	238 / 493 / 89	321 / 484 / 35	260 / 597 / 28	395 / 380 / 75	316 / 469 / 60	264 / 417 / 104	240 / 519 / 85	303 / 499 / 33	249 / 621 / 27	377 / 397 / 71	306 / 493 / 58	255 / 441 / 101
2		284 / 535 / 31	229 / 655 / 25	340 / 445 / 64	274 / 548 / 52	250 / 449 / 99	215 / 551 / 80	272 / 562 / 29	223 / 699 / 24	322 / 463 / 61	262 / 574 / 50	237 / 466 / 94	215 / 577 / 76	260 / 586 / 28	212 / 720 / 23	310 / 487 / 59	251 / 598 / 47	228 / 490 / 90	214 / 601 / 73
3		241 / 639 / 26	192 / 770 / 21	262 / 569 / 50	213 / 704 / 40	183 / 610 / 73	158 / 744 / 59	229 / 665 / 25	186 / 816 / 20	249 / 595 / 47	201 / 727 / 38	174 / 636 / 69	155 / 765 / 55	217 / 686 / 24	181 / 860 / 20	237 / 618 / 45	196 / 769 / 37	165 / 658 / 66	157 / 807 / 53
1		392 / 457 / 39	319 / 570 / 32	470 / 350 / 88	392 / 452 / 73	311 / 398 / 131	266 / 493 / 106	377 / 484 / 38	305 / 597 / 31	463 / 380 / 87	371 / 469 / 69	296 / 417 / 125	266 / 519 / 102	356 / 499 / 36	292 / 621 / 29	442 / 397 / 83	359 / 493 / 67	286 / 441 / 121	265 / 544 / 98
2		334 / 535 / 33	269 / 655 / 27	399 / 445 / 75	321 / 548 / 60	281 / 449 / 119	239 / 551 / 95	319 / 562 / 32	261 / 699 / 26	378 / 463 / 71	307 / 574 / 58	266 / 466 / 112	238 / 577 / 91	305 / 586 / 31	249 / 720 / 25	364 / 487 / 68	294 / 598 / 55	256 / 490 / 108	236 / 601 / 87
3		283 / 639 / 28	225 / 770 / 23	307 / 569 / 58	250 / 704 / 47	206 / 610 / 87	176 / 744 / 70	269 / 665 / 27	218 / 816 / 22	292 / 595 / 55	235 / 727 / 44	196 / 636 / 83	172 / 765 / 66	254 / 686 / 26	212 / 860 / 21	278 / 618 / 52	230 / 769 / 43	186 / 658 / 79	173 / 807 / 64
1		392 / 457 / 39	319 / 570 / 32	470 / 350 / 88	392 / 452 / 73	344 / 398 / 157	293 / 493 / 127	377 / 484 / 38	305 / 597 / 31	463 / 380 / 87	371 / 469 / 69	328 / 417 / 150	292 / 519 / 122	356 / 499 / 36	292 / 621 / 29	442 / 397 / 83	359 / 493 / 67	317 / 441 / 145	290 / 544 / 117
2		334 / 535 / 33	269 / 655 / 27	399 / 445 / 75	321 / 548 / 60	311 / 449 / 142	264 / 551 / 114	319 / 562 / 32	261 / 699 / 26	378 / 463 / 71	307 / 574 / 58	295 / 466 / 135	261 / 577 / 109	305 / 586 / 31	249 / 720 / 25	364 / 487 / 68	294 / 598 / 55	283 / 490 / 129	259 / 601 / 104
3		283 / 639 / 28	225 / 770 / 23	307 / 569 / 58	250 / 704 / 47	228 / 610 / 104	194 / 744 / 84	269 / 665 / 27	218 / 816 / 22	292 / 595 / 55	235 / 727 / 44	217 / 636 / 99	189 / 765 / 79	254 / 686 / 26	212 / 860 / 21	278 / 618 / 52	230 / 769 / 43	206 / 658 / 94	190 / 807 / 76
Wind Speed [mph]		110						115											
15	1	291 / 521 / 31	244 / 642 / 25	359 / 413 / 68	303 / 516 / 55	241 / 455 / 96	240 / 566 / 78	278 / 541 / 30	244 / 677 / 25	347 / 434 / 66	299 / 537 / 53	239 / 476 / 92	240 / 586 / 74						
	2	247 / 607 / 27	212 / 760 / 22	298 / 510 / 56	246 / 619 / 45	219 / 513 / 87	213 / 621 / 69	241 / 642 / 26	205 / 773 / 21	286 / 531 / 54	247 / 654 / 44	216 / 534 / 83	217 / 656 / 67						
	3	210 / 725 / 23	173 / 870 / 18	231 / 655 / 44	196 / 809 / 36	161 / 696 / 64	159 / 848 / 52	198 / 739 / 22	172 / 908 / 18	219 / 673 / 42	189 / 820 / 34	157 / 713 / 60	160 / 886 / 50						
	1	341 / 521 / 34	285 / 642 / 28	421 / 413 / 79	353 / 516 / 64	271 / 455 / 114	264 / 566 / 93	327 / 541 / 33	284 / 677 / 27	406 / 434 / 76	347 / 537 / 62	268 / 476 / 110	263 / 586 / 89						
	2	290 / 607 / 29	247 / 760 / 24	349 / 510 / 65	287 / 619 / 52	246 / 513 / 104	234 / 621 / 83	283 / 642 / 28	238 / 773 / 23	335 / 531 / 63	287 / 654 / 51	242 / 534 / 100	238 / 656 / 81						
	3	247 / 725 / 25	202 / 870 / 20	271 / 655 / 51	228 / 809 / 42	181 / 696 / 76	174 / 848 / 62	232 / 739 / 23	200 / 908 / 19	257 / 673 / 48	219 / 820 / 39	175 / 713 / 72	175 / 886 / 60						
	1	341 / 521 / 34	285 / 642 / 28	421 / 413 / 79	353 / 516 / 64	300 / 455 / 137	288 / 566 / 112	327 / 541 / 33	284 / 677 / 27	406 / 434 / 76	347 / 537 / 62	296 / 476 / 132	286 / 586 / 107						
	2	290 / 607 / 29	247 / 760 / 24	349 / 510 / 65	287 / 619 / 52	272 / 513 / 124	256 / 621 / 99	283 / 642 / 28	238 / 773 / 23	335 / 531 / 63	287 / 654 / 51	268 / 534 / 119	259 / 656 / 97						
	3	247 / 725 / 25	202 / 870 / 20	271 / 655 / 51	228 / 809 / 42	200 / 696 / 92	190 / 848 / 74	232 / 739 / 23	200 / 908 / 19	257 / 673 / 48	219 / 820 / 39	194 / 713 / 86	191 / 886 / 71						
Wind Speed [mph]		120						130											
15	1	266 / 560 / 29	238 / 692 / 24	334 / 454 / 63	294 / 556 / 51	239 / 495 / 89	239 / 603 / 71	278 / 541 / 30	244 / 677 / 25	347 / 434 / 66	299 / 537 / 53	239 / 476 / 92	240 / 586 / 74						
	2	229 / 658 / 25	204 / 808 / 20	274 / 550 / 52	241 / 669 / 42	215 / 553 / 80	215 / 672 / 64	241 / 642 / 26	205 / 773 / 21	286 / 531 / 54	247 / 654 / 44	216 / 534 / 83	217 / 656 / 67						
	3	192 / 774 / 21	170 / 942 / 17	213 / 706 / 40	188 / 855 / 32	158 / 747 / 59	161 / 923 / 48	198 / 739 / 22	172 / 908 / 18	219 / 673 / 42	189 / 820 / 34	157 / 713 / 60	160 / 886 / 50						
	1	312 / 560 / 31	276 / 692 / 26	392 / 454 / 73	341 / 556 / 59	266 / 495 / 106	261 / 603 / 85	327 / 541 / 33	284 / 677 / 27	406 / 434 / 76	347 / 537 / 62	268 / 476 / 110	263 / 586 / 89						
	2	269 / 658 / 27	236 / 808 / 22	321 / 550 / 60	279 / 669 / 48	240 / 553 / 95	235 / 672 / 76	283 / 642 / 28	238 / 773 / 23	335 / 531 / 63	287 / 654 / 51	242 / 534 / 100	238 / 656 / 81						
	3	225 / 774 / 23	197 / 942 / 18	250 / 706 / 47	217 / 855 / 38	176 / 747 / 70	176 / 923 / 57	232 / 739 / 23	200 / 908 / 19	257 / 673 / 48	219 / 820 / 39	175 / 713 / 72	175 / 886 / 60						
	1	312 / 560 / 31	276 / 692 / 26	392 / 454 / 73	341 / 556 / 59	293 / 495 / 127	283 / 603 / 102	327 / 541 / 33	284 / 677 / 27	406 / 434 / 76	347 / 537 / 62	296 / 476 / 132	286 / 586 / 107						
	2	269 / 658 / 27	236 / 808 / 22	321 / 550 / 60	279 / 669 / 48	264 / 553 / 114	254 / 672 / 92	283 / 642 / 28	238 / 773 / 23	335 / 531 / 63	287 / 654 / 51	268 / 534 / 119	259 / 656 / 97						
	3	225 / 774 / 23	197 / 942 / 18	250 / 706 / 47	217 / 855 / 38	194 / 747 / 84	191 / 923 / 69	232 / 739 / 23	200 / 908 / 19	257 / 673 / 48	219 / 820 / 39	194 / 713 / 86	191 / 886 / 71						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																		
	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	260 / 590 / 28	238 / 725 / 23	322 / 472 / 61	290 / 572 / 48	238 / 513 / 85	244 / 634 / 69	246 / 631 / 26	238 / 785 / 22	305 / 505 / 56	293 / 628 / 46	240 / 555 / 80	245 / 674 / 64	238 / 666 / 24	229 / 812 / 20	300 / 542 / 53	288 / 664 / 43	241 / 592 / 74	254 / 726 / 60
	2	223 / 690 / 24	203 / 841 / 20	262 / 567 / 50	241 / 701 / 40	213 / 570 / 76	219 / 703 / 62	209 / 729 / 22	201 / 901 / 18	249 / 609 / 46	242 / 761 / 38	214 / 611 / 71	218 / 740 / 57	205 / 781 / 21	197 / 951 / 17	248 / 660 / 44	234 / 790 / 35	213 / 645 / 66	224 / 792 / 53
	3	186 / 806 / 20	168 / 974 / 16	207 / 739 / 39	186 / 888 / 31	159 / 780 / 57	163 / 956 / 46	177 / 866 / 19	171 / 1073 / 16	193 / 776 / 36	183 / 945 / 29	155 / 813 / 52	164 / 1015 / 43	172 / 917 / 18	166 / 1116 / 14	189 / 828 / 34	187 / 1034 / 28	161 / 895 / 50	164 / 1060 / 39
	1	305 / 590 / 31	275 / 725 / 25	378 / 472 / 71	334 / 572 / 56	264 / 513 / 102	265 / 634 / 83	288 / 631 / 28	272 / 785 / 23	356 / 505 / 65	335 / 628 / 54	265 / 555 / 95	265 / 674 / 76	277 / 666 / 26	260 / 812 / 21	348 / 542 / 62	327 / 664 / 50	264 / 592 / 89	271 / 726 / 72
	2	261 / 690 / 26	234 / 841 / 21	307 / 567 / 58	278 / 701 / 47	237 / 570 / 91	238 / 703 / 74	244 / 729 / 24	230 / 901 / 20	291 / 609 / 54	276 / 761 / 44	235 / 611 / 85	236 / 740 / 68	239 / 781 / 23	224 / 951 / 18	288 / 660 / 51	265 / 790 / 40	233 / 645 / 79	239 / 792 / 64
	3	218 / 806 / 22	194 / 974 / 18	243 / 739 / 46	215 / 888 / 36	176 / 780 / 68	177 / 956 / 55	207 / 866 / 21	196 / 1073 / 17	225 / 776 / 42	209 / 945 / 34	171 / 813 / 62	177 / 1015 / 51	200 / 917 / 19	188 / 1116 / 16	220 / 828 / 39	212 / 1034 / 32	176 / 895 / 60	176 / 1060 / 47
	1	305 / 590 / 31	275 / 725 / 25	378 / 472 / 71	334 / 572 / 56	290 / 513 / 122	286 / 634 / 99	288 / 631 / 28	272 / 785 / 23	356 / 505 / 65	335 / 628 / 54	289 / 555 / 114	285 / 674 / 92	277 / 666 / 26	260 / 812 / 21	348 / 542 / 62	327 / 664 / 50	287 / 592 / 107	290 / 726 / 86
	2	261 / 690 / 26	234 / 841 / 21	307 / 567 / 58	278 / 701 / 47	260 / 570 / 109	257 / 703 / 89	244 / 729 / 24	230 / 901 / 20	291 / 609 / 54	276 / 761 / 44	257 / 611 / 102	253 / 740 / 81	239 / 781 / 23	224 / 951 / 18	288 / 660 / 51	265 / 790 / 40	253 / 645 / 94	256 / 792 / 76
	3	218 / 806 / 22	194 / 974 / 18	243 / 739 / 46	215 / 888 / 36	194 / 780 / 81	191 / 956 / 66	207 / 866 / 21	196 / 1073 / 17	225 / 776 / 42	209 / 945 / 34	187 / 813 / 74	190 / 1015 / 61	200 / 917 / 19	188 / 1116 / 16	220 / 828 / 39	212 / 1034 / 32	192 / 895 / 71	188 / 1060 / 56
20	1	236 / 712 / 23	234 / 887 / 19	294 / 575 / 50	289 / 711 / 40	241 / 623 / 69	267 / 773 / 57	233 / 753 / 22	231 / 925 / 18	288 / 602 / 46	290 / 754 / 38	246 / 664 / 66	278 / 814 / 53	ASCE Group Zone					
	2	202 / 827 / 20	201 / 1033 / 16	240 / 689 / 40	240 / 864 / 34	216 / 691 / 62	242 / 865 / 52	204 / 897 / 19	196 / 1062 / 15	237 / 730 / 38	237 / 903 / 31	219 / 732 / 59	250 / 905 / 48	Panal Angle					
	3	174 / 997 / 17	168 / 1201 / 14	185 / 872 / 31	182 / 1072 / 26	161 / 940 / 46	175 / 1143 / 37	168 / 1029 / 16	169 / 1280 / 13	187 / 943 / 30	185 / 1148 / 24	160 / 974 / 43	185 / 1222 / 36	Mono Slope					
	1	273 / 712 / 25	265 / 887 / 21	339 / 575 / 58	326 / 711 / 47	262 / 623 / 83	276 / 773 / 68	268 / 753 / 23	259 / 925 / 19	330 / 602 / 54	324 / 754 / 44	266 / 664 / 79	279 / 814 / 64	0 - 3					
	2	233 / 827 / 21	227 / 1033 / 18	276 / 689 / 47	270 / 864 / 39	235 / 691 / 74	250 / 865 / 62	234 / 897 / 21	219 / 1062 / 16	272 / 730 / 44	266 / 903 / 36	237 / 732 / 70	251 / 905 / 57	3 = 3					
	3	201 / 997 / 18	189 / 1201 / 15	213 / 872 / 36	205 / 1072 / 30	175 / 940 / 55	181 / 1143 / 45	193 / 1029 / 17	189 / 1280 / 14	214 / 943 / 35	207 / 1148 / 28	173 / 974 / 51	186 / 1222 / 43	3 - 10					
	1	273 / 712 / 25	265 / 887 / 21	339 / 575 / 58	326 / 711 / 47	283 / 623 / 99	293 / 773 / 81	268 / 753 / 23	259 / 925 / 19	330 / 602 / 54	324 / 754 / 44	286 / 664 / 94	296 / 814 / 76	1 = 1					
	2	233 / 827 / 21	227 / 1033 / 18	276 / 689 / 47	270 / 864 / 39	254 / 691 / 89	266 / 865 / 74	234 / 897 / 21	219 / 1062 / 16	272 / 730 / 44	266 / 903 / 36	255 / 732 / 84	266 / 905 / 69	2 = 2' / 2					
	3	201 / 997 / 18	189 / 1201 / 15	213 / 872 / 36	205 / 1072 / 30	189 / 940 / 66	193 / 1143 / 54	193 / 1029 / 17	189 / 1280 / 14	214 / 943 / 35	207 / 1148 / 28	186 / 974 / 61	197 / 1222 / 51	3 = 3' / 3					
25	1	230 / 789 / 20	236 / 992 / 17	287 / 640 / 44	289 / 791 / 36	249 / 702 / 62	286 / 848 / 50	233 / 846 / 20	230 / 1013 / 16	286 / 673 / 42	287 / 821 / 34	256 / 735 / 59	304 / 908 / 48	10 - 30					
	2	199 / 929 / 18	198 / 1131 / 14	234 / 766 / 36	233 / 933 / 29	221 / 768 / 55	256 / 935 / 45	201 / 991 / 17	200 / 1195 / 14	238 / 823 / 35	238 / 994 / 28	232 / 825 / 53	270 / 995 / 43	1 = 1					
	3	169 / 1098 / 15	170 / 1353 / 12	181 / 971 / 28	187 / 1219 / 23	164 / 1041 / 41	194 / 1294 / 34	169 / 1163 / 14	170 / 1416 / 12	183 / 1033 / 27	188 / 1284 / 22	171 / 1104 / 39	203 / 1359 / 32	2 = 2					
	1	262 / 789 / 22	263 / 992 / 18	327 / 640 / 51	322 / 791 / 42	268 / 702 / 74	286 / 848 / 60	264 / 846 / 21	255 / 1013 / 17	324 / 673 / 48	318 / 821 / 39	270 / 735 / 70	304 / 908 / 57	3 = 3					
	2	227 / 929 / 19	221 / 1131 / 16	267 / 766 / 42	260 / 933 / 34	238 / 768 / 66	256 / 935 / 53	228 / 991 / 18	222 / 1195 / 15	270 / 823 / 40	263 / 994 / 32	245 / 825 / 64	270 / 995 / 51	ASCE Group Zone					
	3	192 / 1098 / 16	189 / 1353 / 13	207 / 971 / 32	208 / 1219 / 27	177 / 1041 / 49	194 / 1294 / 41	192 / 1163 / 16	189 / 1416 / 13	207 / 1033 / 31	208 / 1284 / 26	180 / 1104 / 47	203 / 1359 / 38	Panal Angle					
	1	262 / 789 / 22	263 / 992 / 18	327 / 640 / 51	322 / 791 / 42	287 / 702 / 89	296 / 848 / 71	264 / 846 / 21	255 / 1013 / 17	324 / 673 / 48	318 / 821 / 39	288 / 735 / 84	306 / 908 / 69	Mono Slope					
	2	227 / 929 / 19	221 / 1131 / 16	267 / 766 / 42	260 / 933 / 34	255 / 768 / 79	265 / 935 / 64	228 / 991 / 18	222 / 1195 / 15	270 / 823 / 40	263 / 994 / 32	262 / 825 / 76	272 / 995 / 61	1 = 1					
	3	192 / 1098 / 16	189 / 1353 / 13	207 / 971 / 32	208 / 1219 / 27	189 / 1041 / 59	201 / 1294 / 49	192 / 1163 / 16	189 / 1416 / 13	207 / 1033 / 31	208 / 1284 / 26	192 / 1104 / 56	204 / 1359 / 46	2 = 2					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	394 / 457 / 39	321 / 570 / 32	473 / 350 / 88	394 / 452 / 74	378 / 398 / 183	320 / 493 / 148	379 / 484 / 38	306 / 597 / 31	465 / 380 / 87	372 / 469 / 70	360 / 417 / 174	318 / 519 / 142	357 / 499 / 36	294 / 621 / 29	444 / 397 / 83	360 / 493 / 67	348 / 441 / 169	315 / 544 / 136
2		336 / 535 / 33	270 / 655 / 27	401 / 445 / 75	322 / 548 / 60	342 / 449 / 166	288 / 551 / 133	321 / 562 / 32	263 / 699 / 26	380 / 463 / 71	308 / 574 / 58	323 / 466 / 157	285 / 577 / 127	306 / 586 / 31	250 / 720 / 25	365 / 487 / 68	296 / 598 / 55	311 / 490 / 151	281 / 601 / 121	
3		285 / 639 / 28	226 / 770 / 23	308 / 569 / 58	251 / 704 / 47	250 / 610 / 121	211 / 744 / 98	270 / 665 / 27	219 / 816 / 22	294 / 595 / 55	237 / 727 / 44	238 / 636 / 115	206 / 765 / 92	255 / 686 / 26	213 / 860 / 21	279 / 618 / 52	231 / 769 / 43	226 / 658 / 110	206 / 807 / 89	
35		1	433 / 457 / 41	353 / 570 / 34	511 / 345 / 95	433 / 452 / 81	412 / 398 / 209	347 / 493 / 169	417 / 484 / 40	337 / 597 / 32	511 / 380 / 95	409 / 469 / 76	392 / 417 / 199	344 / 519 / 162	393 / 499 / 37	323 / 621 / 31	488 / 397 / 91	396 / 493 / 73	379 / 441 / 192	340 / 544 / 155
		2	369 / 535 / 35	297 / 655 / 28	440 / 445 / 82	354 / 548 / 66	372 / 449 / 189	313 / 551 / 152	353 / 562 / 34	289 / 699 / 28	417 / 463 / 78	338 / 574 / 63	352 / 466 / 179	308 / 577 / 145	337 / 586 / 32	274 / 720 / 26	401 / 487 / 75	325 / 598 / 60	339 / 490 / 172	303 / 601 / 139
		3	313 / 639 / 30	249 / 770 / 24	338 / 569 / 63	275 / 704 / 51	273 / 610 / 139	229 / 744 / 112	297 / 665 / 28	241 / 816 / 23	323 / 595 / 60	260 / 727 / 49	259 / 636 / 132	222 / 765 / 105	281 / 686 / 27	234 / 860 / 22	307 / 618 / 57	253 / 769 / 47	246 / 658 / 125	222 / 807 / 102
40		1	472 / 457 / 43	385 / 570 / 35	540 / 334 / 100	471 / 452 / 87	446 / 398 / 235	375 / 493 / 190	455 / 484 / 42	367 / 597 / 34	540 / 368 / 100	446 / 469 / 83	424 / 417 / 224	370 / 519 / 182	428 / 499 / 39	352 / 621 / 32	531 / 397 / 99	431 / 493 / 80	410 / 441 / 216	365 / 544 / 175
		2	402 / 535 / 37	324 / 655 / 30	480 / 445 / 89	386 / 548 / 72	403 / 449 / 213	337 / 551 / 171	385 / 562 / 35	315 / 699 / 29	454 / 463 / 84	369 / 574 / 68	381 / 466 / 201	332 / 577 / 163	367 / 586 / 34	299 / 720 / 27	437 / 487 / 81	353 / 598 / 65	367 / 490 / 194	326 / 601 / 156
		3	341 / 639 / 31	271 / 770 / 25	369 / 569 / 68	300 / 704 / 56	295 / 610 / 156	247 / 744 / 125	324 / 665 / 30	262 / 816 / 24	352 / 595 / 65	283 / 727 / 53	281 / 636 / 148	239 / 765 / 118	306 / 686 / 28	255 / 860 / 23	334 / 618 / 62	276 / 769 / 51	266 / 658 / 141	239 / 807 / 114
Wind Speed [mph]		110						115												
30	1	343 / 521 / 34	286 / 642 / 28	423 / 413 / 79	355 / 516 / 64	329 / 455 / 160	312 / 566 / 130	328 / 541 / 33	285 / 677 / 27	408 / 434 / 76	349 / 537 / 62	324 / 476 / 154	309 / 586 / 124							
	2	292 / 607 / 29	248 / 760 / 24	351 / 510 / 66	288 / 619 / 52	299 / 513 / 145	277 / 621 / 115	285 / 642 / 28	239 / 773 / 23	337 / 531 / 63	288 / 654 / 51	293 / 534 / 139	279 / 656 / 113							
	3	248 / 725 / 25	203 / 870 / 20	272 / 655 / 51	229 / 809 / 42	220 / 696 / 107	206 / 848 / 86	234 / 739 / 23	201 / 908 / 19	258 / 673 / 48	220 / 820 / 39	212 / 713 / 101	206 / 886 / 83							
	35	1	377 / 521 / 36	313 / 642 / 29	464 / 413 / 86	389 / 516 / 70	359 / 455 / 182	336 / 566 / 149	361 / 541 / 34	312 / 677 / 28	448 / 434 / 84	381 / 537 / 68	353 / 476 / 176	331 / 586 / 142						
		2	321 / 607 / 31	272 / 760 / 25	385 / 510 / 72	316 / 619 / 57	326 / 513 / 166	298 / 621 / 132	313 / 642 / 30	262 / 773 / 24	370 / 531 / 69	315 / 654 / 56	319 / 534 / 159	300 / 656 / 128						
		3	273 / 725 / 26	223 / 870 / 21	299 / 655 / 56	251 / 809 / 46	239 / 696 / 122	222 / 848 / 98	257 / 739 / 25	219 / 908 / 20	283 / 673 / 53	240 / 820 / 43	231 / 713 / 115	221 / 886 / 95						
	40	1	411 / 521 / 38	341 / 642 / 31	506 / 413 / 94	422 / 516 / 76	388 / 455 / 205	360 / 566 / 167	393 / 541 / 36	339 / 677 / 30	488 / 434 / 91	413 / 537 / 73	381 / 476 / 197	354 / 586 / 160						
		2	350 / 607 / 32	296 / 760 / 27	420 / 510 / 78	343 / 619 / 62	352 / 513 / 186	319 / 621 / 148	341 / 642 / 31	284 / 773 / 25	403 / 531 / 75	342 / 654 / 61	345 / 534 / 178	321 / 656 / 144						
		3	297 / 725 / 27	242 / 870 / 22	326 / 655 / 61	273 / 809 / 50	259 / 696 / 137	238 / 848 / 110	280 / 739 / 26	238 / 908 / 21	309 / 673 / 57	261 / 820 / 46	249 / 713 / 129	236 / 886 / 107						
Wind Speed [mph]		120						130												
30	1	314 / 560 / 31	277 / 692 / 26	394 / 454 / 74	342 / 556 / 59	321 / 495 / 148	304 / 603 / 118	328 / 541 / 33	285 / 677 / 27	408 / 434 / 76	349 / 537 / 62	324 / 476 / 154	309 / 586 / 124							
	2	270 / 658 / 27	237 / 808 / 22	322 / 550 / 60	280 / 669 / 48	289 / 553 / 133	274 / 672 / 107	285 / 642 / 28	239 / 773 / 23	337 / 531 / 63	288 / 654 / 51	293 / 534 / 139	279 / 656 / 113							
	3	226 / 774 / 23	198 / 942 / 18	251 / 706 / 47	218 / 855 / 38	212 / 747 / 98	206 / 923 / 80	234 / 739 / 23	201 / 908 / 19	258 / 673 / 48	220 / 820 / 39	212 / 713 / 101	206 / 886 / 83							
	35	1	345 / 560 / 33	302 / 692 / 27	433 / 454 / 81	373 / 556 / 65	348 / 495 / 169	326 / 603 / 135	361 / 541 / 34	312 / 677 / 28	448 / 434 / 84	381 / 537 / 68	353 / 476 / 176	331 / 586 / 142						
		2	297 / 658 / 28	259 / 808 / 23	354 / 550 / 66	305 / 669 / 53	313 / 553 / 152	294 / 672 / 122	313 / 642 / 30	262 / 773 / 24	370 / 531 / 69	315 / 654 / 56	319 / 534 / 159	300 / 656 / 128						
		3	249 / 774 / 24	216 / 942 / 19	275 / 706 / 51	238 / 855 / 41	230 / 747 / 112	220 / 923 / 91	257 / 739 / 25	219 / 908 / 20	283 / 673 / 53	240 / 820 / 43	231 / 713 / 115	221 / 886 / 95						
	40	1	376 / 560 / 35	327 / 692 / 28	471 / 454 / 87	404 / 556 / 70	375 / 495 / 190	348 / 603 / 152	393 / 541 / 36	339 / 677 / 30	488 / 434 / 91	413 / 537 / 73	381 / 476 / 197	354 / 586 / 160						
		2	324 / 658 / 30	281 / 808 / 24	386 / 550 / 72	331 / 669 / 57	338 / 553 / 171	313 / 672 / 137	341 / 642 / 31	284 / 773 / 25	403 / 531 / 75	342 / 654 / 61	345 / 534 / 178	321 / 656 / 144						
		3	271 / 774 / 25	234 / 942 / 20	300 / 706 / 56	257 / 855 / 45	248 / 747 / 125	235 / 923 / 103	280 / 739 / 26	238 / 908 / 21	309 / 673 / 57	261 / 820 / 46	249 / 713 / 129	236 / 886 / 107						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
	30	1	306 / 590 / 31	276 / 725 / 25	380 / 472 / 71	335 / 572 / 56	316 / 513 / 142	307 / 634 / 115	290 / 631 / 28	273 / 785 / 23	358 / 505 / 66	336 / 628 / 54	314 / 555 / 133	304 / 674 / 107	279 / 666 / 26	261 / 812 / 21	350 / 542 / 62	328 / 664 / 50	310 / 592 / 124	308 / 726 / 101
2		263 / 690 / 26	235 / 841 / 21	308 / 567 / 58	279 / 701 / 47	284 / 570 / 127	276 / 703 / 104	245 / 729 / 24	231 / 901 / 20	292 / 609 / 54	277 / 761 / 44	279 / 611 / 118	270 / 740 / 95	240 / 781 / 23	225 / 951 / 18	289 / 660 / 51	266 / 790 / 40	273 / 645 / 110	272 / 792 / 89	
3		219 / 806 / 22	195 / 974 / 18	244 / 739 / 46	216 / 888 / 36	211 / 780 / 95	205 / 956 / 77	208 / 866 / 21	197 / 1073 / 17	226 / 776 / 42	210 / 945 / 34	202 / 813 / 86	203 / 1015 / 71	201 / 917 / 19	189 / 1116 / 16	221 / 828 / 39	213 / 1034 / 32	207 / 895 / 83	199 / 1060 / 65	
35		1	337 / 590 / 32	300 / 725 / 26	417 / 472 / 78	365 / 572 / 62	343 / 513 / 162	329 / 634 / 132	318 / 631 / 30	296 / 785 / 25	392 / 505 / 72	364 / 628 / 59	338 / 555 / 152	324 / 674 / 122	305 / 666 / 28	282 / 812 / 22	382 / 542 / 68	354 / 664 / 54	333 / 592 / 142	327 / 726 / 115
		2	289 / 690 / 28	256 / 841 / 22	338 / 567 / 63	304 / 701 / 51	307 / 570 / 145	295 / 703 / 118	269 / 729 / 25	250 / 901 / 21	320 / 609 / 59	301 / 761 / 49	301 / 611 / 135	288 / 740 / 108	262 / 781 / 24	243 / 951 / 19	316 / 660 / 56	287 / 790 / 44	293 / 645 / 125	288 / 792 / 102
		3	241 / 806 / 23	212 / 974 / 19	268 / 739 / 50	235 / 888 / 40	229 / 780 / 108	219 / 956 / 88	228 / 866 / 22	213 / 1073 / 18	248 / 776 / 46	228 / 945 / 37	218 / 813 / 98	216 / 1015 / 81	220 / 917 / 20	204 / 1116 / 16	241 / 828 / 43	230 / 1034 / 35	222 / 895 / 95	211 / 1060 / 75
40		1	367 / 590 / 34	325 / 725 / 27	454 / 472 / 84	394 / 572 / 67	369 / 513 / 182	350 / 634 / 148	346 / 631 / 31	320 / 785 / 26	427 / 505 / 78	393 / 628 / 64	363 / 555 / 171	343 / 674 / 137	331 / 666 / 29	303 / 812 / 23	415 / 542 / 73	380 / 664 / 59	356 / 592 / 160	345 / 726 / 129
		2	315 / 690 / 29	277 / 841 / 23	369 / 567 / 68	329 / 701 / 56	330 / 570 / 163	314 / 703 / 133	293 / 729 / 27	270 / 901 / 22	348 / 609 / 64	324 / 761 / 53	323 / 611 / 152	305 / 740 / 122	285 / 781 / 25	261 / 951 / 20	343 / 660 / 61	308 / 790 / 48	313 / 645 / 141	305 / 792 / 114
		3	262 / 806 / 24	230 / 974 / 20	292 / 739 / 54	254 / 888 / 43	246 / 780 / 122	233 / 956 / 99	249 / 866 / 23	230 / 1073 / 19	270 / 776 / 50	246 / 945 / 40	234 / 813 / 110	229 / 1015 / 91	239 / 917 / 21	220 / 1116 / 17	262 / 828 / 46	247 / 1034 / 38	237 / 895 / 107	223 / 1060 / 84
Wind Speed [mph]		170						180												
30	1	274 / 712 / 25	266 / 887 / 21	341 / 575 / 58	327 / 711 / 47	305 / 623 / 115	311 / 773 / 95	269 / 753 / 23	260 / 925 / 19	331 / 602 / 54	326 / 754 / 44	306 / 664 / 110	312 / 814 / 89							
	2	234 / 827 / 21	228 / 1033 / 18	278 / 689 / 47	271 / 864 / 39	274 / 691 / 104	282 / 865 / 86	235 / 897 / 21	220 / 1062 / 16	273 / 730 / 44	266 / 903 / 36	273 / 732 / 98	281 / 905 / 80							
	3	202 / 997 / 18	190 / 1201 / 15	214 / 872 / 36	206 / 1072 / 30	203 / 940 / 77	204 / 1143 / 62	193 / 1029 / 17	190 / 1280 / 14	215 / 943 / 35	207 / 1148 / 28	199 / 974 / 71	208 / 1222 / 59							
	35	1	299 / 712 / 26	286 / 887 / 22	371 / 575 / 63	352 / 711 / 51	326 / 623 / 132	328 / 773 / 108	292 / 753 / 25	279 / 925 / 20	359 / 602 / 59	349 / 754 / 49	326 / 664 / 125	328 / 814 / 102						
		2	255 / 827 / 22	245 / 1033 / 19	302 / 689 / 51	292 / 864 / 43	293 / 691 / 118	297 / 865 / 98	256 / 897 / 22	236 / 1062 / 17	296 / 730 / 49	285 / 903 / 40	291 / 732 / 112	295 / 905 / 91						
		3	220 / 997 / 19	204 / 1201 / 16	233 / 872 / 40	221 / 1072 / 33	217 / 940 / 88	215 / 1143 / 71	210 / 1029 / 18	204 / 1280 / 15	234 / 943 / 38	222 / 1148 / 31	212 / 974 / 81	219 / 1222 / 68						
	40	1	323 / 712 / 27	306 / 887 / 23	401 / 575 / 68	377 / 711 / 56	347 / 623 / 148	346 / 773 / 122	315 / 753 / 26	298 / 925 / 21	387 / 602 / 64	372 / 754 / 53	346 / 664 / 141	345 / 814 / 114						
		2	276 / 827 / 23	262 / 1033 / 20	327 / 689 / 56	312 / 864 / 46	312 / 691 / 133	313 / 865 / 110	276 / 897 / 23	252 / 1062 / 18	320 / 730 / 53	304 / 903 / 43	309 / 732 / 125	310 / 905 / 103						
		3	238 / 997 / 20	219 / 1201 / 16	252 / 872 / 43	237 / 1072 / 35	232 / 940 / 99	227 / 1143 / 80	227 / 1029 / 19	218 / 1280 / 16	252 / 943 / 42	237 / 1148 / 34	225 / 974 / 91	230 / 1222 / 76						
Wind Speed [mph]		190						200												
30	1	263 / 789 / 22	264 / 992 / 18	328 / 640 / 51	323 / 791 / 42	307 / 702 / 104	312 / 848 / 83	265 / 846 / 21	256 / 1013 / 17	325 / 673 / 48	319 / 821 / 39	306 / 735 / 98	321 / 908 / 80							
	2	228 / 929 / 19	222 / 1131 / 16	268 / 766 / 42	260 / 933 / 34	272 / 768 / 92	278 / 935 / 74	229 / 991 / 18	223 / 1195 / 15	271 / 823 / 40	264 / 994 / 32	278 / 825 / 89	285 / 995 / 71							
	3	193 / 1098 / 16	190 / 1353 / 13	207 / 971 / 32	208 / 1219 / 27	202 / 1041 / 68	212 / 1294 / 57	192 / 1163 / 16	189 / 1416 / 13	208 / 1033 / 31	209 / 1284 / 26	204 / 1104 / 65	214 / 1359 / 54							
	35	1	285 / 789 / 23	282 / 992 / 19	355 / 640 / 56	345 / 791 / 46	326 / 702 / 118	327 / 848 / 95	286 / 846 / 22	272 / 1013 / 18	350 / 673 / 53	339 / 821 / 43	324 / 735 / 112	336 / 908 / 91						
		2	247 / 929 / 20	237 / 1131 / 16	290 / 766 / 46	278 / 933 / 37	288 / 768 / 105	292 / 935 / 85	247 / 991 / 19	237 / 1195 / 16	292 / 823 / 44	281 / 994 / 35	294 / 825 / 102	299 / 995 / 81						
		3	209 / 1098 / 17	203 / 1353 / 14	224 / 971 / 35	222 / 1219 / 30	214 / 1041 / 78	222 / 1294 / 64	208 / 1163 / 16	202 / 1416 / 13	224 / 1033 / 34	222 / 1284 / 28	216 / 1104 / 75	224 / 1359 / 61						
	40	1	307 / 789 / 24	300 / 992 / 20	382 / 640 / 61	366 / 791 / 50	345 / 702 / 133	342 / 848 / 107	307 / 846 / 23	289 / 1013 / 19	375 / 673 / 57	359 / 821 / 46	342 / 735 / 125	350 / 908 / 103						
		2	266 / 929 / 21	252 / 1131 / 17	311 / 766 / 50	296 / 933 / 40	305 / 768 / 118	305 / 935 / 95	265 / 991 / 20	251 / 1195 / 16	313 / 823 / 48	298 / 994 / 38	311 / 825 / 114	312 / 995 / 91						
		3	225 / 1098 / 18	216 / 1353 / 15	241 / 971 / 38	237 / 1219 / 32	227 / 1041 / 88	232 / 1294 / 72	223 / 1163 / 17	214 / 1416 / 14	240 / 1033 / 37	236 / 1284 / 31	228 / 1104 / 84	234 / 1359 / 69						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	1	516 / 457 / 99	421 / 570 / 81	568 / 324 / 157	512 / 452 / 142	480 / 398 / 268	402 / 493 / 216	497 / 484 / 95	402 / 597 / 77	568 / 357 / 157	484 / 469 / 134	456 / 417 / 255	396 / 519 / 208	469 / 499 / 90	383 / 621 / 74	568 / 391 / 157	466 / 493 / 129	441 / 441 / 247	391 / 544 / 199	
45	2	440 / 535 / 84	354 / 655 / 68	522 / 445 / 145	419 / 548 / 116	433 / 449 / 242	362 / 551 / 195	421 / 562 / 81	344 / 699 / 66	494 / 463 / 137	401 / 574 / 111	410 / 466 / 229	355 / 577 / 186	402 / 586 / 77	325 / 720 / 63	475 / 487 / 132	382 / 598 / 106	395 / 490 / 221	348 / 601 / 178	
	3	373 / 639 / 72	297 / 770 / 57	401 / 569 / 111	326 / 704 / 91	317 / 610 / 178	265 / 744 / 143	354 / 665 / 68	287 / 816 / 55	382 / 595 / 106	308 / 727 / 85	302 / 636 / 169	256 / 765 / 134	335 / 686 / 64	278 / 860 / 53	363 / 618 / 101	298 / 769 / 83	286 / 658 / 160	255 / 807 / 130	
	1	569 / 457 / 106	463 / 570 / 87	605 / 313 / 165	564 / 452 / 154	513 / 398 / 292	429 / 493 / 236	548 / 484 / 102	442 / 597 / 83	605 / 345 / 165	533 / 469 / 146	488 / 417 / 278	423 / 519 / 226	516 / 499 / 96	421 / 621 / 79	605 / 378 / 165	513 / 493 / 140	472 / 441 / 269	416 / 544 / 217	
50	2	484 / 535 / 91	390 / 655 / 73	574 / 445 / 157	461 / 548 / 126	464 / 449 / 264	386 / 551 / 212	463 / 562 / 87	379 / 699 / 71	543 / 463 / 149	441 / 574 / 121	439 / 466 / 250	379 / 577 / 203	442 / 586 / 83	358 / 720 / 67	523 / 487 / 143	420 / 598 / 115	422 / 490 / 241	370 / 601 / 193	
	3	411 / 639 / 77	327 / 770 / 61	441 / 569 / 121	359 / 704 / 98	340 / 610 / 193	283 / 744 / 156	390 / 665 / 73	316 / 816 / 59	420 / 595 / 115	339 / 727 / 93	323 / 636 / 184	273 / 765 / 146	369 / 686 / 69	306 / 860 / 57	400 / 618 / 109	328 / 769 / 90	307 / 658 / 175	271 / 807 / 142	
	1	673 / 457 / 121	548 / 570 / 98	679 / 297 / 182	667 / 452 / 178	578 / 392 / 335	484 / 493 / 275	648 / 484 / 116	523 / 597 / 94	679 / 327 / 182	631 / 469 / 169	559 / 417 / 324	475 / 519 / 264	611 / 499 / 109	499 / 621 / 89	679 / 359 / 182	607 / 493 / 162	540 / 441 / 313	466 / 544 / 253	
60	2	573 / 535 / 103	461 / 655 / 83	679 / 445 / 182	546 / 548 / 146	530 / 449 / 308	435 / 551 / 247	548 / 562 / 98	449 / 699 / 81	643 / 463 / 172	522 / 574 / 140	502 / 466 / 291	425 / 577 / 236	523 / 586 / 94	424 / 720 / 76	619 / 487 / 165	497 / 598 / 133	483 / 490 / 280	415 / 601 / 225	
	3	486 / 639 / 87	386 / 770 / 69	522 / 569 / 140	425 / 704 / 114	389 / 610 / 225	319 / 744 / 182	461 / 665 / 83	374 / 816 / 67	497 / 595 / 133	400 / 727 / 107	370 / 636 / 214	307 / 765 / 171	436 / 686 / 78	362 / 860 / 65	473 / 618 / 127	388 / 769 / 104	351 / 658 / 203	304 / 807 / 165	
	1	450 / 521 / 86	368 / 642 / 70	549 / 413 / 152	456 / 516 / 124	418 / 455 / 234	384 / 566 / 190	430 / 541 / 83	366 / 677 / 68	531 / 434 / 147	446 / 537 / 119	409 / 476 / 225	377 / 586 / 182							
45	2	383 / 607 / 74	320 / 760 / 61	456 / 510 / 127	371 / 619 / 101	379 / 513 / 212	341 / 621 / 169	373 / 642 / 72	307 / 773 / 57	438 / 531 / 121	368 / 654 / 98	370 / 534 / 203	341 / 656 / 165							
	3	325 / 725 / 63	262 / 870 / 50	354 / 655 / 98	295 / 809 / 80	279 / 696 / 156	253 / 848 / 126	306 / 739 / 59	257 / 908 / 48	335 / 673 / 93	281 / 820 / 75	268 / 713 / 147	252 / 886 / 121							
	1	495 / 521 / 93	400 / 642 / 75	605 / 413 / 165	492 / 516 / 135	447 / 455 / 255	408 / 566 / 208	474 / 541 / 89	393 / 677 / 73	584 / 434 / 160	478 / 537 / 129	438 / 476 / 245	400 / 586 / 198							
50	2	421 / 607 / 79	348 / 760 / 65	502 / 510 / 137	400 / 619 / 109	406 / 513 / 231	362 / 621 / 184	411 / 642 / 77	329 / 773 / 61	482 / 531 / 132	395 / 654 / 107	396 / 534 / 222	362 / 656 / 179							
	3	358 / 725 / 67	285 / 870 / 53	390 / 655 / 107	318 / 809 / 87	298 / 696 / 170	269 / 848 / 137	337 / 739 / 63	276 / 908 / 51	369 / 673 / 101	302 / 820 / 82	286 / 713 / 161	267 / 886 / 132							
	1	586 / 521 / 105	474 / 642 / 85	679 / 392 / 182	582 / 516 / 156	512 / 455 / 297	456 / 566 / 242	561 / 541 / 101	461 / 677 / 83	679 / 426 / 182	558 / 537 / 149	494 / 476 / 286	446 / 586 / 231							
60	2	499 / 607 / 89	411 / 760 / 74	594 / 510 / 159	473 / 619 / 127	464 / 513 / 269	404 / 621 / 214	486 / 642 / 87	386 / 773 / 69	570 / 531 / 153	461 / 654 / 123	447 / 534 / 258	403 / 656 / 209							
	3	424 / 725 / 76	337 / 870 / 61	461 / 655 / 123	376 / 809 / 101	341 / 696 / 198	301 / 848 / 160	399 / 739 / 72	324 / 908 / 58	437 / 673 / 117	352 / 820 / 94	323 / 713 / 187	297 / 886 / 154							
	1	411 / 560 / 79	353 / 692 / 64	512 / 454 / 142	435 / 556 / 114	402 / 495 / 216	370 / 603 / 173	430 / 541 / 83	366 / 677 / 68	531 / 434 / 147	446 / 537 / 119	409 / 476 / 225	377 / 586 / 182							
45	2	354 / 658 / 68	302 / 808 / 55	419 / 550 / 116	356 / 669 / 93	362 / 553 / 195	333 / 672 / 156	373 / 642 / 72	307 / 773 / 57	438 / 531 / 121	368 / 654 / 98	370 / 534 / 203	341 / 656 / 165							
	3	297 / 774 / 57	252 / 942 / 46	326 / 706 / 91	277 / 855 / 73	266 / 747 / 143	250 / 923 / 117	306 / 739 / 59	257 / 908 / 48	335 / 673 / 93	281 / 820 / 75	268 / 713 / 147	252 / 886 / 121							
	1	453 / 560 / 85	378 / 692 / 69	564 / 454 / 154	466 / 556 / 123	430 / 495 / 236	392 / 603 / 189	474 / 541 / 89	393 / 677 / 73	584 / 434 / 160	478 / 537 / 129	438 / 476 / 245	400 / 586 / 198							
50	2	390 / 658 / 73	324 / 808 / 59	461 / 550 / 126	381 / 669 / 101	387 / 553 / 212	352 / 672 / 170	411 / 642 / 77	329 / 773 / 61	482 / 531 / 132	395 / 654 / 107	396 / 534 / 222	362 / 656 / 179							
	3	327 / 774 / 61	270 / 942 / 49	359 / 706 / 98	297 / 855 / 79	284 / 747 / 156	264 / 923 / 128	337 / 739 / 63	276 / 908 / 51	369 / 673 / 101	302 / 820 / 82	286 / 713 / 161	267 / 886 / 132							
	1	536 / 560 / 96	436 / 692 / 78	667 / 454 / 178	534 / 556 / 143	484 / 495 / 275	435 / 603 / 220	561 / 541 / 101	461 / 677 / 83	679 / 426 / 182	558 / 537 / 149	494 / 476 / 286	446 / 586 / 231							
60	2	461 / 658 / 83	374 / 808 / 67	546 / 550 / 146	437 / 669 / 117	436 / 553 / 247	392 / 672 / 198	486 / 642 / 87	386 / 773 / 69	570 / 531 / 153	461 / 654 / 123	447 / 534 / 258	403 / 656 / 209							
	3	386 / 774 / 69	312 / 942 / 56	425 / 706 / 114	340 / 855 / 91	320 / 747 / 182	294 / 923 / 149	399 / 739 / 72	324 / 908 / 58	437 / 673 / 117	352 / 820 / 94	323 / 713 / 187	297 / 886 / 154							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	45	1	402 / 590 / 77	350 / 725 / 63	494 / 472 / 137	424 / 572 / 109	395 / 513 / 208	371 / 634 / 169	375 / 631 / 72	343 / 785 / 59	461 / 505 / 127	421 / 628 / 103	387 / 555 / 195	363 / 674 / 156	357 / 666 / 66	324 / 812 / 53	447 / 542 / 119	406 / 664 / 96	379 / 592 / 182	364 / 726 / 147															
2		344 / 690 / 66	298 / 841 / 53	401 / 567 / 111	353 / 701 / 91	354 / 570 / 186	333 / 703 / 152	317 / 729 / 61	289 / 901 / 50	377 / 609 / 103	347 / 761 / 85	344 / 611 / 173	323 / 740 / 139	307 / 781 / 57	279 / 951 / 46	369 / 660 / 98	329 / 790 / 78	334 / 645 / 160	321 / 792 / 130																
3		287 / 806 / 55	247 / 974 / 44	317 / 739 / 88	273 / 888 / 70	263 / 780 / 139	248 / 956 / 113	269 / 866 / 52	247 / 1073 / 42	292 / 776 / 80	263 / 945 / 65	250 / 813 / 126	242 / 1015 / 104	258 / 917 / 48	235 / 1116 / 39	282 / 828 / 75	264 / 1034 / 62	253 / 895 / 121	235 / 1060 / 95																
50		1	442 / 590 / 83	374 / 725 / 67	543 / 472 / 149	453 / 572 / 118	421 / 513 / 226	392 / 634 / 184	411 / 631 / 77	366 / 785 / 63	502 / 505 / 137	449 / 628 / 112	412 / 555 / 212	383 / 674 / 170	383 / 666 / 71	345 / 812 / 57	479 / 542 / 129	432 / 664 / 104	402 / 592 / 198	382 / 726 / 161															
		2	379 / 690 / 71	319 / 841 / 57	441 / 567 / 121	378 / 701 / 98	377 / 570 / 203	352 / 703 / 165	348 / 729 / 65	309 / 901 / 53	410 / 609 / 112	370 / 761 / 93	366 / 611 / 189	340 / 740 / 151	330 / 781 / 61	297 / 951 / 49	396 / 660 / 107	350 / 790 / 84	354 / 645 / 175	337 / 792 / 142															
		3	316 / 806 / 59	264 / 974 / 47	349 / 739 / 95	292 / 888 / 76	281 / 780 / 151	262 / 956 / 123	295 / 866 / 55	263 / 1073 / 46	318 / 776 / 87	281 / 945 / 70	266 / 813 / 137	255 / 1015 / 113	277 / 917 / 51	250 / 1116 / 42	302 / 828 / 82	280 / 1034 / 68	268 / 895 / 132	247 / 1060 / 104															
60		1	523 / 590 / 94	424 / 725 / 76	643 / 472 / 172	513 / 572 / 136	473 / 513 / 264	435 / 634 / 214	486 / 631 / 87	412 / 785 / 72	594 / 505 / 159	505 / 628 / 130	461 / 555 / 247	422 / 674 / 198	449 / 666 / 81	387 / 812 / 65	558 / 542 / 149	484 / 664 / 120	447 / 592 / 231	419 / 726 / 187															
		2	449 / 690 / 81	362 / 841 / 65	522 / 567 / 140	427 / 701 / 114	424 / 570 / 236	390 / 703 / 192	411 / 729 / 74	348 / 901 / 61	485 / 609 / 130	417 / 761 / 107	410 / 611 / 220	375 / 740 / 176	386 / 781 / 69	334 / 951 / 56	461 / 660 / 123	393 / 790 / 98	394 / 645 / 203	370 / 792 / 165															
		3	374 / 806 / 67	299 / 974 / 54	413 / 739 / 110	330 / 888 / 88	316 / 780 / 176	290 / 956 / 143	349 / 866 / 63	296 / 1073 / 52	376 / 776 / 101	316 / 945 / 81	297 / 813 / 160	281 / 1015 / 132	324 / 917 / 58	280 / 1116 / 47	352 / 828 / 94	314 / 1034 / 78	298 / 895 / 154	271 / 1060 / 121															
Wind Speed [mph]		170						180																											
45	1	348 / 712 / 63	326 / 887 / 52	432 / 575 / 111	401 / 711 / 91	368 / 623 / 169	363 / 773 / 139	339 / 753 / 59	317 / 925 / 48	415 / 602 / 103	395 / 754 / 85	367 / 664 / 160	361 / 814 / 130	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
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2	297 / 827 / 53	280 / 1033 / 44	352 / 689 / 91	332 / 864 / 75	331 / 691 / 152	329 / 865 / 126	296 / 897 / 52	268 / 1062 / 41	343 / 730 / 85	324 / 903 / 70	327 / 732 / 143	325 / 905 / 117																							
3	256 / 997 / 46	233 / 1201 / 37	271 / 872 / 70	252 / 1072 / 57	246 / 940 / 113	238 / 1143 / 91	243 / 1029 / 42	231 / 1280 / 35	270 / 943 / 67	252 / 1148 / 55	238 / 974 / 104	241 / 1222 / 87																							
50	1	373 / 712 / 67	347 / 887 / 55	462 / 575 / 121	426 / 711 / 98	390 / 623 / 184	380 / 773 / 151	362 / 753 / 63	335 / 925 / 51	444 / 602 / 112	419 / 754 / 93	387 / 664 / 175	377 / 814 / 142																						
	2	318 / 827 / 57	297 / 1033 / 47	376 / 689 / 98	353 / 864 / 82	350 / 691 / 165	345 / 865 / 137	317 / 897 / 55	284 / 1062 / 44	366 / 730 / 93	343 / 903 / 76	345 / 732 / 156	340 / 905 / 128																						
	3	274 / 997 / 49	248 / 1201 / 40	290 / 872 / 76	268 / 1072 / 62	260 / 940 / 123	250 / 1143 / 99	260 / 1029 / 46	245 / 1280 / 38	288 / 943 / 73	267 / 1148 / 59	251 / 974 / 113	252 / 1222 / 95																						
60	1	424 / 712 / 76	387 / 887 / 63	523 / 575 / 140	475 / 711 / 114	432 / 623 / 214	415 / 773 / 176	408 / 753 / 72	373 / 925 / 58	500 / 602 / 130	465 / 754 / 107	427 / 664 / 203	410 / 814 / 165																						
	2	362 / 827 / 65	332 / 1033 / 54	425 / 689 / 114	394 / 864 / 94	388 / 691 / 192	376 / 865 / 160	357 / 897 / 63	316 / 1062 / 49	413 / 730 / 107	381 / 903 / 88	381 / 732 / 182	369 / 905 / 149																						
	3	312 / 997 / 56	277 / 1201 / 45	328 / 872 / 88	299 / 1072 / 72	288 / 940 / 143	273 / 1143 / 116	293 / 1029 / 52	273 / 1280 / 43	325 / 943 / 85	296 / 1148 / 68	277 / 974 / 132	273 / 1222 / 110																						
Wind Speed [mph]		190						200																											
45	1	328 / 789 / 55	318 / 992 / 46	408 / 640 / 98	388 / 791 / 80	364 / 702 / 152	357 / 848 / 121	328 / 846 / 53	306 / 1013 / 42	401 / 673 / 93	380 / 821 / 75	360 / 735 / 143	365 / 908 / 117																						
	2	285 / 929 / 48	267 / 1131 / 39	333 / 766 / 80	313 / 933 / 65	322 / 768 / 134	319 / 935 / 108	283 / 991 / 46	266 / 1195 / 37	334 / 823 / 78	314 / 994 / 62	327 / 825 / 130	325 / 995 / 104																						
	3	241 / 1098 / 41	229 / 1353 / 33	258 / 971 / 62	251 / 1219 / 52	239 / 1041 / 100	243 / 1294 / 83	238 / 1163 / 39	226 / 1416 / 32	256 / 1033 / 60	249 / 1284 / 49	240 / 1104 / 95	244 / 1359 / 78																						
	50	1	350 / 789 / 59	336 / 992 / 49	435 / 640 / 107	410 / 791 / 87	383 / 702 / 165	373 / 848 / 132	349 / 846 / 57	322 / 1013 / 46	426 / 673 / 101	400 / 821 / 82	378 / 735 / 156	380 / 908 / 128																					
		2	303 / 929 / 51	282 / 1131 / 42	355 / 766 / 87	331 / 933 / 70	339 / 768 / 146	333 / 935 / 118	301 / 991 / 49	280 / 1195 / 40	355 / 823 / 84	331 / 994 / 68	343 / 825 / 142	338 / 995 / 113																					
		3	257 / 1098 / 44	242 / 1353 / 36	275 / 971 / 68	265 / 1219 / 56	252 / 1041 / 109	253 / 1294 / 90	253 / 1163 / 42	238 / 1416 / 34	272 / 1033 / 65	262 / 1284 / 54	252 / 1104 / 104	253 / 1359 / 85																					
	60	1	393 / 789 / 67	372 / 992 / 56	489 / 640 / 123	454 / 791 / 101	421 / 702 / 192	403 / 848 / 154	391 / 846 / 65	356 / 1013 / 52	477 / 673 / 117	441 / 821 / 94	414 / 735 / 182	409 / 908 / 149																					
		2	341 / 929 / 58	313 / 1131 / 47	399 / 766 / 101	366 / 933 / 81	373 / 768 / 171	360 / 935 / 138	338 / 991 / 56	309 / 1195 / 45	397 / 823 / 98	365 / 994 / 78	376 / 825 / 165	364 / 995 / 132																					
		3	289 / 1098 / 49	268 / 1353 / 41	309 / 971 / 78	293 / 1219 / 65	277 / 1041 / 127	274 / 1294 / 105	284 / 1163 / 47	263 / 1416 / 38	305 / 1033 / 75	289 / 1284 / 62	276 / 1104 / 121	273 / 1359 / 99																					

Exposure Category : D

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																																		
	95						100						105																						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
70	1	748 / 221 / 130	633 / 570 / 110	728 / 276 / 192	728 / 427 / 192	634 / 373 / 366	546 / 493 / 316	748 / 244 / 130	605 / 597 / 105	728 / 304 / 192	728 / 469 / 192	634 / 410 / 366	527 / 519 / 303	705 / 499 / 122	576 / 621 / 100	728 / 333 / 192	700 / 493 / 184	623 / 441 / 360	516 / 544 / 290																
	2	662 / 535 / 115	533 / 655 / 93	728 / 413 / 192	630 / 548 / 166	612 / 449 / 353	492 / 551 / 284	633 / 562 / 110	518 / 699 / 90	728 / 454 / 192	602 / 574 / 159	579 / 466 / 335	472 / 577 / 272	605 / 586 / 105	490 / 720 / 85	714 / 487 / 188	574 / 598 / 151	557 / 490 / 322	460 / 601 / 259																
	3	561 / 639 / 97	446 / 770 / 78	602 / 569 / 159	490 / 704 / 129	448 / 610 / 259	361 / 744 / 208	533 / 665 / 93	432 / 816 / 75	574 / 595 / 151	462 / 727 / 122	426 / 636 / 246	341 / 765 / 196	504 / 686 / 88	418 / 860 / 73	546 / 618 / 144	448 / 769 / 118	404 / 658 / 234	337 / 807 / 190																
	1	800 / 208 / 135	718 / 570 / 122	779 / 260 / 202	779 / 402 / 202	693 / 360 / 400	619 / 493 / 358	800 / 230 / 135	686 / 597 / 116	779 / 287 / 202	779 / 442 / 202	693 / 396 / 400	594 / 519 / 343	800 / 252 / 135	653 / 621 / 111	779 / 314 / 202	779 / 484 / 202	693 / 433 / 400	569 / 544 / 329																
	2	751 / 535 / 127	604 / 655 / 102	779 / 390 / 202	715 / 548 / 186	693 / 449 / 400	557 / 551 / 322	718 / 562 / 122	588 / 699 / 100	779 / 428 / 202	683 / 574 / 178	656 / 466 / 379	532 / 577 / 308	686 / 586 / 116	555 / 720 / 94	779 / 468 / 202	651 / 598 / 169	631 / 490 / 365	508 / 601 / 293																
	3	637 / 639 / 108	506 / 770 / 86	683 / 569 / 178	556 / 704 / 145	508 / 610 / 293	409 / 744 / 236	604 / 665 / 102	490 / 816 / 83	651 / 595 / 169	524 / 727 / 136	483 / 636 / 279	384 / 765 / 222	572 / 686 / 97	474 / 860 / 80	620 / 618 / 161	509 / 769 / 132	458 / 658 / 265	372 / 807 / 215																
	1	840 / 195 / 139	803 / 570 / 133	835 / 250 / 215	835 / 386 / 215	733 / 341 / 423	692 / 493 / 399	840 / 216 / 139	767 / 597 / 127	835 / 275 / 215	835 / 424 / 215	733 / 374 / 423	664 / 519 / 384	840 / 237 / 139	730 / 621 / 121	835 / 301 / 215	835 / 464 / 215	733 / 410 / 423	636 / 544 / 368																
	2	840 / 535 / 139	676 / 655 / 112	835 / 374 / 215	800 / 548 / 206	733 / 425 / 423	622 / 551 / 360	803 / 562 / 133	657 / 699 / 109	835 / 411 / 215	764 / 574 / 196	733 / 466 / 423	595 / 577 / 344	767 / 586 / 127	621 / 720 / 103	835 / 449 / 215	728 / 598 / 187	705 / 490 / 407	567 / 601 / 328																
	3	712 / 639 / 118	566 / 770 / 94	764 / 569 / 196	622 / 704 / 160	567 / 610 / 328	457 / 744 / 264	676 / 665 / 112	548 / 816 / 91	728 / 595 / 187	586 / 727 / 151	540 / 636 / 312	429 / 765 / 248	639 / 686 / 106	530 / 860 / 88	693 / 618 / 178	569 / 769 / 146	512 / 658 / 296	415 / 807 / 240																
70	1	676 / 521 / 117	547 / 642 / 95	728 / 364 / 192	672 / 516 / 177	590 / 455 / 341	504 / 566 / 278	648 / 541 / 112	533 / 677 / 93	728 / 396 / 192	644 / 537 / 170	568 / 476 / 328	492 / 586 / 265	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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1	702 / 560 / 119	572 / 692 / 97	779 / 404 / 202	699 / 556 / 182	619 / 495 / 358	522 / 603 / 286	735 / 541 / 124	604 / 677 / 102	779 / 373 / 202	731 / 537 / 190	644 / 476 / 372	537 / 586 / 300	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3	
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						83in x 41.5in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	605 / 590 / 105	490 / 725 / 85	728 / 463 / 192	588 / 572 / 155	526 / 513 / 303	477 / 634 / 246	561 / 631 / 97	461 / 785 / 80	686 / 505 / 181	562 / 628 / 148	510 / 555 / 284	461 / 674 / 227	518 / 666 / 90	429 / 812 / 73	644 / 542 / 170	536 / 664 / 136	493 / 592 / 265
2		518 / 690 / 90	418 / 841 / 73	602 / 567 / 159	490 / 701 / 129	471 / 570 / 272	428 / 703 / 221	475 / 729 / 83	389 / 901 / 68	560 / 609 / 148	463 / 761 / 122	453 / 611 / 253	410 / 740 / 202	446 / 781 / 78	370 / 951 / 63	532 / 660 / 140	435 / 790 / 111	434 / 645 / 234	403 / 792 / 190
3		432 / 806 / 75	346 / 974 / 60	476 / 739 / 125	378 / 888 / 100	351 / 780 / 202	318 / 956 / 164	403 / 866 / 70	331 / 1073 / 58	434 / 776 / 114	351 / 945 / 92	329 / 813 / 183	308 / 1015 / 152	374 / 917 / 65	311 / 1116 / 53	406 / 828 / 107	348 / 1034 / 89	329 / 895 / 177	295 / 1060 / 139
80	1	686 / 590 / 116	555 / 725 / 94	779 / 437 / 202	667 / 572 / 173	594 / 513 / 343	520 / 634 / 279	637 / 631 / 108	523 / 785 / 89	779 / 505 / 202	636 / 628 / 165	559 / 555 / 322	500 / 674 / 258	588 / 666 / 100	474 / 812 / 80	731 / 542 / 190	589 / 664 / 153	539 / 592 / 300	493 / 726 / 243
	2	588 / 690 / 100	474 / 841 / 80	683 / 567 / 178	556 / 701 / 145	532 / 570 / 308	466 / 703 / 250	539 / 729 / 91	441 / 901 / 75	636 / 609 / 165	524 / 761 / 136	497 / 611 / 286	445 / 740 / 229	506 / 781 / 86	408 / 951 / 69	604 / 660 / 157	477 / 790 / 124	475 / 645 / 265	435 / 792 / 215
	3	490 / 806 / 83	392 / 974 / 67	540 / 739 / 140	429 / 888 / 112	396 / 780 / 229	347 / 956 / 186	457 / 866 / 78	376 / 1073 / 64	493 / 776 / 128	397 / 945 / 103	360 / 813 / 208	334 / 1015 / 172	425 / 917 / 72	343 / 1116 / 58	461 / 828 / 120	382 / 1034 / 99	359 / 895 / 200	319 / 1060 / 158
90	1	767 / 590 / 127	621 / 725 / 103	835 / 419 / 215	746 / 572 / 192	664 / 513 / 384	562 / 634 / 312	712 / 631 / 118	584 / 785 / 97	835 / 484 / 215	711 / 628 / 183	622 / 555 / 360	540 / 674 / 288	657 / 666 / 109	530 / 812 / 88	817 / 542 / 210	657 / 664 / 169	585 / 592 / 336	530 / 726 / 272
	2	657 / 690 / 109	530 / 841 / 88	764 / 567 / 196	622 / 701 / 160	595 / 570 / 344	505 / 703 / 280	603 / 729 / 100	493 / 901 / 82	711 / 609 / 183	586 / 761 / 151	553 / 611 / 320	480 / 740 / 256	566 / 781 / 94	457 / 951 / 76	675 / 660 / 174	533 / 790 / 137	515 / 645 / 296	468 / 792 / 240
	3	548 / 806 / 91	438 / 974 / 73	604 / 739 / 155	480 / 888 / 124	443 / 780 / 256	375 / 956 / 208	511 / 866 / 85	420 / 1073 / 70	551 / 776 / 142	444 / 945 / 114	401 / 813 / 232	360 / 1015 / 192	475 / 917 / 79	384 / 1116 / 64	515 / 828 / 133	427 / 1034 / 110	390 / 895 / 224	343 / 1060 / 176
Wind Speed [mph]		170						180											
70	1	490 / 712 / 85	428 / 887 / 70	602 / 575 / 159	524 / 711 / 129	475 / 623 / 246	450 / 773 / 202	461 / 753 / 80	411 / 925 / 65	560 / 602 / 148	512 / 754 / 122	467 / 664 / 234	443 / 814 / 190						
	2	418 / 827 / 73	367 / 1033 / 60	490 / 689 / 129	435 / 864 / 107	426 / 691 / 221	408 / 865 / 183	403 / 897 / 70	348 / 1062 / 55	462 / 730 / 122	419 / 903 / 100	417 / 732 / 208	398 / 905 / 171						
	3	360 / 997 / 63	306 / 1201 / 50	378 / 872 / 100	330 / 1072 / 81	317 / 940 / 164	296 / 1143 / 133	331 / 1029 / 58	300 / 1280 / 48	364 / 943 / 96	326 / 1148 / 78	303 / 974 / 152	295 / 1222 / 127						
80	1	555 / 712 / 94	468 / 887 / 78	683 / 575 / 178	574 / 711 / 145	517 / 623 / 279	485 / 773 / 229	523 / 753 / 89	448 / 925 / 72	636 / 602 / 165	558 / 754 / 136	508 / 664 / 265	475 / 814 / 215						
	2	474 / 827 / 80	402 / 1033 / 67	556 / 689 / 145	475 / 864 / 120	464 / 691 / 250	440 / 865 / 208	457 / 897 / 78	379 / 1062 / 61	524 / 730 / 136	457 / 903 / 112	453 / 732 / 236	428 / 905 / 193						
	3	408 / 997 / 69	335 / 1201 / 56	429 / 872 / 112	361 / 1072 / 91	345 / 940 / 186	318 / 1143 / 150	376 / 1029 / 64	328 / 1280 / 53	413 / 943 / 108	355 / 1148 / 87	329 / 974 / 172	317 / 1222 / 143						
90	1	621 / 712 / 103	511 / 887 / 85	764 / 575 / 196	623 / 711 / 160	560 / 623 / 312	520 / 773 / 256	584 / 753 / 97	486 / 925 / 79	711 / 602 / 183	604 / 754 / 151	548 / 664 / 296	508 / 814 / 240						
	2	530 / 827 / 88	438 / 1033 / 73	622 / 689 / 160	516 / 864 / 133	502 / 691 / 280	471 / 865 / 232	511 / 897 / 85	411 / 1062 / 67	586 / 730 / 151	495 / 903 / 124	489 / 732 / 264	457 / 905 / 216						
	3	457 / 997 / 76	365 / 1201 / 61	480 / 872 / 124	392 / 1072 / 101	373 / 940 / 208	341 / 1143 / 168	420 / 1029 / 70	355 / 1280 / 58	462 / 943 / 119	385 / 1148 / 96	356 / 974 / 192	339 / 1222 / 160						
Wind Speed [mph]		190						200											
70	1	437 / 789 / 75	409 / 992 / 63	542 / 640 / 140	497 / 791 / 114	459 / 702 / 221	434 / 848 / 177	434 / 846 / 73	389 / 1013 / 58	528 / 673 / 133	482 / 821 / 107	450 / 735 / 208	439 / 908 / 171						
	2	379 / 929 / 65	343 / 1131 / 53	442 / 766 / 114	401 / 933 / 92	407 / 768 / 196	387 / 935 / 158	374 / 991 / 63	338 / 1195 / 50	440 / 823 / 111	399 / 994 / 89	409 / 825 / 190	390 / 995 / 152						
	3	321 / 1098 / 55	294 / 1353 / 45	343 / 971 / 89	321 / 1219 / 74	302 / 1041 / 145	294 / 1294 / 120	314 / 1163 / 53	288 / 1416 / 43	337 / 1033 / 85	316 / 1284 / 70	300 / 1104 / 139	293 / 1359 / 114						
80	1	490 / 789 / 83	445 / 992 / 69	604 / 640 / 157	541 / 791 / 128	497 / 702 / 250	464 / 848 / 200	476 / 846 / 80	422 / 1013 / 64	578 / 673 / 149	523 / 821 / 120	486 / 735 / 236	468 / 908 / 193						
	2	425 / 929 / 72	374 / 1131 / 58	493 / 766 / 128	436 / 933 / 103	440 / 768 / 222	414 / 935 / 179	410 / 991 / 69	367 / 1195 / 56	482 / 823 / 124	433 / 994 / 99	442 / 825 / 215	416 / 995 / 172						
	3	359 / 1098 / 61	320 / 1353 / 50	382 / 971 / 99	349 / 1219 / 83	327 / 1041 / 165	315 / 1294 / 136	344 / 1163 / 58	312 / 1416 / 47	370 / 1033 / 95	343 / 1284 / 79	324 / 1104 / 158	312 / 1359 / 129						
90	1	548 / 789 / 91	481 / 992 / 76	675 / 640 / 174	585 / 791 / 142	535 / 702 / 280	495 / 848 / 224	530 / 846 / 88	456 / 1013 / 70	640 / 673 / 165	564 / 821 / 133	522 / 735 / 264	498 / 908 / 216						
	2	475 / 929 / 79	404 / 1131 / 64	551 / 766 / 142	472 / 933 / 114	474 / 768 / 248	442 / 935 / 200	457 / 991 / 76	396 / 1195 / 61	533 / 823 / 137	467 / 994 / 110	474 / 825 / 240	442 / 995 / 192						
	3	402 / 1098 / 67	346 / 1353 / 55	427 / 971 / 110	377 / 1219 / 92	352 / 1041 / 184	336 / 1294 / 152	384 / 1163 / 64	337 / 1416 / 52	409 / 1033 / 105	370 / 1284 / 87	348 / 1104 / 176	332 / 1359 / 144						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]	95						100						105					
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																
100	1	888 / 187 / 145	888 / 291 / 145	864 / 234 / 220	864 / 361 / 220	764 / 321 / 441	764 / 493 / 441	888 / 206 / 145	848 / 597 / 138	864 / 257 / 220	864 / 397 / 220	764 / 353 / 441	734 / 519 / 424	888 / 227 / 145	808 / 621 / 132	864 / 282 / 220	864 / 434 / 220	764 / 387 / 441	703 / 544 / 406
	2	888 / 512 / 145	747 / 655 / 122	864 / 350 / 220	864 / 536 / 220	764 / 401 / 441	688 / 551 / 397	888 / 562 / 145	727 / 699 / 119	864 / 384 / 220	845 / 574 / 215	764 / 440 / 441	657 / 577 / 380	848 / 586 / 138	687 / 720 / 112	864 / 420 / 220	805 / 598 / 205	764 / 481 / 441	627 / 601 / 362
	3	787 / 639 / 128	626 / 770 / 102	845 / 569 / 215	688 / 704 / 175	627 / 610 / 362	505 / 744 / 292	747 / 665 / 122	606 / 816 / 99	805 / 595 / 205	648 / 727 / 165	596 / 636 / 344	474 / 765 / 274	707 / 686 / 115	586 / 860 / 96	766 / 618 / 195	629 / 769 / 160	566 / 658 / 327	459 / 807 / 265
100	1	888 / 248 / 145	767 / 642 / 125	864 / 308 / 220	864 / 473 / 220	764 / 421 / 441	673 / 566 / 389	888 / 270 / 145	747 / 677 / 122	864 / 335 / 220	864 / 514 / 220	764 / 457 / 441	642 / 586 / 371						
	2	808 / 607 / 132	666 / 760 / 109	864 / 458 / 220	766 / 619 / 195	749 / 513 / 433	596 / 621 / 344	787 / 642 / 128	626 / 773 / 102	864 / 497 / 220	747 / 654 / 190	718 / 534 / 415	581 / 656 / 336						
	3	687 / 725 / 112	545 / 870 / 89	747 / 655 / 190	609 / 809 / 155	550 / 696 / 318	443 / 848 / 256	646 / 739 / 105	525 / 908 / 86	707 / 673 / 180	570 / 820 / 145	520 / 713 / 300	428 / 886 / 247						
100	1	868 / 560 / 142	707 / 692 / 115	864 / 363 / 220	864 / 556 / 220	764 / 495 / 441	611 / 603 / 353	888 / 270 / 145	747 / 677 / 122	864 / 335 / 220	864 / 514 / 220	764 / 457 / 441	642 / 586 / 371						
	2	747 / 658 / 122	606 / 808 / 99	864 / 538 / 220	707 / 669 / 180	688 / 553 / 397	550 / 672 / 318	787 / 642 / 128	626 / 773 / 102	864 / 497 / 220	747 / 654 / 190	718 / 534 / 415	581 / 656 / 336						
	3	626 / 774 / 102	505 / 942 / 82	688 / 706 / 175	550 / 855 / 140	505 / 747 / 292	413 / 923 / 239	646 / 739 / 105	525 / 908 / 86	707 / 673 / 180	570 / 820 / 145	520 / 713 / 300	428 / 886 / 247						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]		140						150						160					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	848 / 590 / 138	687 / 725 / 112	864 / 392 / 220	825 / 572 / 210	734 / 513 / 424	605 / 634 / 344	787 / 631 / 128	646 / 785 / 105	864 / 453 / 220	786 / 628 / 200	688 / 555 / 397	579 / 674 / 318	727 / 666 / 119	586 / 812 / 96	864 / 519 / 220	727 / 664 / 185	642 / 592 / 371	567 / 726 / 300	
	2	727 / 690 / 119	586 / 841 / 96	845 / 567 / 215	688 / 701 / 175	657 / 570 / 380	543 / 703 / 309	666 / 729 / 109	545 / 901 / 89	786 / 609 / 200	648 / 761 / 165	611 / 611 / 353	514 / 740 / 283	626 / 781 / 102	505 / 951 / 82	747 / 660 / 190	590 / 790 / 150	566 / 645 / 327	501 / 792 / 265	
	3	606 / 806 / 99	485 / 974 / 79	668 / 739 / 170	531 / 888 / 135	489 / 780 / 283	403 / 956 / 230	565 / 866 / 92	465 / 1073 / 76	609 / 776 / 155	491 / 945 / 125	443 / 813 / 256	386 / 1015 / 212	525 / 917 / 86	424 / 1116 / 69	570 / 828 / 145	472 / 1034 / 120	428 / 895 / 247	367 / 1060 / 195	
100	1	687 / 712 / 112	565 / 887 / 92	845 / 575 / 215	688 / 711 / 175	602 / 623 / 344	555 / 773 / 283	646 / 753 / 105	525 / 925 / 86	786 / 602 / 200	651 / 754 / 165	588 / 664 / 327	541 / 814 / 265							
	2	586 / 827 / 96	485 / 1033 / 79	688 / 689 / 175	570 / 864 / 145	540 / 691 / 309	503 / 865 / 256	565 / 897 / 92	444 / 1062 / 73	648 / 730 / 165	533 / 903 / 135	525 / 732 / 292	487 / 905 / 239							
	3	505 / 997 / 82	404 / 1201 / 66	531 / 872 / 135	432 / 1072 / 110	402 / 940 / 230	364 / 1143 / 186	465 / 1029 / 76	384 / 1280 / 63	511 / 943 / 130	414 / 1148 / 105	382 / 974 / 212	361 / 1222 / 177							
100	1	606 / 789 / 99	517 / 992 / 82	747 / 640 / 190	628 / 791 / 155	573 / 702 / 309	525 / 848 / 247	586 / 846 / 96	489 / 1013 / 76	707 / 673 / 180	605 / 821 / 145	558 / 735 / 292	527 / 908 / 239							
	2	525 / 929 / 86	434 / 1131 / 69	609 / 766 / 155	507 / 933 / 125	508 / 768 / 274	469 / 935 / 221	505 / 991 / 82	425 / 1195 / 66	590 / 823 / 150	500 / 994 / 120	507 / 825 / 265	468 / 995 / 212							
	3	444 / 1098 / 73	372 / 1353 / 60	472 / 971 / 120	406 / 1219 / 100	377 / 1041 / 203	356 / 1294 / 168	424 / 1163 / 69	362 / 1416 / 56	452 / 1033 / 115	396 / 1284 / 95	372 / 1104 / 195	351 / 1359 / 159							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	95						100						105							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	233 / 388 / 41	186 / 477 / 33	279 / 289 / 57	236 / 382 / 48	254 / 330 / 68	208 / 419 / 56	222 / 408 / 39	178 / 504 / 31	272 / 311 / 55	225 / 402 / 46	247 / 354 / 66	197 / 437 / 53	211 / 425 / 37	171 / 528 / 30	261 / 328 / 53	214 / 419 / 43	236 / 372 / 63	190 / 461 / 51	
	2	197 / 453 / 35	160 / 565 / 28	239 / 375 / 49	192 / 466 / 39	233 / 380 / 63	187 / 469 / 50	189 / 479 / 33	153 / 592 / 27	228 / 395 / 46	185 / 492 / 38	222 / 399 / 60	176 / 486 / 48	178 / 494 / 31	146 / 615 / 26	218 / 412 / 44	174 / 507 / 35	211 / 416 / 57	169 / 509 / 46	
	3	167 / 546 / 30	135 / 669 / 24	185 / 488 / 38	149 / 598 / 30	169 / 518 / 46	138 / 640 / 37	157 / 560 / 28	128 / 693 / 23	174 / 504 / 35	142 / 624 / 29	162 / 544 / 44	131 / 665 / 35	153 / 598 / 27	124 / 735 / 22	167 / 528 / 34	134 / 646 / 27	155 / 568 / 42	124 / 686 / 33	
	5	1	258 / 388 / 41	205 / 477 / 33	307 / 289 / 60	259 / 382 / 50	254 / 330 / 85	208 / 419 / 69	245 / 408 / 39	197 / 504 / 31	299 / 311 / 58	247 / 402 / 48	247 / 354 / 82	197 / 437 / 66	233 / 425 / 37	189 / 528 / 30	287 / 328 / 56	235 / 419 / 46	236 / 372 / 79	190 / 461 / 64
	2	217 / 453 / 35	177 / 565 / 28	263 / 375 / 51	211 / 466 / 41	233 / 380 / 78	187 / 469 / 62	209 / 479 / 33	169 / 592 / 27	251 / 395 / 49	203 / 492 / 40	222 / 399 / 74	176 / 486 / 59	197 / 494 / 31	161 / 615 / 26	239 / 412 / 47	191 / 507 / 37	211 / 416 / 71	169 / 509 / 57	
	3	185 / 546 / 30	149 / 669 / 24	203 / 488 / 40	163 / 598 / 32	169 / 518 / 57	138 / 640 / 46	173 / 560 / 28	141 / 693 / 23	191 / 504 / 37	156 / 624 / 30	162 / 544 / 54	131 / 665 / 44	169 / 598 / 27	137 / 735 / 22	183 / 528 / 36	148 / 646 / 29	155 / 568 / 52	124 / 686 / 41	
	10	1	327 / 388 / 41	260 / 477 / 33	367 / 274 / 70	327 / 382 / 62	292 / 330 / 110	239 / 419 / 90	311 / 408 / 39	250 / 504 / 31	367 / 303 / 70	312 / 402 / 60	284 / 354 / 107	227 / 437 / 86	296 / 425 / 37	240 / 528 / 30	362 / 328 / 69	297 / 419 / 57	272 / 372 / 102	219 / 461 / 83
	2	276 / 453 / 35	225 / 565 / 28	332 / 375 / 63	267 / 466 / 51	268 / 380 / 101	215 / 469 / 81	265 / 479 / 33	214 / 592 / 27	317 / 395 / 61	257 / 492 / 49	256 / 399 / 96	203 / 486 / 77	250 / 494 / 31	204 / 615 / 26	302 / 412 / 58	242 / 507 / 46	243 / 416 / 92	195 / 509 / 73	
	3	235 / 546 / 30	189 / 669 / 24	257 / 488 / 49	206 / 598 / 40	195 / 518 / 73	158 / 640 / 60	220 / 560 / 28	179 / 693 / 23	242 / 504 / 46	196 / 624 / 38	187 / 544 / 70	150 / 665 / 57	214 / 598 / 27	174 / 735 / 22	232 / 528 / 44	186 / 646 / 36	179 / 568 / 67	142 / 686 / 54	
5	1	204 / 447 / 36	164 / 551 / 29	254 / 350 / 51	207 / 441 / 42	225 / 388 / 61	195 / 484 / 49	193 / 460 / 34	157 / 571 / 28	247 / 370 / 50	196 / 455 / 40	215 / 402 / 58	196 / 495 / 47							
	2	171 / 516 / 30	138 / 636 / 24	207 / 427 / 42	167 / 529 / 34	201 / 431 / 54	173 / 532 / 44	164 / 537 / 29	135 / 671 / 24	199 / 448 / 41	160 / 549 / 33	194 / 451 / 52	176 / 552 / 42							
	3	146 / 619 / 26	117 / 752 / 21	160 / 550 / 33	131 / 684 / 27	148 / 590 / 40	128 / 724 / 32	138 / 638 / 24	113 / 789 / 20	156 / 583 / 32	124 / 700 / 25	141 / 610 / 38	132 / 762 / 32							
	5	1	225 / 447 / 36	181 / 551 / 29	279 / 350 / 54	227 / 441 / 44	225 / 388 / 75	195 / 484 / 61	213 / 460 / 34	173 / 571 / 28	271 / 370 / 53	215 / 455 / 42	215 / 402 / 72	196 / 495 / 58						
	2	189 / 516 / 30	153 / 636 / 24	227 / 427 / 44	183 / 529 / 36	201 / 431 / 67	173 / 532 / 54	181 / 537 / 29	149 / 671 / 24	219 / 448 / 43	175 / 549 / 34	194 / 451 / 65	176 / 552 / 52							
	3	161 / 619 / 26	129 / 752 / 21	175 / 550 / 34	144 / 684 / 28	148 / 590 / 50	128 / 724 / 40	153 / 638 / 24	125 / 789 / 20	171 / 583 / 34	136 / 700 / 27	141 / 610 / 47	132 / 762 / 39							
	10	1	286 / 447 / 36	230 / 551 / 29	352 / 350 / 67	287 / 441 / 55	260 / 388 / 98	220 / 484 / 80	270 / 460 / 34	220 / 571 / 28	342 / 370 / 65	272 / 455 / 52	248 / 402 / 93	216 / 495 / 75						
	2	240 / 516 / 30	194 / 636 / 24	287 / 427 / 55	232 / 529 / 44	231 / 431 / 87	195 / 532 / 70	230 / 537 / 29	189 / 671 / 24	277 / 448 / 53	222 / 549 / 42	223 / 451 / 84	194 / 552 / 67							
	3	204 / 619 / 26	164 / 752 / 21	222 / 550 / 42	181 / 684 / 35	171 / 590 / 64	144 / 724 / 52	194 / 638 / 24	158 / 789 / 20	216 / 583 / 41	171 / 700 / 33	162 / 610 / 61	146 / 762 / 51							
10	1	186 / 479 / 33	149 / 589 / 26	236 / 384 / 48	189 / 474 / 38	208 / 421 / 56	200 / 514 / 45	193 / 460 / 34	157 / 571 / 28	247 / 370 / 50	196 / 455 / 40	215 / 402 / 58	196 / 495 / 47							
	2	160 / 568 / 28	128 / 686 / 23	192 / 468 / 39	156 / 580 / 32	187 / 471 / 50	183 / 583 / 41	164 / 537 / 29	135 / 671 / 24	199 / 448 / 41	160 / 549 / 33	194 / 451 / 52	176 / 552 / 42							
	3	135 / 671 / 24	109 / 824 / 19	149 / 601 / 30	120 / 734 / 25	138 / 642 / 37	132 / 773 / 30	138 / 638 / 24	113 / 789 / 20	156 / 583 / 32	124 / 700 / 25	141 / 610 / 38	132 / 762 / 32							
	5	1	205 / 479 / 33	165 / 589 / 26	259 / 384 / 50	207 / 474 / 40	208 / 421 / 69	200 / 514 / 55	213 / 460 / 34	173 / 571 / 28	271 / 370 / 53	215 / 455 / 42	215 / 402 / 72	196 / 495 / 58						
	2	177 / 568 / 28	141 / 686 / 23	211 / 468 / 41	171 / 580 / 34	187 / 471 / 62	183 / 583 / 51	181 / 537 / 29	149 / 671 / 24	219 / 448 / 43	175 / 549 / 34	194 / 451 / 65	176 / 552 / 52							
	3	149 / 671 / 24	121 / 824 / 19	163 / 601 / 32	132 / 734 / 26	138 / 642 / 46	132 / 773 / 37	153 / 638 / 24	125 / 789 / 20	171 / 583 / 34	136 / 700 / 27	141 / 610 / 47	132 / 762 / 39							
	10	1	260 / 479 / 33	209 / 589 / 26	327 / 384 / 62	262 / 474 / 50	239 / 421 / 90	217 / 514 / 72	270 / 460 / 34	220 / 571 / 28	342 / 370 / 65	272 / 455 / 52	248 / 402 / 93	216 / 495 / 75						
	2	225 / 568 / 28	179 / 686 / 23	267 / 468 / 51	216 / 580 / 41	215 / 471 / 81	198 / 583 / 66	230 / 537 / 29	189 / 671 / 24	277 / 448 / 53	222 / 549 / 42	223 / 451 / 84	194 / 552 / 67							
	3	189 / 671 / 24	153 / 824 / 19	206 / 601 / 40	166 / 734 / 32	158 / 642 / 60	143 / 773 / 48	194 / 638 / 24	158 / 789 / 20	216 / 583 / 41	171 / 700 / 33	162 / 610 / 61	146 / 762 / 51							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
0	1	178 / 497 / 31	148 / 619 / 26	225 / 396 / 46	184 / 492 / 37	201 / 439 / 54	208 / 542 / 44	167 / 539 / 30	152 / 660 / 24	210 / 430 / 43	193 / 535 / 35	193 / 473 / 50	218 / 585 / 41	157 / 577 / 28	160 / 713 / 23	196 / 459 / 40	196 / 559 / 32	198 / 500 / 47	227 / 621 / 38	
	2	153 / 584 / 27	126 / 718 / 22	185 / 486 / 38	151 / 596 / 30	180 / 489 / 48	185 / 599 / 39	142 / 626 / 25	132 / 778 / 21	171 / 518 / 35	156 / 637 / 28	171 / 521 / 45	193 / 640 / 36	135 / 678 / 24	137 / 832 / 19	160 / 554 / 33	164 / 690 / 27	178 / 557 / 42	204 / 692 / 34	
	3	128 / 684 / 23	107 / 858 / 19	142 / 616 / 29	118 / 766 / 24	131 / 656 / 35	136 / 805 / 29	120 / 743 / 21	111 / 919 / 18	134 / 674 / 27	123 / 827 / 22	127 / 715 / 33	142 / 864 / 27	113 / 797 / 20	114 / 970 / 16	124 / 707 / 25	128 / 880 / 21	129 / 746 / 31	148 / 915 / 25	
	5	1	197 / 497 / 31	163 / 619 / 26	247 / 396 / 48	201 / 492 / 39	201 / 439 / 67	208 / 542 / 54	185 / 539 / 30	162 / 660 / 24	231 / 430 / 45	204 / 535 / 37	193 / 473 / 62	218 / 585 / 51	173 / 577 / 28	165 / 713 / 23	215 / 459 / 42	201 / 559 / 34	198 / 500 / 58	227 / 621 / 47
	2	169 / 584 / 27	138 / 718 / 22	203 / 486 / 40	165 / 596 / 32	180 / 489 / 60	185 / 599 / 48	157 / 626 / 25	140 / 778 / 21	187 / 518 / 37	165 / 637 / 30	171 / 521 / 55	193 / 640 / 45	149 / 678 / 24	142 / 832 / 19	175 / 554 / 34	168 / 690 / 28	178 / 557 / 52	204 / 692 / 43	
	3	141 / 684 / 23	118 / 858 / 19	156 / 616 / 30	129 / 766 / 25	131 / 656 / 44	136 / 805 / 36	133 / 743 / 21	118 / 919 / 18	148 / 674 / 29	130 / 827 / 24	127 / 715 / 41	142 / 864 / 33	125 / 797 / 20	118 / 970 / 16	136 / 707 / 27	131 / 880 / 22	129 / 746 / 38	148 / 915 / 31	
	10	1	250 / 497 / 31	206 / 619 / 26	312 / 396 / 60	254 / 492 / 48	231 / 439 / 87	221 / 542 / 70	235 / 539 / 30	202 / 660 / 24	292 / 430 / 56	253 / 535 / 45	220 / 473 / 81	225 / 585 / 66	220 / 577 / 28	203 / 713 / 23	272 / 459 / 52	246 / 559 / 41	218 / 500 / 75	227 / 621 / 61
	2	214 / 584 / 27	175 / 718 / 22	257 / 486 / 49	208 / 596 / 40	207 / 489 / 78	197 / 599 / 63	199 / 626 / 25	175 / 778 / 21	237 / 518 / 45	205 / 637 / 37	195 / 521 / 72	199 / 640 / 58	189 / 678 / 24	174 / 832 / 19	222 / 554 / 42	206 / 690 / 35	195 / 557 / 67	204 / 692 / 55	
	3	179 / 684 / 23	149 / 858 / 19	196 / 616 / 38	163 / 766 / 31	150 / 656 / 57	144 / 805 / 46	169 / 743 / 21	148 / 919 / 18	186 / 674 / 36	162 / 827 / 29	145 / 715 / 54	146 / 864 / 43	158 / 797 / 20	145 / 970 / 16	171 / 707 / 33	160 / 880 / 27	142 / 746 / 49	148 / 915 / 40	
5	1	146 / 608 / 26	166 / 761 / 21	185 / 493 / 38	206 / 605 / 30	205 / 533 / 44	233 / 651 / 35	151 / 650 / 24	172 / 804 / 20	191 / 523 / 35	210 / 631 / 28	211 / 560 / 41	244 / 692 / 33	128 / 747 / 21	144 / 917 / 17	155 / 627 / 29	177 / 780 / 24	191 / 630 / 37	223 / 782 / 31	
	2	124 / 706 / 22	141 / 879 / 18	149 / 586 / 30	171 / 737 / 25	183 / 588 / 39	215 / 739 / 32	108 / 882 / 18	122 / 1083 / 14	119 / 793 / 22	138 / 998 / 19	142 / 859 / 28	161 / 1027 / 22	163 / 650 / 24	172 / 804 / 20	204 / 523 / 37	210 / 631 / 30	211 / 560 / 51	244 / 692 / 41	
	3	106 / 843 / 19	116 / 1009 / 15	116 / 753 / 24	131 / 924 / 19	134 / 791 / 29	158 / 994 / 24	137 / 747 / 21	144 / 917 / 17	166 / 627 / 30	177 / 780 / 25	191 / 630 / 46	223 / 782 / 38	116 / 882 / 18	122 / 1083 / 14	127 / 793 / 24	138 / 998 / 20	142 / 859 / 34	161 / 1027 / 27	
	5	1	161 / 608 / 26	168 / 761 / 21	203 / 493 / 40	206 / 605 / 32	205 / 533 / 54	233 / 651 / 44	204 / 650 / 24	203 / 804 / 20	254 / 523 / 46	245 / 631 / 37	219 / 560 / 66	244 / 692 / 54	172 / 747 / 21	170 / 917 / 17	206 / 627 / 38	207 / 780 / 31	199 / 630 / 60	223 / 782 / 49
	2	137 / 706 / 22	142 / 879 / 18	164 / 586 / 32	171 / 737 / 27	183 / 588 / 48	215 / 739 / 40	145 / 882 / 18	144 / 917 / 17	166 / 627 / 30	177 / 780 / 25	191 / 630 / 46	223 / 782 / 38	204 / 650 / 24	203 / 804 / 20	254 / 523 / 46	245 / 631 / 37	219 / 560 / 66	244 / 692 / 54	
	3	117 / 843 / 19	117 / 1009 / 15	128 / 753 / 25	131 / 924 / 20	134 / 791 / 36	158 / 994 / 30	172 / 747 / 21	170 / 917 / 17	206 / 627 / 38	207 / 780 / 31	199 / 630 / 60	223 / 782 / 49	145 / 882 / 18	144 / 1083 / 14	159 / 793 / 29	162 / 998 / 24	148 / 859 / 45	161 / 1027 / 35	
	10	1	204 / 608 / 26	203 / 761 / 21	257 / 493 / 49	249 / 605 / 40	219 / 533 / 70	233 / 651 / 57	172 / 747 / 21	170 / 917 / 17	206 / 627 / 38	207 / 780 / 31	199 / 630 / 60	223 / 782 / 49	156 / 688 / 23	176 / 839 / 19	195 / 549 / 33	218 / 668 / 27	221 / 597 / 39	254 / 729 / 32
	2	174 / 706 / 22	172 / 879 / 18	207 / 586 / 40	207 / 737 / 33	195 / 588 / 63	215 / 739 / 52	137 / 839 / 19	159 / 1047 / 16	165 / 699 / 26	186 / 846 / 21	206 / 701 / 33	236 / 848 / 27	113 / 948 / 17	128 / 1153 / 14	126 / 856 / 22	140 / 1024 / 17	145 / 892 / 26	169 / 1096 / 21	
	3	148 / 843 / 19	142 / 1009 / 15	161 / 753 / 31	158 / 924 / 25	143 / 791 / 46	158 / 994 / 39	164 / 722 / 22	179 / 867 / 18	202 / 584 / 32	225 / 701 / 25	229 / 632 / 37	270 / 784 / 31	164 / 688 / 23	176 / 839 / 19	203 / 549 / 35	218 / 668 / 28	221 / 597 / 48	254 / 729 / 39	
10	1	156 / 688 / 23	176 / 839 / 19	195 / 549 / 33	218 / 668 / 27	221 / 597 / 39	254 / 729 / 32	137 / 839 / 19	159 / 1047 / 16	165 / 699 / 26	186 / 846 / 21	206 / 701 / 33	236 / 848 / 27	164 / 688 / 23	176 / 839 / 19	203 / 549 / 35	218 / 668 / 28	221 / 597 / 48	254 / 729 / 39	
	2	135 / 808 / 20	152 / 983 / 16	160 / 665 / 27	182 / 816 / 22	199 / 667 / 35	231 / 818 / 29	140 / 839 / 19	159 / 1047 / 16	168 / 699 / 27	186 / 846 / 22	206 / 701 / 41	236 / 848 / 33	113 / 948 / 17	128 / 1153 / 14	131 / 856 / 23	140 / 1024 / 18	145 / 892 / 32	169 / 1096 / 26	
	3	113 / 948 / 17	128 / 1153 / 14	126 / 856 / 22	140 / 1024 / 17	145 / 892 / 26	169 / 1096 / 21	164 / 722 / 22	179 / 867 / 18	206 / 584 / 34	225 / 701 / 27	229 / 632 / 46	270 / 784 / 38	119 / 948 / 17	128 / 1153 / 14	131 / 856 / 23	140 / 1024 / 18	145 / 892 / 32	169 / 1096 / 26	
	5	1	164 / 688 / 23	176 / 839 / 19	203 / 549 / 35	218 / 668 / 28	221 / 597 / 48	254 / 729 / 39	140 / 839 / 19	159 / 1047 / 16	168 / 699 / 27	186 / 846 / 22	206 / 701 / 41	236 / 848 / 33	203 / 688 / 23	201 / 839 / 19	250 / 549 / 43	247 / 668 / 35	223 / 597 / 63	254 / 729 / 51
	2	141 / 808 / 20	152 / 983 / 16	167 / 665 / 29	182 / 816 / 24	199 / 667 / 44	231 / 818 / 36	172 / 839 / 19	177 / 1047 / 16	204 / 699 / 34	204 / 846 / 27	206 / 701 / 54	236 / 848 / 43	203 / 688 / 23	201 / 839 / 19	250 / 549 / 43	247 / 668 / 35	223 / 597 / 63	254 / 729 / 51	
	3	119 / 948 / 17	128 / 1153 / 14	131 / 856 / 23	140 / 1024 / 18	145 / 892 / 32	169 / 1096 / 26	172 / 839 / 19	177 / 1047 / 16	204 / 699 / 34	204 / 846 / 27	206 / 701 / 54	236 / 848 / 43	142 / 971 / 16	147 / 1218 / 13	158 / 885 / 26	160 / 1087 / 21	153 / 953 / 40	177 / 1160 / 32	
	10	1	203 / 688 / 23	201 / 839 / 19	250 / 549 / 43	247 / 668 / 35	223 / 597 / 63	254 / 729 / 51	142 / 971 / 16	147 / 1218 / 13	158 / 885 / 26	160 / 1087 / 21	153 / 953 / 40	177 / 1160 / 32	175 / 808 / 20	173 / 983 / 16	206 / 665 / 36	206 / 816 / 29	202 / 667 / 57	231 / 818 / 46
	2	175 / 808 / 20	173 / 983 / 16	206 / 665 / 36	206 / 816 / 29	202 / 667 / 57	231 / 818 / 46	142 / 971 / 16	147 / 1218 / 13	158 / 885 / 26	160 / 1087 / 21	153 / 953 / 40	177 / 1160 / 32	147 / 948 / 17	146 / 1153 / 14	161 / 856 / 28	158 / 1024 / 22	147 / 892 / 42	169 / 1096 / 34	
	3	147 / 948 / 17	146 / 1153 / 14	161 / 856 / 28	158 / 1024 / 22	147 / 892 / 42	169 / 1096 / 34	142 / 971 / 16	147 / 1218 / 13	158 / 885 / 26	160 / 1087 / 21	153 / 953 / 40	177 / 1160 / 32	147 / 948 / 17	146 / 1153 / 14	161 / 856 / 28	158 / 1024 / 22	147 / 892 / 42	169 / 1096 / 34	

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	395 / 388 / 42	315 / 477 / 34	419 / 259 / 79	395 / 382 / 74	336 / 330 / 135	276 / 419 / 111	377 / 408 / 40	303 / 504 / 33	419 / 286 / 79	377 / 402 / 71	327 / 354 / 132	262 / 437 / 105	358 / 425 / 38	291 / 528 / 31	419 / 315 / 79	359 / 419 / 68	313 / 372 / 126	252 / 461 / 102
2		334 / 453 / 36	272 / 565 / 29	401 / 375 / 76	322 / 466 / 61	308 / 380 / 124	248 / 469 / 100	321 / 479 / 35	260 / 592 / 28	383 / 395 / 72	310 / 492 / 59	294 / 399 / 119	234 / 486 / 94	303 / 494 / 33	247 / 615 / 27	365 / 412 / 69	292 / 507 / 55	280 / 416 / 113	224 / 509 / 90	
3		284 / 546 / 31	229 / 669 / 25	310 / 488 / 59	249 / 598 / 47	224 / 518 / 90	182 / 640 / 74	266 / 560 / 29	217 / 693 / 23	292 / 504 / 55	237 / 624 / 45	215 / 544 / 87	173 / 665 / 70	260 / 598 / 28	210 / 735 / 23	280 / 528 / 53	225 / 646 / 43	206 / 568 / 83	164 / 686 / 66	
20		1	464 / 388 / 46	370 / 477 / 37	470 / 248 / 88	463 / 382 / 86	380 / 330 / 167	312 / 419 / 137	443 / 408 / 44	356 / 504 / 35	470 / 274 / 88	442 / 402 / 82	370 / 354 / 163	296 / 437 / 130	421 / 425 / 42	341 / 528 / 34	470 / 301 / 88	421 / 419 / 79	354 / 372 / 156	285 / 461 / 126
		2	392 / 453 / 39	319 / 565 / 32	470 / 375 / 88	378 / 466 / 71	349 / 380 / 154	280 / 469 / 123	377 / 479 / 37	305 / 592 / 30	449 / 395 / 84	364 / 492 / 68	333 / 399 / 147	264 / 486 / 116	356 / 494 / 35	290 / 615 / 29	428 / 412 / 80	342 / 507 / 64	317 / 416 / 140	254 / 509 / 112
		3	334 / 546 / 33	269 / 669 / 27	364 / 488 / 68	292 / 598 / 55	254 / 518 / 112	206 / 640 / 91	312 / 560 / 31	254 / 693 / 25	342 / 504 / 64	278 / 624 / 52	243 / 544 / 107	196 / 665 / 86	305 / 598 / 30	247 / 735 / 25	328 / 528 / 61	264 / 646 / 49	233 / 568 / 103	185 / 686 / 82
25		1	464 / 388 / 46	370 / 477 / 37	470 / 248 / 88	463 / 382 / 86	413 / 321 / 196	348 / 419 / 165	443 / 408 / 44	356 / 504 / 35	470 / 274 / 88	442 / 402 / 82	413 / 354 / 196	330 / 437 / 157	421 / 425 / 42	341 / 528 / 34	470 / 301 / 88	421 / 419 / 79	395 / 372 / 187	318 / 461 / 151
		2	392 / 453 / 39	319 / 565 / 32	470 / 375 / 88	378 / 466 / 71	389 / 380 / 185	313 / 469 / 148	377 / 479 / 37	305 / 592 / 30	449 / 395 / 84	364 / 492 / 68	371 / 399 / 176	295 / 486 / 140	356 / 494 / 35	290 / 615 / 29	428 / 412 / 80	342 / 507 / 64	354 / 416 / 168	283 / 509 / 134
		3	334 / 546 / 33	269 / 669 / 27	364 / 488 / 68	292 / 598 / 55	283 / 518 / 134	230 / 640 / 109	312 / 560 / 31	254 / 693 / 25	342 / 504 / 64	278 / 624 / 52	271 / 544 / 129	218 / 665 / 104	305 / 598 / 30	247 / 735 / 25	328 / 528 / 61	264 / 646 / 49	260 / 568 / 123	207 / 686 / 98
Wind Speed [mph]		110						115												
15	1	346 / 447 / 37	278 / 551 / 30	419 / 345 / 79	347 / 441 / 65	299 / 388 / 120	252 / 484 / 98	328 / 460 / 35	266 / 571 / 29	413 / 370 / 78	328 / 455 / 62	285 / 402 / 115	246 / 495 / 92							
	2	291 / 516 / 31	235 / 636 / 25	347 / 427 / 65	280 / 529 / 53	266 / 431 / 107	223 / 532 / 87	278 / 537 / 30	229 / 671 / 25	334 / 448 / 63	268 / 549 / 51	257 / 451 / 104	221 / 552 / 83							
	3	247 / 619 / 27	198 / 752 / 21	268 / 550 / 51	219 / 684 / 41	196 / 590 / 79	165 / 724 / 64	235 / 638 / 25	192 / 789 / 21	262 / 583 / 49	207 / 700 / 39	187 / 610 / 75	166 / 762 / 62							
	20	1	406 / 447 / 40	327 / 551 / 32	470 / 330 / 88	406 / 441 / 76	338 / 388 / 149	284 / 484 / 121	385 / 460 / 38	312 / 571 / 31	470 / 359 / 88	385 / 455 / 72	322 / 402 / 142	276 / 495 / 114						
		2	341 / 516 / 34	276 / 636 / 27	406 / 427 / 76	328 / 529 / 61	301 / 431 / 133	251 / 532 / 107	327 / 537 / 32	269 / 671 / 27	392 / 448 / 73	314 / 549 / 59	291 / 451 / 128	248 / 552 / 103						
		3	290 / 619 / 29	232 / 752 / 23	314 / 550 / 59	257 / 684 / 48	222 / 590 / 98	186 / 724 / 79	276 / 638 / 27	225 / 789 / 23	307 / 583 / 57	243 / 700 / 45	211 / 610 / 93	186 / 762 / 77						
	25	1	406 / 447 / 40	327 / 551 / 32	470 / 330 / 88	406 / 441 / 76	377 / 388 / 179	316 / 484 / 146	385 / 460 / 38	312 / 571 / 31	470 / 359 / 88	385 / 455 / 72	360 / 402 / 171	307 / 495 / 137						
		2	341 / 516 / 34	276 / 636 / 27	406 / 427 / 76	328 / 529 / 61	336 / 431 / 160	279 / 532 / 129	327 / 537 / 32	269 / 671 / 27	392 / 448 / 73	314 / 549 / 59	324 / 451 / 154	275 / 552 / 123						
		3	290 / 619 / 29	232 / 752 / 23	314 / 550 / 59	257 / 684 / 48	248 / 590 / 118	207 / 724 / 95	276 / 638 / 27	225 / 789 / 23	307 / 583 / 57	243 / 700 / 45	236 / 610 / 112	207 / 762 / 93						
Wind Speed [mph]		120						130												
15	1	315 / 479 / 34	254 / 589 / 27	395 / 384 / 74	316 / 474 / 60	276 / 421 / 111	245 / 514 / 89	328 / 460 / 35	266 / 571 / 29	413 / 370 / 78	328 / 455 / 62	285 / 402 / 115	246 / 495 / 92							
	2	272 / 568 / 29	217 / 686 / 23	322 / 468 / 61	262 / 580 / 49	248 / 471 / 100	225 / 583 / 81	278 / 537 / 30	229 / 671 / 25	334 / 448 / 63	268 / 549 / 51	257 / 451 / 104	221 / 552 / 83							
	3	229 / 671 / 25	186 / 824 / 20	249 / 601 / 47	201 / 734 / 38	182 / 642 / 74	162 / 773 / 59	235 / 638 / 25	192 / 789 / 21	262 / 583 / 49	207 / 700 / 39	187 / 610 / 75	166 / 762 / 62							
	20	1	370 / 479 / 37	298 / 589 / 30	463 / 384 / 86	371 / 474 / 69	312 / 421 / 137	274 / 514 / 109	385 / 460 / 38	312 / 571 / 31	470 / 359 / 88	385 / 455 / 72	322 / 402 / 142	276 / 495 / 114						
		2	319 / 568 / 32	254 / 686 / 25	378 / 468 / 71	307 / 580 / 57	280 / 471 / 123	251 / 583 / 100	327 / 537 / 32	269 / 671 / 27	392 / 448 / 73	314 / 549 / 59	291 / 451 / 128	248 / 552 / 103						
		3	269 / 671 / 27	218 / 824 / 22	292 / 601 / 55	235 / 734 / 44	206 / 642 / 91	181 / 773 / 72	276 / 638 / 27	225 / 789 / 23	307 / 583 / 57	243 / 700 / 45	211 / 610 / 93	186 / 762 / 77						
	25	1	370 / 479 / 37	298 / 589 / 30	463 / 384 / 86	371 / 474 / 69	348 / 421 / 165	303 / 514 / 132	385 / 460 / 38	312 / 571 / 31	470 / 359 / 88	385 / 455 / 72	360 / 402 / 171	307 / 495 / 137						
		2	319 / 568 / 32	254 / 686 / 25	378 / 468 / 71	307 / 580 / 57	313 / 471 / 148	277 / 583 / 121	327 / 537 / 32	269 / 671 / 27	392 / 448 / 73	314 / 549 / 59	324 / 451 / 154	275 / 552 / 123						
		3	269 / 671 / 27	218 / 824 / 22	292 / 601 / 55	235 / 734 / 44	230 / 642 / 109	200 / 773 / 87	276 / 638 / 27	225 / 789 / 23	307 / 583 / 57	243 / 700 / 45	236 / 610 / 112	207 / 762 / 93						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	303 / 497 / 33	249 / 619 / 27	377 / 396 / 71	306 / 492 / 57	266 / 439 / 107	249 / 542 / 87	284 / 539 / 31	242 / 660 / 25	353 / 430 / 66	302 / 535 / 54	252 / 473 / 100	251 / 585 / 81	266 / 577 / 29	241 / 713 / 23	328 / 459 / 62	291 / 559 / 49	248 / 500 / 92	251 / 621 / 75
2		260 / 584 / 28	212 / 718 / 23	310 / 486 / 59	251 / 596 / 47	238 / 489 / 96	222 / 599 / 77	241 / 626 / 26	209 / 778 / 21	286 / 518 / 54	245 / 637 / 44	224 / 521 / 89	222 / 640 / 72	229 / 678 / 25	206 / 832 / 20	268 / 554 / 51	244 / 690 / 41	222 / 557 / 83	226 / 692 / 68	
3		217 / 684 / 23	181 / 858 / 19	237 / 616 / 45	196 / 766 / 37	173 / 656 / 70	163 / 805 / 57	204 / 743 / 22	177 / 919 / 18	225 / 674 / 43	193 / 827 / 35	167 / 715 / 66	164 / 864 / 53	192 / 797 / 21	172 / 970 / 17	207 / 707 / 39	190 / 880 / 32	162 / 746 / 60	164 / 915 / 49	
20		1	356 / 497 / 35	292 / 619 / 29	442 / 396 / 82	358 / 492 / 67	301 / 439 / 133	277 / 542 / 107	334 / 539 / 33	282 / 660 / 27	413 / 430 / 77	352 / 535 / 63	285 / 473 / 123	277 / 585 / 100	312 / 577 / 31	278 / 713 / 25	385 / 459 / 72	336 / 559 / 57	278 / 500 / 114	276 / 621 / 93
		2	305 / 584 / 30	248 / 718 / 25	364 / 486 / 68	294 / 596 / 55	270 / 489 / 119	247 / 599 / 96	283 / 626 / 28	244 / 778 / 23	335 / 518 / 63	284 / 637 / 51	252 / 521 / 109	245 / 640 / 89	269 / 678 / 27	239 / 832 / 22	314 / 554 / 59	282 / 690 / 48	249 / 557 / 103	248 / 692 / 84
		3	254 / 684 / 25	212 / 858 / 21	278 / 616 / 52	230 / 766 / 43	196 / 656 / 86	181 / 805 / 70	240 / 743 / 24	206 / 919 / 20	264 / 674 / 49	225 / 827 / 40	188 / 715 / 82	181 / 864 / 65	225 / 797 / 23	199 / 970 / 18	243 / 707 / 45	219 / 880 / 38	181 / 746 / 75	179 / 915 / 61
25		1	356 / 497 / 35	292 / 619 / 29	442 / 396 / 82	358 / 492 / 67	336 / 439 / 160	306 / 542 / 129	334 / 539 / 33	282 / 660 / 27	413 / 430 / 77	352 / 535 / 63	317 / 473 / 148	304 / 585 / 121	312 / 577 / 31	278 / 713 / 25	385 / 459 / 72	336 / 559 / 57	308 / 500 / 137	300 / 621 / 112
		2	305 / 584 / 30	248 / 718 / 25	364 / 486 / 68	294 / 596 / 55	301 / 489 / 143	272 / 599 / 115	283 / 626 / 28	244 / 778 / 23	335 / 518 / 63	284 / 637 / 51	281 / 521 / 132	268 / 640 / 107	269 / 678 / 27	239 / 832 / 22	314 / 554 / 59	282 / 690 / 48	276 / 557 / 123	270 / 692 / 101
		3	254 / 684 / 25	212 / 858 / 21	278 / 616 / 52	230 / 766 / 43	218 / 656 / 104	200 / 805 / 84	240 / 743 / 24	206 / 919 / 20	264 / 674 / 49	225 / 827 / 40	210 / 715 / 98	198 / 864 / 79	225 / 797 / 23	199 / 970 / 18	243 / 707 / 45	219 / 880 / 38	201 / 746 / 90	195 / 915 / 73
Wind Speed [mph]		170						180												
15	1	248 / 608 / 27	239 / 761 / 22	310 / 493 / 59	292 / 605 / 47	247 / 533 / 87	250 / 651 / 70	245 / 650 / 25	236 / 804 / 21	304 / 523 / 55	285 / 631 / 44	245 / 560 / 81	254 / 692 / 66							
	2	210 / 706 / 23	203 / 879 / 19	250 / 586 / 47	242 / 737 / 39	220 / 588 / 77	230 / 739 / 64	206 / 747 / 21	198 / 917 / 18	247 / 627 / 45	240 / 780 / 37	223 / 630 / 74	233 / 782 / 60							
	3	180 / 843 / 19	166 / 1009 / 16	195 / 753 / 37	185 / 924 / 30	161 / 791 / 57	169 / 994 / 47	174 / 882 / 18	168 / 1083 / 15	190 / 793 / 35	188 / 998 / 29	166 / 859 / 55	167 / 1027 / 44							
	20	1	291 / 608 / 29	274 / 761 / 24	364 / 493 / 68	335 / 605 / 55	275 / 533 / 107	273 / 651 / 86	286 / 650 / 27	269 / 804 / 23	355 / 523 / 64	325 / 631 / 51	272 / 560 / 100	276 / 692 / 82						
		2	247 / 706 / 25	233 / 879 / 20	293 / 586 / 55	278 / 737 / 45	245 / 588 / 96	251 / 739 / 79	241 / 747 / 23	226 / 917 / 19	288 / 627 / 52	274 / 780 / 43	247 / 630 / 91	252 / 782 / 75						
		3	211 / 843 / 21	191 / 1009 / 17	228 / 753 / 43	213 / 924 / 35	180 / 791 / 70	184 / 994 / 58	203 / 882 / 20	191 / 1083 / 16	222 / 793 / 40	214 / 998 / 34	183 / 859 / 68	181 / 1027 / 54						
	25	1	291 / 608 / 29	274 / 761 / 24	364 / 493 / 68	335 / 605 / 55	303 / 533 / 129	295 / 651 / 104	286 / 650 / 27	269 / 804 / 23	355 / 523 / 64	325 / 631 / 51	298 / 560 / 121	297 / 692 / 98						
		2	247 / 706 / 25	233 / 879 / 20	293 / 586 / 55	278 / 737 / 45	271 / 588 / 115	272 / 739 / 95	241 / 747 / 23	226 / 917 / 19	288 / 627 / 52	274 / 780 / 43	270 / 630 / 109	272 / 782 / 90						
		3	211 / 843 / 21	191 / 1009 / 17	228 / 753 / 43	213 / 924 / 35	198 / 791 / 84	200 / 994 / 70	203 / 882 / 20	191 / 1083 / 16	222 / 793 / 40	214 / 998 / 34	201 / 859 / 81	195 / 1027 / 65						
Wind Speed [mph]		190						200												
15	1	242 / 688 / 24	232 / 839 / 19	297 / 549 / 52	285 / 668 / 41	249 / 597 / 77	257 / 729 / 62	238 / 722 / 23	228 / 867 / 18	296 / 584 / 49	283 / 701 / 39	251 / 632 / 74	270 / 784 / 60							
	2	208 / 808 / 21	200 / 983 / 17	244 / 665 / 43	237 / 816 / 35	224 / 667 / 70	234 / 818 / 57	203 / 839 / 19	202 / 1047 / 16	241 / 699 / 40	233 / 846 / 32	225 / 701 / 66	236 / 848 / 53							
	3	175 / 948 / 18	168 / 1153 / 14	192 / 856 / 33	182 / 1024 / 27	164 / 892 / 51	172 / 1096 / 42	168 / 971 / 16	169 / 1218 / 14	186 / 885 / 31	183 / 1087 / 26	168 / 953 / 49	177 / 1160 / 40							
	20	1	280 / 688 / 26	264 / 839 / 21	344 / 549 / 60	322 / 668 / 48	274 / 597 / 96	278 / 729 / 77	274 / 722 / 25	257 / 867 / 20	341 / 584 / 57	319 / 701 / 45	275 / 632 / 91	287 / 784 / 75						
		2	241 / 808 / 23	227 / 983 / 18	283 / 665 / 49	269 / 816 / 40	247 / 667 / 86	252 / 818 / 70	234 / 839 / 21	228 / 1047 / 18	278 / 699 / 47	263 / 846 / 38	247 / 701 / 82	251 / 848 / 65						
		3	203 / 948 / 19	191 / 1153 / 15	222 / 856 / 39	206 / 1024 / 31	180 / 892 / 63	185 / 1096 / 52	194 / 971 / 18	190 / 1218 / 15	214 / 885 / 36	206 / 1087 / 30	183 / 953 / 61	189 / 1160 / 49						
	25	1	280 / 688 / 26	264 / 839 / 21	344 / 549 / 60	322 / 668 / 48	299 / 597 / 115	298 / 729 / 93	274 / 722 / 25	257 / 867 / 20	341 / 584 / 57	319 / 701 / 45	299 / 632 / 109	307 / 784 / 90						
		2	241 / 808 / 23	227 / 983 / 18	283 / 665 / 49	269 / 816 / 40	270 / 667 / 104	271 / 818 / 84	234 / 839 / 21	228 / 1047 / 18	278 / 699 / 47	263 / 846 / 38	268 / 701 / 98	268 / 848 / 79						
		3	203 / 948 / 19	191 / 1153 / 15	222 / 856 / 39	206 / 1024 / 31	197 / 892 / 76	199 / 1096 / 62	194 / 971 / 18	190 / 1218 / 15	214 / 885 / 36	206 / 1087 / 30	199 / 953 / 73	201 / 1160 / 59						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	30	1	501 / 388 / 48	400 / 477 / 38	500 / 244 / 93	500 / 382 / 93	443 / 312 / 222	384 / 419 / 193	478 / 408 / 46	384 / 504 / 37	500 / 270 / 93	477 / 402 / 89	443 / 344 / 222	365 / 437 / 183	454 / 425 / 43	368 / 528 / 35	500 / 297 / 93	454 / 419 / 84	436 / 372 / 219	352 / 461 / 177
2		423 / 453 / 40	345 / 565 / 33	500 / 370 / 93	408 / 466 / 76	430 / 380 / 216	345 / 469 / 173	408 / 479 / 39	329 / 592 / 32	484 / 395 / 90	392 / 492 / 73	410 / 399 / 206	326 / 486 / 164	384 / 494 / 37	314 / 615 / 30	461 / 412 / 86	369 / 507 / 69	391 / 416 / 196	313 / 509 / 157	
3		361 / 546 / 35	290 / 669 / 28	392 / 488 / 73	315 / 598 / 59	313 / 518 / 157	254 / 640 / 128	337 / 560 / 32	274 / 693 / 26	369 / 504 / 69	300 / 624 / 56	300 / 544 / 151	241 / 665 / 121	329 / 598 / 32	267 / 735 / 26	354 / 528 / 66	285 / 646 / 53	287 / 568 / 144	228 / 686 / 115	
35		1	545 / 187 / 50	441 / 477 / 40	534 / 236 / 99	534 / 371 / 99	477 / 307 / 251	420 / 419 / 221	528 / 408 / 48	424 / 504 / 39	534 / 261 / 99	526 / 402 / 97	477 / 339 / 251	399 / 437 / 210	502 / 425 / 46	407 / 528 / 37	534 / 287 / 99	500 / 419 / 93	477 / 372 / 251	385 / 461 / 202
		2	467 / 453 / 43	381 / 565 / 35	534 / 358 / 99	450 / 466 / 83	470 / 380 / 247	377 / 469 / 198	450 / 479 / 41	363 / 592 / 33	534 / 395 / 99	433 / 492 / 80	449 / 399 / 236	356 / 486 / 187	424 / 494 / 39	346 / 615 / 32	509 / 412 / 94	407 / 507 / 75	427 / 416 / 225	342 / 509 / 180
		3	398 / 546 / 37	320 / 669 / 29	433 / 488 / 80	348 / 598 / 65	342 / 518 / 180	278 / 640 / 146	372 / 560 / 34	303 / 693 / 28	407 / 504 / 75	331 / 624 / 61	328 / 544 / 172	264 / 665 / 139	363 / 598 / 33	294 / 735 / 27	390 / 528 / 72	314 / 646 / 58	313 / 568 / 165	249 / 686 / 131
40		1	583 / 181 / 111	488 / 477 / 93	568 / 229 / 157	568 / 359 / 157	503 / 298 / 281	456 / 419 / 255	583 / 201 / 111	469 / 504 / 89	568 / 253 / 157	568 / 395 / 157	503 / 329 / 281	433 / 437 / 242	555 / 425 / 105	450 / 528 / 86	568 / 278 / 157	549 / 419 / 152	503 / 360 / 281	418 / 461 / 233
		2	516 / 453 / 98	421 / 565 / 80	568 / 347 / 157	494 / 466 / 136	503 / 374 / 281	410 / 469 / 229	497 / 479 / 95	402 / 592 / 77	568 / 382 / 157	475 / 492 / 131	487 / 399 / 272	387 / 486 / 216	469 / 494 / 89	383 / 615 / 73	559 / 412 / 154	447 / 507 / 123	464 / 416 / 259	371 / 509 / 207
		3	440 / 546 / 84	354 / 669 / 67	475 / 488 / 131	382 / 598 / 105	371 / 518 / 207	302 / 640 / 169	411 / 560 / 78	335 / 693 / 64	447 / 504 / 123	363 / 624 / 100	356 / 544 / 199	286 / 665 / 160	402 / 598 / 77	325 / 735 / 62	428 / 528 / 118	345 / 646 / 95	340 / 568 / 190	271 / 686 / 151
Wind Speed [mph]		110						115												
30	1	439 / 447 / 42	353 / 551 / 34	500 / 325 / 93	438 / 441 / 82	417 / 388 / 209	348 / 484 / 170	415 / 460 / 40	337 / 571 / 32	500 / 354 / 93	415 / 455 / 77	397 / 402 / 200	337 / 495 / 160							
	2	368 / 516 / 35	298 / 636 / 29	438 / 427 / 82	354 / 529 / 66	371 / 431 / 186	308 / 532 / 151	353 / 537 / 34	290 / 671 / 28	423 / 448 / 79	338 / 549 / 63	358 / 451 / 180	302 / 552 / 144							
	3	314 / 619 / 30	251 / 752 / 24	338 / 550 / 63	277 / 684 / 52	274 / 590 / 138	227 / 724 / 111	298 / 638 / 29	243 / 789 / 23	331 / 583 / 62	262 / 700 / 49	261 / 610 / 131	227 / 762 / 108							
	35	1	484 / 447 / 44	389 / 551 / 36	534 / 315 / 99	483 / 441 / 89	456 / 388 / 239	379 / 484 / 195	459 / 460 / 42	372 / 571 / 34	534 / 343 / 99	458 / 455 / 85	434 / 402 / 228	367 / 495 / 183						
		2	407 / 516 / 37	329 / 636 / 30	483 / 427 / 89	390 / 529 / 72	406 / 431 / 213	336 / 532 / 172	389 / 537 / 36	320 / 671 / 29	467 / 448 / 86	373 / 549 / 69	392 / 451 / 206	329 / 552 / 165						
		3	346 / 619 / 32	277 / 752 / 26	373 / 550 / 69	306 / 684 / 57	299 / 590 / 157	248 / 724 / 127	329 / 638 / 30	268 / 789 / 25	365 / 583 / 68	289 / 700 / 54	285 / 610 / 150	247 / 762 / 124						
	40	1	536 / 447 / 102	430 / 551 / 82	568 / 305 / 157	531 / 441 / 146	495 / 388 / 276	411 / 484 / 225	507 / 460 / 96	411 / 571 / 78	568 / 332 / 157	503 / 455 / 139	472 / 402 / 263	397 / 495 / 212						
		2	450 / 516 / 86	364 / 636 / 69	531 / 427 / 146	428 / 529 / 118	441 / 431 / 246	364 / 532 / 199	430 / 537 / 82	354 / 671 / 67	512 / 448 / 141	410 / 549 / 113	425 / 451 / 237	356 / 552 / 190						
		3	383 / 619 / 73	306 / 752 / 58	410 / 550 / 113	335 / 684 / 93	325 / 590 / 181	269 / 724 / 147	364 / 638 / 69	297 / 789 / 57	401 / 583 / 111	317 / 700 / 88	310 / 610 / 173	267 / 762 / 143						
Wind Speed [mph]		120						130												
30	1	400 / 479 / 38	321 / 589 / 31	500 / 384 / 93	400 / 474 / 74	384 / 421 / 193	332 / 514 / 154	415 / 460 / 40	337 / 571 / 32	500 / 354 / 93	415 / 455 / 77	397 / 402 / 200	337 / 495 / 160							
	2	345 / 568 / 33	274 / 686 / 26	408 / 468 / 76	331 / 580 / 62	345 / 471 / 173	304 / 583 / 141	353 / 537 / 34	290 / 671 / 28	423 / 448 / 79	338 / 549 / 63	358 / 451 / 180	302 / 552 / 144							
	3	290 / 671 / 28	235 / 824 / 23	315 / 601 / 59	254 / 734 / 47	254 / 642 / 128	219 / 773 / 102	298 / 638 / 29	243 / 789 / 23	331 / 583 / 62	262 / 700 / 49	261 / 610 / 131	227 / 762 / 108							
	35	1	441 / 479 / 40	355 / 589 / 33	534 / 372 / 99	441 / 474 / 82	420 / 421 / 221	361 / 514 / 176	459 / 460 / 42	372 / 571 / 34	534 / 343 / 99	458 / 455 / 85	434 / 402 / 228	367 / 495 / 183						
		2	381 / 568 / 35	303 / 686 / 28	450 / 468 / 83	365 / 580 / 68	377 / 471 / 198	330 / 583 / 161	389 / 537 / 36	320 / 671 / 29	467 / 448 / 86	373 / 549 / 69	392 / 451 / 206	329 / 552 / 165						
		3	320 / 671 / 29	260 / 824 / 24	348 / 601 / 65	280 / 734 / 52	278 / 642 / 146	238 / 773 / 116	329 / 638 / 30	268 / 789 / 25	365 / 583 / 68	289 / 700 / 54	285 / 610 / 150	247 / 762 / 124						
	40	1	488 / 479 / 93	392 / 589 / 75	568 / 360 / 157	484 / 474 / 134	456 / 421 / 255	389 / 514 / 203	507 / 460 / 96	411 / 571 / 78	568 / 332 / 157	503 / 455 / 139	472 / 402 / 263	397 / 495 / 212						
		2	421 / 568 / 80	335 / 686 / 64	494 / 468 / 136	401 / 580 / 111	410 / 471 / 229	356 / 583 / 186	430 / 537 / 82	354 / 671 / 67	512 / 448 / 141	410 / 549 / 113	425 / 451 / 237	356 / 552 / 190						
		3	354 / 671 / 67	287 / 824 / 55	382 / 601 / 105	308 / 734 / 85	302 / 642 / 169	257 / 773 / 134	364 / 638 / 69	297 / 789 / 57	401 / 583 / 111	317 / 700 / 88	310 / 610 / 173	267 / 762 / 143						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]		140						150						160																					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																											
Ground Snow	30	1	384 / 497 / 37	315 / 619 / 30	477 / 396 / 89	387 / 492 / 72	371 / 439 / 186	334 / 542 / 151	361 / 539 / 35	303 / 660 / 28	446 / 430 / 83	378 / 535 / 67	349 / 473 / 173	330 / 585 / 141	337 / 577 / 32	299 / 713 / 26	415 / 459 / 77	360 / 559 / 62	338 / 500 / 160	325 / 621 / 131																
		2	329 / 584 / 32	268 / 718 / 26	392 / 486 / 73	317 / 596 / 59	332 / 489 / 167	298 / 599 / 134	306 / 626 / 29	262 / 778 / 24	361 / 518 / 67	306 / 637 / 55	310 / 521 / 154	292 / 640 / 124	290 / 678 / 28	256 / 832 / 23	338 / 554 / 63	302 / 690 / 52	303 / 557 / 144	292 / 692 / 118																
		3	274 / 684 / 26	229 / 858 / 22	300 / 616 / 56	248 / 766 / 46	241 / 656 / 121	218 / 805 / 98	259 / 743 / 25	221 / 919 / 20	285 / 674 / 53	242 / 827 / 43	231 / 715 / 115	215 / 864 / 92	243 / 797 / 23	213 / 970 / 19	262 / 707 / 49	235 / 880 / 40	221 / 746 / 105	211 / 915 / 85																
	35	1	424 / 497 / 39	348 / 619 / 32	526 / 396 / 97	426 / 492 / 79	406 / 439 / 213	362 / 542 / 172	398 / 539 / 37	333 / 660 / 29	492 / 430 / 91	415 / 535 / 74	382 / 473 / 198	356 / 585 / 161	372 / 577 / 34	327 / 713 / 28	458 / 459 / 85	394 / 559 / 68	368 / 500 / 183	349 / 621 / 150																
		2	363 / 584 / 33	296 / 718 / 27	433 / 486 / 80	350 / 596 / 65	363 / 489 / 191	323 / 599 / 154	338 / 626 / 31	288 / 778 / 26	399 / 518 / 74	336 / 637 / 60	339 / 521 / 176	315 / 640 / 142	320 / 678 / 29	280 / 832 / 24	373 / 554 / 69	330 / 690 / 57	330 / 557 / 165	315 / 692 / 135																
		3	303 / 684 / 28	252 / 858 / 23	331 / 616 / 61	273 / 766 / 50	264 / 656 / 139	236 / 805 / 113	286 / 743 / 26	243 / 919 / 22	314 / 674 / 58	265 / 827 / 47	252 / 715 / 131	232 / 864 / 105	268 / 797 / 25	234 / 970 / 20	289 / 707 / 54	257 / 880 / 44	240 / 746 / 120	227 / 915 / 98																
	40	1	469 / 497 / 89	383 / 619 / 73	568 / 390 / 157	466 / 492 / 129	441 / 439 / 246	390 / 542 / 199	440 / 539 / 84	363 / 660 / 67	540 / 430 / 149	453 / 535 / 121	414 / 473 / 229	383 / 585 / 186	411 / 577 / 78	356 / 713 / 64	503 / 459 / 139	429 / 559 / 111	398 / 500 / 212	374 / 621 / 173																
		2	402 / 584 / 77	325 / 718 / 62	475 / 486 / 131	382 / 596 / 105	395 / 489 / 220	348 / 599 / 177	373 / 626 / 71	314 / 778 / 58	438 / 518 / 121	366 / 637 / 98	368 / 521 / 203	338 / 640 / 164	354 / 678 / 67	305 / 832 / 55	410 / 554 / 113	359 / 690 / 93	357 / 557 / 190	337 / 692 / 156																
		3	335 / 684 / 64	278 / 858 / 53	363 / 616 / 100	298 / 766 / 82	286 / 656 / 160	255 / 805 / 130	316 / 743 / 60	265 / 919 / 49	345 / 674 / 95	289 / 827 / 77	274 / 715 / 151	249 / 864 / 121	297 / 797 / 57	254 / 970 / 46	317 / 707 / 88	279 / 880 / 72	260 / 746 / 138	243 / 915 / 113																
30	170	1	314 / 608 / 30	293 / 761 / 25	392 / 493 / 73	358 / 605 / 59	332 / 533 / 151	318 / 651 / 121	308 / 650 / 29	287 / 804 / 23	381 / 523 / 69	346 / 631 / 55	324 / 560 / 141	319 / 692 / 115	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	267 / 706 / 26	249 / 879 / 21	316 / 586 / 59	297 / 737 / 49	296 / 588 / 134	292 / 739 / 111	259 / 747 / 24	241 / 917 / 20	310 / 627 / 56	292 / 780 / 46	294 / 630 / 128	291 / 782 / 105																								
3	228 / 843 / 22	205 / 1009 / 18	246 / 753 / 46	227 / 924 / 37	216 / 791 / 98	215 / 994 / 82	219 / 882 / 20	204 / 1083 / 17	239 / 793 / 43	228 / 998 / 36	219 / 859 / 95	210 / 1027 / 76																								
35	1	346 / 608 / 32	320 / 761 / 26	433 / 493 / 80	391 / 605 / 65	360 / 533 / 172	341 / 651 / 139	339 / 650 / 30	312 / 804 / 25	420 / 523 / 75	377 / 631 / 60	351 / 560 / 161	340 / 692 / 131																							
	2	294 / 706 / 27	272 / 879 / 22	348 / 586 / 65	324 / 737 / 54	321 / 588 / 154	313 / 739 / 127	285 / 747 / 26	262 / 917 / 21	341 / 627 / 61	317 / 780 / 50	318 / 630 / 146	311 / 782 / 120																							
	3	251 / 843 / 23	223 / 1009 / 19	272 / 753 / 50	248 / 924 / 41	235 / 791 / 113	230 / 994 / 94	241 / 882 / 22	222 / 1083 / 18	262 / 793 / 47	248 / 998 / 40	237 / 859 / 109	224 / 1027 / 86																							
40	1	383 / 608 / 73	347 / 761 / 60	475 / 493 / 131	423 / 605 / 105	388 / 533 / 199	363 / 651 / 160	370 / 650 / 69	338 / 804 / 57	458 / 523 / 123	407 / 631 / 98	377 / 560 / 186	361 / 692 / 151																							
	2	325 / 706 / 62	295 / 879 / 51	382 / 586 / 105	351 / 737 / 88	346 / 588 / 177	334 / 739 / 147	311 / 747 / 58	283 / 917 / 48	372 / 627 / 100	343 / 780 / 82	342 / 630 / 169	331 / 782 / 138																							
	3	278 / 843 / 53	242 / 1009 / 42	298 / 753 / 82	269 / 924 / 67	253 / 791 / 130	246 / 994 / 108	263 / 882 / 49	240 / 1083 / 40	286 / 793 / 77	268 / 998 / 65	255 / 859 / 125	238 / 1027 / 100																							
30	190	1	301 / 688 / 27	280 / 839 / 22	370 / 549 / 64	343 / 668 / 52	324 / 597 / 134	318 / 729 / 108	294 / 722 / 26	272 / 867 / 20	365 / 584 / 62	338 / 701 / 49	323 / 632 / 128	326 / 784 / 105																						
		2	259 / 808 / 23	242 / 983 / 19	304 / 665 / 53	286 / 816 / 43	292 / 667 / 121	289 / 818 / 98	251 / 839 / 22	242 / 1047 / 18	297 / 699 / 50	278 / 846 / 40	290 / 701 / 115	286 / 848 / 92																						
		3	218 / 948 / 20	203 / 1153 / 16	238 / 856 / 42	219 / 1024 / 33	214 / 892 / 89	212 / 1096 / 72	208 / 971 / 18	202 / 1218 / 15	230 / 885 / 39	219 / 1087 / 32	215 / 953 / 85	214 / 1160 / 69																						
	35	1	330 / 688 / 29	304 / 839 / 23	405 / 549 / 71	371 / 668 / 57	349 / 597 / 154	338 / 729 / 124	322 / 722 / 27	294 / 867 / 22	399 / 584 / 68	365 / 701 / 54	347 / 632 / 146	346 / 784 / 120																						
		2	285 / 808 / 25	262 / 983 / 20	333 / 665 / 58	309 / 816 / 47	315 / 667 / 139	308 / 818 / 113	274 / 839 / 23	262 / 1047 / 19	325 / 699 / 55	301 / 846 / 44	311 / 701 / 131	303 / 848 / 105																						
		3	239 / 948 / 21	220 / 1153 / 17	261 / 856 / 46	237 / 1024 / 36	230 / 892 / 101	226 / 1096 / 83	227 / 971 / 19	218 / 1218 / 16	251 / 885 / 43	236 / 1087 / 35	231 / 953 / 98	227 / 1160 / 79																						
	40	1	360 / 688 / 66	328 / 839 / 53	441 / 549 / 116	400 / 668 / 93	374 / 597 / 177	358 / 729 / 143	349 / 722 / 62	316 / 867 / 49	433 / 584 / 111	392 / 701 / 88	371 / 632 / 169	366 / 784 / 138																						
		2	310 / 808 / 57	282 / 983 / 46	363 / 665 / 95	333 / 816 / 77	338 / 667 / 160	326 / 818 / 130	298 / 839 / 53	281 / 1047 / 44	353 / 699 / 90	323 / 846 / 72	333 / 701 / 151	320 / 848 / 121																						
		3	260 / 948 / 48	237 / 1153 / 39	284 / 856 / 75	256 / 1024 / 59	247 / 892 / 117	239 / 1096 / 95	247 / 971 / 44	234 / 1218 / 37	272 / 885 / 70	254 / 1087 / 57	247 / 953 / 113	240 / 1160 / 91																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof

30-60ft

83in x 41.5in

Exposure Category : B	Wind Speed [mph]		95						100						105																					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																													
Ground Snow	45	1	628 / 175 / 116	543 / 477 / 100	612 / 222 / 166	612 / 347 / 166	534 / 294 / 304	492 / 419 / 280	628 / 195 / 116	522 / 504 / 96	612 / 245 / 166	612 / 382 / 166	534 / 324 / 304	467 / 437 / 266	618 / 425 / 114	501 / 528 / 92	612 / 269 / 166	612 / 419 / 166	534 / 355 / 304	451 / 461 / 257																
		2	575 / 453 / 106	469 / 565 / 87	612 / 336 / 166	550 / 466 / 149	534 / 368 / 304	442 / 469 / 252	554 / 479 / 102	447 / 592 / 83	612 / 370 / 166	529 / 492 / 144	526 / 399 / 299	417 / 486 / 238	522 / 494 / 96	426 / 615 / 79	612 / 405 / 166	498 / 507 / 135	501 / 416 / 285	401 / 509 / 228																
		3	490 / 546 / 91	394 / 669 / 73	529 / 488 / 144	425 / 598 / 116	401 / 518 / 228	326 / 640 / 186	458 / 560 / 85	373 / 693 / 69	498 / 504 / 135	405 / 624 / 110	384 / 544 / 219	309 / 665 / 176	447 / 598 / 83	362 / 735 / 67	477 / 528 / 130	384 / 646 / 104	367 / 568 / 209	292 / 686 / 167																
	50	1	669 / 169 / 120	599 / 477 / 108	651 / 214 / 175	651 / 335 / 175	555 / 285 / 322	529 / 419 / 306	669 / 188 / 120	575 / 504 / 104	651 / 237 / 175	651 / 369 / 175	555 / 314 / 322	502 / 437 / 291	669 / 207 / 120	552 / 528 / 99	651 / 260 / 175	651 / 405 / 175	555 / 344 / 322	484 / 461 / 280																
		2	634 / 453 / 114	517 / 565 / 93	651 / 324 / 175	606 / 466 / 162	555 / 357 / 322	475 / 469 / 275	610 / 479 / 110	493 / 592 / 89	651 / 357 / 175	583 / 492 / 156	555 / 392 / 322	448 / 486 / 260	575 / 494 / 104	470 / 615 / 85	651 / 391 / 175	549 / 507 / 147	538 / 416 / 311	430 / 509 / 249																
		3	540 / 546 / 97	434 / 669 / 78	583 / 488 / 156	469 / 598 / 126	430 / 518 / 249	350 / 640 / 203	505 / 560 / 91	411 / 693 / 74	549 / 504 / 147	446 / 624 / 120	412 / 544 / 239	332 / 665 / 192	493 / 598 / 89	399 / 735 / 72	526 / 528 / 141	423 / 646 / 114	394 / 568 / 229	314 / 686 / 182																
	60	1	737 / 158 / 128	709 / 477 / 123	718 / 199 / 189	718 / 312 / 189	623 / 271 / 360	623 / 419 / 360	737 / 175 / 128	682 / 504 / 118	718 / 220 / 189	718 / 343 / 189	623 / 298 / 360	591 / 437 / 342	737 / 193 / 128	654 / 528 / 113	718 / 242 / 189	718 / 376 / 189	623 / 327 / 360	570 / 461 / 330																
		2	737 / 445 / 128	612 / 565 / 106	718 / 302 / 189	718 / 466 / 189	623 / 339 / 360	560 / 469 / 323	723 / 479 / 125	584 / 592 / 101	718 / 332 / 189	691 / 492 / 182	623 / 373 / 360	528 / 486 / 305	682 / 494 / 118	557 / 615 / 96	718 / 364 / 189	650 / 507 / 171	623 / 409 / 360	507 / 509 / 293																
		3	640 / 546 / 111	515 / 669 / 89	691 / 488 / 182	555 / 598 / 146	507 / 518 / 293	412 / 640 / 238	598 / 560 / 104	487 / 693 / 84	650 / 504 / 171	528 / 624 / 139	486 / 544 / 281	391 / 665 / 226	584 / 598 / 101	473 / 735 / 82	623 / 528 / 164	501 / 646 / 132	465 / 568 / 269	370 / 686 / 214																
110	45	1	596 / 447 / 110	479 / 551 / 89	612 / 295 / 166	591 / 441 / 161	534 / 388 / 304	443 / 484 / 247	564 / 460 / 104	458 / 571 / 85	612 / 321 / 166	560 / 455 / 152	509 / 402 / 290	427 / 495 / 233	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	501 / 516 / 92	405 / 636 / 75	591 / 427 / 161	477 / 529 / 130	476 / 431 / 271	392 / 532 / 219	479 / 537 / 89	394 / 671 / 73	570 / 448 / 155	456 / 549 / 124	459 / 451 / 261	383 / 552 / 209																								
3	426 / 619 / 79	341 / 752 / 63	456 / 550 / 124	373 / 684 / 102	351 / 590 / 200	290 / 724 / 162	405 / 638 / 75	330 / 789 / 61	446 / 583 / 121	353 / 700 / 96	334 / 610 / 190	287 / 762 / 157																								
50	1	657 / 447 / 118	528 / 551 / 95	651 / 285 / 175	651 / 441 / 175	555 / 375 / 322	475 / 484 / 270	622 / 460 / 112	505 / 571 / 91	651 / 310 / 175	617 / 455 / 165	547 / 402 / 317	457 / 495 / 254																							
	2	552 / 516 / 99	446 / 636 / 80	651 / 427 / 175	526 / 529 / 141	511 / 431 / 296	420 / 532 / 239	528 / 537 / 95	434 / 671 / 78	628 / 448 / 169	503 / 549 / 135	493 / 451 / 286	410 / 552 / 229																							
	3	470 / 619 / 85	376 / 752 / 68	503 / 550 / 135	412 / 684 / 110	376 / 590 / 218	311 / 724 / 177	446 / 638 / 80	364 / 789 / 66	491 / 583 / 132	389 / 700 / 104	359 / 610 / 208	308 / 762 / 172																							
60	1	737 / 211 / 128	626 / 551 / 108	718 / 265 / 189	718 / 410 / 189	623 / 357 / 360	549 / 484 / 317	737 / 231 / 128	598 / 571 / 104	718 / 289 / 189	718 / 446 / 189	623 / 389 / 360	518 / 495 / 299																							
	2	654 / 516 / 113	529 / 636 / 92	718 / 397 / 189	623 / 529 / 164	602 / 431 / 348	486 / 532 / 281	626 / 537 / 108	515 / 671 / 89	718 / 432 / 189	596 / 549 / 157	581 / 451 / 336	465 / 552 / 269																							
	3	557 / 619 / 96	445 / 752 / 77	596 / 550 / 157	488 / 684 / 128	444 / 590 / 256	359 / 724 / 208	529 / 638 / 92	431 / 789 / 75	582 / 583 / 153	461 / 700 / 121	423 / 610 / 244	349 / 762 / 202																							
120	45	1	543 / 479 / 100	437 / 589 / 81	612 / 349 / 166	539 / 474 / 147	492 / 421 / 280	418 / 514 / 224	564 / 460 / 104	458 / 571 / 85	612 / 321 / 166	560 / 455 / 152	509 / 402 / 290	427 / 495 / 233																						
		2	469 / 568 / 87	373 / 686 / 69	550 / 468 / 149	446 / 580 / 121	442 / 471 / 252	383 / 583 / 205	479 / 537 / 89	394 / 671 / 73	570 / 448 / 155	456 / 549 / 124	459 / 451 / 261	383 / 552 / 209																						
		3	394 / 671 / 73	320 / 824 / 59	425 / 601 / 116	342 / 734 / 93	326 / 642 / 186	276 / 773 / 148	405 / 638 / 75	330 / 789 / 61	446 / 583 / 121	353 / 700 / 96	334 / 610 / 190	287 / 762 / 157																						
	50	1	599 / 479 / 108	481 / 589 / 87	651 / 337 / 175	594 / 474 / 159	529 / 421 / 306	447 / 514 / 244	622 / 460 / 112	505 / 571 / 91	651 / 310 / 175	617 / 455 / 165	547 / 402 / 317	457 / 495 / 254																						
		2	517 / 568 / 93	411 / 686 / 74	606 / 468 / 162	491 / 580 / 132	475 / 471 / 275	409 / 583 / 223	528 / 537 / 95	434 / 671 / 78	628 / 448 / 169	503 / 549 / 135	493 / 451 / 286	410 / 552 / 229																						
		3	434 / 671 / 78	352 / 824 / 64	469 / 601 / 126	377 / 734 / 101	350 / 642 / 203	295 / 773 / 161	446 / 638 / 80	364 / 789 / 66	491 / 583 / 132	389 / 700 / 104	359 / 610 / 208	308 / 762 / 172																						
	60	1	709 / 479 / 123	570 / 589 / 99	718 / 313 / 189	704 / 474 / 185	623 / 421 / 360	505 / 514 / 287	737 / 231 / 128	598 / 571 / 104	718 / 289 / 189	718 / 446 / 189	623 / 389 / 360	518 / 495 / 299																						
		2	612 / 568 / 106	487 / 686 / 84	718 / 468 / 189	582 / 580 / 153	560 / 471 / 323	462 / 583 / 262	626 / 537 / 108	515 / 671 / 89	718 / 432 / 189	596 / 549 / 157	581 / 451 / 336	465 / 552 / 269																						
		3	515 / 671 / 89	418 / 824 / 72	555 / 601 / 146	447 / 734 / 118	412 / 642 / 238	333 / 773 / 189	529 / 638 / 92	431 / 789 / 75	582 / 583 / 153	461 / 700 / 121	423 / 610 / 244	349 / 762 / 202																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	522 / 497 / 96	426 / 619 / 79	612 / 377 / 166	519 / 492 / 141	476 / 439 / 271	418 / 542 / 219	490 / 539 / 91	394 / 660 / 73	601 / 430 / 163	490 / 535 / 132	447 / 473 / 252	409 / 585 / 205	458 / 577 / 85	384 / 713 / 69	560 / 459 / 152	463 / 559 / 121	428 / 500 / 233
2		447 / 584 / 83	362 / 718 / 67	529 / 486 / 144	425 / 596 / 116	426 / 489 / 243	373 / 599 / 195	415 / 626 / 77	341 / 778 / 63	487 / 518 / 132	396 / 637 / 107	396 / 521 / 224	362 / 640 / 181	394 / 678 / 73	329 / 832 / 59	456 / 554 / 124	387 / 690 / 102	384 / 557 / 209	359 / 692 / 171
3		373 / 684 / 69	309 / 858 / 57	405 / 616 / 110	332 / 766 / 90	309 / 656 / 176	273 / 805 / 143	352 / 743 / 65	288 / 919 / 53	384 / 674 / 104	313 / 827 / 85	295 / 715 / 167	267 / 864 / 133	330 / 797 / 61	274 / 970 / 49	353 / 707 / 96	301 / 880 / 79	280 / 746 / 152	259 / 915 / 124
50	1	575 / 497 / 104	470 / 619 / 85	651 / 364 / 175	571 / 492 / 153	511 / 439 / 296	447 / 542 / 239	540 / 539 / 97	434 / 660 / 78	651 / 423 / 175	537 / 535 / 144	479 / 473 / 275	435 / 585 / 223	505 / 577 / 91	413 / 713 / 74	617 / 459 / 165	497 / 559 / 132	458 / 500 / 254	423 / 621 / 208
	2	493 / 584 / 89	399 / 718 / 72	583 / 486 / 156	469 / 596 / 126	457 / 489 / 265	398 / 599 / 213	458 / 626 / 83	376 / 778 / 68	537 / 518 / 144	434 / 637 / 117	425 / 521 / 244	385 / 640 / 197	434 / 678 / 78	354 / 832 / 64	503 / 554 / 135	416 / 690 / 110	411 / 557 / 229	381 / 692 / 187
	3	411 / 684 / 74	341 / 858 / 62	446 / 616 / 120	366 / 766 / 98	332 / 656 / 192	291 / 805 / 156	388 / 743 / 70	317 / 919 / 57	423 / 674 / 114	343 / 827 / 92	317 / 715 / 182	284 / 864 / 146	364 / 797 / 66	295 / 970 / 53	389 / 707 / 104	324 / 880 / 86	299 / 746 / 166	275 / 915 / 135
60	1	682 / 497 / 118	557 / 619 / 96	718 / 339 / 189	677 / 492 / 178	602 / 439 / 348	503 / 542 / 281	640 / 539 / 111	515 / 660 / 89	718 / 393 / 189	636 / 535 / 167	560 / 473 / 323	488 / 585 / 262	598 / 577 / 104	487 / 713 / 84	718 / 451 / 189	582 / 559 / 153	518 / 500 / 299	472 / 621 / 244
	2	584 / 584 / 101	473 / 718 / 82	691 / 486 / 182	555 / 596 / 146	539 / 489 / 311	448 / 599 / 250	543 / 626 / 94	445 / 778 / 77	636 / 518 / 167	515 / 637 / 135	496 / 521 / 287	431 / 640 / 232	515 / 678 / 89	418 / 832 / 72	596 / 554 / 157	488 / 690 / 128	465 / 557 / 269	425 / 692 / 220
	3	487 / 684 / 84	404 / 858 / 70	528 / 616 / 139	433 / 766 / 114	391 / 656 / 226	328 / 805 / 183	459 / 743 / 80	376 / 919 / 65	501 / 674 / 132	406 / 827 / 107	370 / 715 / 214	318 / 864 / 171	431 / 797 / 75	348 / 970 / 60	461 / 707 / 121	379 / 880 / 100	338 / 746 / 195	307 / 915 / 159
Wind Speed [mph]		170						180											
45	1	426 / 608 / 79	374 / 761 / 65	529 / 493 / 144	456 / 605 / 116	416 / 533 / 219	386 / 651 / 176	405 / 650 / 75	363 / 804 / 61	498 / 523 / 135	437 / 631 / 107	404 / 560 / 205	383 / 692 / 167						
	2	362 / 706 / 67	317 / 879 / 55	425 / 586 / 116	378 / 737 / 96	371 / 588 / 195	355 / 739 / 162	341 / 747 / 63	305 / 917 / 51	405 / 627 / 110	368 / 780 / 90	366 / 630 / 186	350 / 782 / 152						
	3	309 / 843 / 57	261 / 1009 / 46	332 / 753 / 90	289 / 924 / 74	272 / 791 / 143	261 / 994 / 119	288 / 882 / 53	258 / 1083 / 44	311 / 793 / 85	288 / 998 / 71	272 / 859 / 138	252 / 1027 / 110						
50	1	470 / 608 / 85	401 / 761 / 70	583 / 493 / 156	488 / 605 / 126	444 / 533 / 239	409 / 651 / 192	446 / 650 / 80	388 / 804 / 66	549 / 523 / 147	467 / 631 / 117	430 / 560 / 223	404 / 692 / 182						
	2	399 / 706 / 72	340 / 879 / 59	469 / 586 / 126	405 / 737 / 104	396 / 588 / 213	376 / 739 / 177	376 / 747 / 68	326 / 917 / 55	446 / 627 / 120	393 / 780 / 98	390 / 630 / 203	370 / 782 / 166						
	3	341 / 843 / 62	280 / 1009 / 49	366 / 753 / 98	310 / 924 / 80	290 / 791 / 156	276 / 994 / 130	317 / 882 / 57	276 / 1083 / 47	343 / 793 / 92	307 / 998 / 77	290 / 859 / 151	266 / 1027 / 120						
60	1	557 / 608 / 96	459 / 761 / 80	691 / 493 / 182	555 / 605 / 146	501 / 533 / 281	454 / 651 / 226	529 / 650 / 92	439 / 804 / 75	650 / 523 / 171	527 / 631 / 135	483 / 560 / 262	447 / 692 / 214						
	2	473 / 706 / 82	390 / 879 / 68	555 / 586 / 146	461 / 737 / 121	446 / 588 / 250	417 / 739 / 208	445 / 747 / 77	368 / 917 / 63	528 / 627 / 139	444 / 780 / 114	438 / 630 / 238	409 / 782 / 195						
	3	404 / 843 / 70	320 / 1009 / 56	433 / 753 / 114	352 / 924 / 93	327 / 791 / 183	307 / 994 / 153	376 / 882 / 65	312 / 1083 / 53	406 / 793 / 107	347 / 998 / 89	326 / 859 / 177	294 / 1027 / 141						
Wind Speed [mph]		190						200											
45	1	389 / 688 / 71	351 / 839 / 57	477 / 549 / 127	428 / 668 / 102	399 / 597 / 195	379 / 729 / 157	377 / 722 / 67	338 / 867 / 53	468 / 584 / 121	419 / 701 / 96	394 / 632 / 186	385 / 784 / 152						
	2	335 / 808 / 61	303 / 983 / 49	392 / 665 / 104	357 / 816 / 85	360 / 667 / 176	344 / 818 / 143	322 / 839 / 57	301 / 1047 / 47	381 / 699 / 99	345 / 846 / 79	354 / 701 / 167	337 / 848 / 133						
	3	281 / 948 / 51	254 / 1153 / 42	307 / 856 / 82	274 / 1024 / 65	263 / 892 / 129	253 / 1096 / 105	266 / 971 / 47	251 / 1218 / 40	294 / 885 / 76	271 / 1087 / 62	263 / 953 / 124	253 / 1160 / 100						
50	1	423 / 688 / 76	375 / 839 / 62	514 / 549 / 138	457 / 668 / 110	424 / 597 / 213	399 / 729 / 172	405 / 722 / 72	360 / 867 / 57	502 / 584 / 132	446 / 701 / 104	418 / 632 / 203	405 / 784 / 166						
	2	364 / 808 / 66	323 / 983 / 53	423 / 665 / 114	381 / 816 / 92	383 / 667 / 192	363 / 818 / 156	345 / 839 / 62	320 / 1047 / 51	408 / 699 / 107	367 / 846 / 86	376 / 701 / 182	354 / 848 / 146						
	3	305 / 948 / 55	272 / 1153 / 45	332 / 856 / 89	292 / 1024 / 71	280 / 892 / 140	266 / 1096 / 115	286 / 971 / 51	267 / 1218 / 43	315 / 885 / 83	289 / 1087 / 68	279 / 953 / 135	266 / 1160 / 109						
60	1	501 / 688 / 87	422 / 839 / 70	609 / 549 / 160	514 / 668 / 128	475 / 597 / 250	439 / 729 / 202	473 / 722 / 82	404 / 867 / 65	582 / 584 / 153	500 / 701 / 121	466 / 632 / 238	444 / 784 / 195						
	2	431 / 808 / 75	364 / 983 / 60	501 / 665 / 132	428 / 816 / 107	428 / 667 / 226	399 / 818 / 183	404 / 839 / 70	360 / 1047 / 58	474 / 699 / 125	411 / 846 / 100	418 / 701 / 214	389 / 848 / 171						
	3	362 / 948 / 63	306 / 1153 / 51	393 / 856 / 103	328 / 1024 / 82	313 / 892 / 165	293 / 1096 / 135	334 / 971 / 58	300 / 1218 / 48	366 / 885 / 96	323 / 1087 / 79	311 / 953 / 159	292 / 1160 / 128						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																																																												
	140						150						160																																																
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																												
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																												
70	1	788 / 252 / 132	643 / 619 / 108	783 / 320 / 203	783 / 492 / 203	683 / 432 / 395	561 / 542 / 324	740 / 539 / 124	595 / 660 / 100	783 / 371 / 203	736 / 535 / 191	646 / 473 / 373	541 / 585 / 303	692 / 577 / 116	563 / 713 / 95	783 / 425 / 203	673 / 559 / 174	598 / 500 / 345	521 / 621 / 282																																										
	2	676 / 584 / 114	547 / 718 / 92	783 / 476 / 203	642 / 596 / 166	622 / 489 / 359	500 / 599 / 289	627 / 626 / 106	515 / 778 / 87	736 / 518 / 191	595 / 637 / 154	573 / 521 / 331	478 / 640 / 268	595 / 678 / 100	483 / 832 / 81	689 / 554 / 178	564 / 690 / 146	537 / 557 / 310	469 / 692 / 254																																										
	3	563 / 684 / 95	467 / 858 / 79	611 / 616 / 158	501 / 766 / 130	451 / 656 / 261	366 / 805 / 212	531 / 743 / 89	434 / 919 / 73	579 / 674 / 150	470 / 827 / 122	427 / 715 / 247	352 / 864 / 198	499 / 797 / 84	402 / 970 / 68	532 / 707 / 138	438 / 880 / 114	390 / 746 / 226	339 / 915 / 183																																										
	1	840 / 236 / 138	730 / 619 / 120	835 / 301 / 214	835 / 463 / 214	733 / 409 / 423	636 / 542 / 368	840 / 275 / 138	676 / 660 / 111	835 / 349 / 214	835 / 535 / 214	733 / 473 / 423	595 / 585 / 344	785 / 577 / 129	639 / 713 / 105	835 / 400 / 214	764 / 559 / 196	678 / 500 / 392	570 / 621 / 320																																										
	2	767 / 584 / 126	621 / 718 / 102	835 / 448 / 214	728 / 596 / 187	705 / 489 / 407	567 / 599 / 328	712 / 626 / 117	584 / 778 / 96	835 / 518 / 214	675 / 637 / 173	650 / 521 / 376	526 / 640 / 304	676 / 678 / 111	548 / 832 / 90	782 / 554 / 200	640 / 690 / 164	609 / 557 / 352	513 / 692 / 288																																										
	3	639 / 684 / 105	530 / 858 / 87	693 / 616 / 177	569 / 766 / 146	512 / 656 / 296	415 / 805 / 240	603 / 743 / 99	493 / 919 / 81	657 / 674 / 168	533 / 827 / 137	484 / 715 / 280	387 / 864 / 224	566 / 797 / 93	457 / 970 / 75	604 / 707 / 155	498 / 880 / 128	443 / 746 / 256	371 / 915 / 208																																										
	1	899 / 226 / 145	817 / 619 / 132	875 / 281 / 222	875 / 433 / 222	773 / 385 / 447	711 / 542 / 411	899 / 263 / 145	756 / 660 / 122	875 / 326 / 222	875 / 500 / 222	773 / 446 / 447	665 / 585 / 384	878 / 577 / 142	715 / 713 / 115	875 / 374 / 222	855 / 559 / 217	758 / 500 / 438	619 / 621 / 357																																										
	2	858 / 584 / 138	695 / 718 / 112	875 / 419 / 222	815 / 596 / 207	773 / 480 / 447	634 / 599 / 366	797 / 626 / 129	654 / 778 / 106	875 / 485 / 222	756 / 637 / 192	727 / 521 / 420	588 / 640 / 340	756 / 678 / 122	613 / 832 / 99	875 / 554 / 222	716 / 690 / 182	681 / 557 / 393	557 / 692 / 322																																										
	3	715 / 684 / 115	593 / 858 / 96	775 / 616 / 197	636 / 766 / 162	572 / 656 / 331	464 / 805 / 268	674 / 743 / 109	552 / 919 / 89	736 / 674 / 187	597 / 827 / 151	541 / 715 / 313	433 / 864 / 250	633 / 797 / 102	511 / 970 / 83	676 / 707 / 172	557 / 880 / 141	495 / 746 / 286	403 / 915 / 233																																										
80	1	643 / 608 / 108	531 / 761 / 89	783 / 483 / 203	642 / 605 / 166	561 / 533 / 324	500 / 651 / 261	611 / 650 / 103	499 / 804 / 84	751 / 523 / 195	595 / 631 / 154	535 / 560 / 303	490 / 692 / 247	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3																										
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10 - 30	1 = 1																																																												
	2 = 2																																																												
	3 = 3																																																												
2	547 / 706 / 92	451 / 879 / 76	642 / 586 / 166	532 / 737 / 138	500 / 588 / 289	459 / 739 / 240	515 / 747 / 87	418 / 917 / 71	611 / 627 / 158	501 / 780 / 130	486 / 630 / 275	448 / 782 / 226																																																	
3	467 / 843 / 79	370 / 1009 / 62	501 / 753 / 130	407 / 924 / 106	366 / 791 / 212	338 / 994 / 176	434 / 882 / 73	354 / 1083 / 60	470 / 793 / 122	392 / 998 / 102	361 / 859 / 205	322 / 1027 / 162																																																	
1	730 / 608 / 120	603 / 761 / 99	835 / 454 / 214	728 / 605 / 187	636 / 533 / 368	545 / 651 / 296	694 / 650 / 114	566 / 804 / 93	835 / 512 / 214	675 / 631 / 173	595 / 560 / 344	533 / 692 / 280																																																	
2	621 / 706 / 102	511 / 879 / 84	728 / 586 / 187	604 / 737 / 155	567 / 588 / 328	501 / 739 / 272	584 / 747 / 96	475 / 917 / 78	693 / 627 / 177	569 / 780 / 146	540 / 630 / 312	487 / 782 / 256																																																	
3	530 / 843 / 87	420 / 1009 / 69	569 / 753 / 146	462 / 924 / 118	415 / 791 / 240	368 / 994 / 200	493 / 882 / 81	402 / 1083 / 66	533 / 793 / 137	444 / 998 / 114	401 / 859 / 232	350 / 1027 / 184																																																	
1	817 / 608 / 132	674 / 761 / 109	875 / 425 / 222	815 / 605 / 207	711 / 533 / 411	590 / 651 / 331	776 / 650 / 125	633 / 804 / 102	875 / 480 / 222	756 / 631 / 192	665 / 560 / 384	576 / 692 / 313																																																	
2	695 / 706 / 112	572 / 879 / 92	815 / 586 / 207	676 / 737 / 172	634 / 588 / 366	542 / 739 / 304	654 / 747 / 106	531 / 917 / 86	775 / 627 / 197	636 / 780 / 162	603 / 630 / 349	527 / 782 / 286																																																	
3	593 / 843 / 96	470 / 1009 / 76	636 / 753 / 162	517 / 924 / 131	464 / 791 / 268	399 / 994 / 224	552 / 882 / 89	450 / 1083 / 73	597 / 793 / 151	497 / 998 / 126	449 / 859 / 259	379 / 1027 / 206																																																	
90	1	579 / 688 / 97	469 / 839 / 79	704 / 549 / 182	571 / 668 / 146	525 / 597 / 289	480 / 729 / 233	547 / 722 / 92	448 / 867 / 73	673 / 584 / 174	553 / 701 / 138	514 / 632 / 275																																																	483 / 784 / 226
	2	499 / 808 / 84	405 / 983 / 68	579 / 665 / 150	476 / 816 / 122	474 / 667 / 261	436 / 818 / 212	467 / 839 / 79	399 / 1047 / 65	548 / 699 / 142	456 / 846 / 114	461 / 701 / 247	423 / 848 / 198																																																
	3	418 / 948 / 71	340 / 1153 / 57	454 / 856 / 118	365 / 1024 / 94	346 / 892 / 190	320 / 1096 / 155	386 / 971 / 65	332 / 1218 / 54	423 / 885 / 110	358 / 1087 / 89	343 / 953 / 183	317 / 1160 / 148																																																
	1	657 / 688 / 108	530 / 839 / 87	800 / 549 / 205	640 / 668 / 164	575 / 597 / 328	520 / 729 / 264	621 / 722 / 102	493 / 867 / 81	764 / 584 / 196	607 / 701 / 155	562 / 632 / 312	522 / 784 / 256																																																
	2	566 / 808 / 93	457 / 983 / 75	657 / 665 / 168	533 / 816 / 137	519 / 667 / 296	473 / 818 / 240	530 / 839 / 87	438 / 1047 / 72	622 / 699 / 159	500 / 846 / 128	504 / 701 / 280	457 / 848 / 224																																																
	3	475 / 948 / 78	384 / 1153 / 63	515 / 856 / 132	409 / 1024 / 105	379 / 892 / 216	347 / 1096 / 176	438 / 971 / 72	365 / 1218 / 60	480 / 885 / 123	393 / 1087 / 100	375 / 953 / 208	343 / 1160 / 168																																																
	1	736 / 688 / 119	593 / 839 / 96	875 / 537 / 222	716 / 668 / 182	634 / 597 / 366	561 / 729 / 295	695 / 722 / 112	552 / 867 / 89	855 / 584 / 217	676 / 701 / 172	610 / 632 / 349	562 / 784 / 286																																																
	2	633 / 808 / 102	511 / 983 / 83	736 / 665 / 187	597 / 816 / 151	572 / 667 / 331	510 / 818 / 268	593 / 839 / 96	491 / 1047 / 79	696 / 699 / 177	557 / 846 / 141	547 / 701 / 313	491 / 848 / 250																																																
	3	531 / 948 / 86	429 / 1153 / 69	577 / 856 / 146	457 / 1024 / 116	418 / 892 / 241	374 / 1096 / 197	491 / 971 / 79	409 / 1218 / 66	537 / 885 / 136	438 / 1087 / 111	407 / 953 / 233	369 / 1160 / 188																																																

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : B

Wind Speed [mph]	95						100						105						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
100	1	927 / 122 / 147	927 / 193 / 147	924 / 158 / 233	924 / 247 / 233	821 / 220 / 474	821 / 341 / 474	927 / 135 / 147	927 / 213 / 147	924 / 174 / 233	924 / 272 / 233	821 / 243 / 474	821 / 375 / 474	927 / 149 / 147	927 / 234 / 147	924 / 192 / 233	924 / 298 / 233	821 / 266 / 474	821 / 410 / 474
	2	927 / 344 / 147	927 / 527 / 147	924 / 239 / 233	924 / 369 / 233	821 / 276 / 474	821 / 425 / 474	927 / 378 / 147	927 / 578 / 147	924 / 263 / 233	924 / 405 / 233	821 / 304 / 474	821 / 466 / 474	927 / 414 / 147	904 / 615 / 144	924 / 289 / 233	924 / 443 / 233	821 / 333 / 474	821 / 509 / 474
	3	927 / 487 / 147	836 / 669 / 133	924 / 402 / 233	902 / 598 / 227	821 / 518 / 474	667 / 640 / 385	927 / 534 / 147	791 / 693 / 126	924 / 441 / 233	858 / 624 / 216	787 / 544 / 454	633 / 665 / 366	927 / 584 / 147	769 / 735 / 122	924 / 482 / 233	814 / 646 / 205	752 / 568 / 435	599 / 686 / 346

Wind Speed [mph]	110						115						
	Group	Array Interior	Array Edge										
100	1	927 / 164 / 147	927 / 256 / 147	924 / 210 / 233	924 / 325 / 233	821 / 291 / 474	821 / 447 / 474	927 / 179 / 147	927 / 278 / 147	924 / 229 / 233	924 / 354 / 233	821 / 316 / 474	821 / 485 / 474
	2	927 / 451 / 147	859 / 636 / 136	924 / 315 / 233	924 / 483 / 233	821 / 363 / 474	787 / 532 / 454	927 / 489 / 147	836 / 671 / 133	924 / 342 / 233	924 / 524 / 233	821 / 394 / 474	752 / 552 / 435
	3	904 / 619 / 144	723 / 752 / 115	924 / 525 / 233	792 / 684 / 199	718 / 590 / 415	582 / 724 / 336	859 / 638 / 136	701 / 789 / 111	924 / 569 / 233	748 / 700 / 188	684 / 610 / 395	564 / 762 / 326

Wind Speed [mph]	120						130						
	Group	Array Interior	Array Edge										
100	1	927 / 194 / 147	927 / 302 / 147	924 / 248 / 233	924 / 383 / 233	821 / 343 / 474	804 / 514 / 464	927 / 179 / 147	927 / 278 / 147	924 / 229 / 233	924 / 354 / 233	821 / 316 / 474	821 / 485 / 474
	2	927 / 529 / 147	791 / 686 / 126	924 / 371 / 233	924 / 567 / 233	821 / 427 / 474	735 / 583 / 425	927 / 489 / 147	836 / 671 / 133	924 / 342 / 233	924 / 524 / 233	821 / 394 / 474	752 / 552 / 435
	3	836 / 671 / 133	678 / 824 / 108	902 / 601 / 227	726 / 734 / 183	667 / 642 / 385	530 / 773 / 306	859 / 638 / 136	701 / 789 / 111	924 / 569 / 233	748 / 700 / 188	684 / 610 / 395	564 / 762 / 326

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72" 64" to 71" 48" to 63" x ≤ 47"

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
	100	1	927 / 211 / 147	904 / 619 / 144	924 / 269 / 233	924 / 413 / 233	821 / 370 / 474	787 / 542 / 454	927 / 245 / 147	836 / 660 / 133	924 / 312 / 233	924 / 478 / 233	821 / 428 / 474	735 / 585 / 425	927 / 281 / 147	791 / 713 / 126	924 / 357 / 233	924 / 546 / 233	821 / 490 / 474
2		927 / 570 / 147	769 / 718 / 122	924 / 400 / 233	902 / 596 / 227	821 / 460 / 474	701 / 599 / 405	882 / 626 / 140	723 / 778 / 115	924 / 463 / 233	836 / 637 / 211	804 / 521 / 464	650 / 640 / 375	836 / 678 / 133	678 / 832 / 108	924 / 529 / 233	792 / 690 / 199	752 / 557 / 435	616 / 692 / 356
3		791 / 684 / 126	656 / 858 / 104	858 / 616 / 216	704 / 766 / 177	633 / 656 / 366	513 / 805 / 296	746 / 743 / 119	610 / 919 / 97	814 / 674 / 205	660 / 827 / 166	599 / 715 / 346	479 / 864 / 277	701 / 797 / 111	565 / 970 / 90	748 / 707 / 188	616 / 880 / 155	547 / 746 / 316	445 / 915 / 257

Exposure Category : B

Wind Speed [mph]		170						180					
100	1	904 / 608 / 144	746 / 761 / 119	924 / 406 / 233	902 / 605 / 227	787 / 533 / 454	636 / 651 / 366	859 / 650 / 136	701 / 804 / 111	924 / 458 / 233	836 / 631 / 211	735 / 560 / 425	619 / 692 / 346
	2	769 / 706 / 122	633 / 879 / 101	902 / 586 / 227	748 / 737 / 188	701 / 588 / 405	584 / 739 / 336	723 / 747 / 115	588 / 917 / 94	858 / 627 / 216	704 / 780 / 177	667 / 630 / 385	566 / 782 / 316
	3	656 / 843 / 104	520 / 1009 / 83	704 / 753 / 177	572 / 924 / 144	513 / 791 / 296	430 / 994 / 247	610 / 882 / 97	498 / 1083 / 79	660 / 793 / 166	550 / 998 / 139	496 / 859 / 287	407 / 1027 / 227

Wind Speed [mph]		190						200					
100	1	814 / 688 / 129	656 / 839 / 104	924 / 512 / 233	792 / 668 / 199	701 / 597 / 405	601 / 729 / 326	769 / 722 / 122	610 / 867 / 97	924 / 570 / 233	748 / 701 / 188	667 / 632 / 385	601 / 784 / 316
	2	701 / 808 / 111	565 / 983 / 90	814 / 665 / 205	660 / 816 / 166	633 / 667 / 366	546 / 818 / 296	656 / 839 / 104	543 / 1047 / 86	770 / 699 / 194	616 / 846 / 155	599 / 701 / 346	526 / 848 / 277
	3	588 / 948 / 94	475 / 1153 / 76	638 / 856 / 161	506 / 1024 / 128	462 / 892 / 267	401 / 1096 / 218	543 / 971 / 86	452 / 1218 / 72	594 / 885 / 150	484 / 1087 / 122	445 / 953 / 257	394 / 1160 / 208

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the e edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in				Load: Up / Down / Side , lbs							
Wind Speed [mph]		95						100				105							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
	0	1	200 / 457 / 35	160 / 560 / 28	250 / 359 / 51	199 / 443 / 41	222 / 397 / 60	194 / 484 / 48	189 / 475 / 33	153 / 586 / 27	239 / 379 / 49	192 / 470 / 39	211 / 416 / 57	200 / 510 / 46	182 / 500 / 32	146 / 610 / 26	228 / 396 / 46	182 / 485 / 37	201 / 433 / 54
2		167 / 526 / 30	138 / 661 / 24	203 / 437 / 41	163 / 538 / 33	197 / 440 / 53	174 / 541 / 43	160 / 552 / 28	131 / 686 / 23	196 / 463 / 40	156 / 564 / 32	187 / 458 / 50	179 / 567 / 41	153 / 575 / 27	124 / 707 / 22	185 / 478 / 38	149 / 587 / 30	180 / 482 / 48	183 / 590 / 39
3		142 / 628 / 25	117 / 781 / 21	160 / 572 / 33	127 / 691 / 26	145 / 599 / 39	128 / 731 / 32	135 / 653 / 24	109 / 802 / 19	152 / 599 / 31	124 / 735 / 25	138 / 625 / 37	133 / 776 / 31	131 / 693 / 23	106 / 845 / 19	145 / 622 / 30	117 / 755 / 24	131 / 647 / 35	134 / 793 / 29
5	1	221 / 457 / 35	177 / 560 / 28	275 / 359 / 53	219 / 443 / 43	222 / 397 / 74	194 / 484 / 59	209 / 475 / 33	169 / 586 / 27	263 / 379 / 51	211 / 470 / 41	211 / 416 / 71	200 / 510 / 57	201 / 500 / 32	162 / 610 / 26	251 / 396 / 49	200 / 485 / 39	201 / 433 / 67	205 / 534 / 54
	2	185 / 526 / 30	153 / 661 / 24	223 / 437 / 44	179 / 538 / 35	197 / 440 / 66	174 / 541 / 53	177 / 552 / 28	145 / 686 / 23	215 / 463 / 42	171 / 564 / 34	187 / 458 / 62	179 / 567 / 51	169 / 575 / 27	137 / 707 / 22	203 / 478 / 40	164 / 587 / 32	180 / 482 / 60	183 / 590 / 48
	3	157 / 628 / 25	129 / 781 / 21	175 / 572 / 34	140 / 691 / 27	145 / 599 / 48	128 / 731 / 39	149 / 653 / 24	121 / 802 / 19	167 / 599 / 33	136 / 735 / 27	138 / 625 / 46	133 / 776 / 38	145 / 693 / 23	117 / 845 / 19	159 / 622 / 31	128 / 755 / 25	131 / 647 / 44	134 / 793 / 36
10	1	281 / 457 / 35	225 / 560 / 28	347 / 359 / 66	277 / 443 / 53	256 / 397 / 96	216 / 484 / 77	265 / 475 / 33	214 / 586 / 27	332 / 379 / 63	267 / 470 / 51	243 / 416 / 92	218 / 510 / 73	255 / 500 / 32	205 / 610 / 26	317 / 396 / 61	252 / 485 / 48	231 / 433 / 87	219 / 534 / 70
	2	235 / 526 / 30	194 / 661 / 24	282 / 437 / 54	227 / 538 / 43	227 / 440 / 86	194 / 541 / 69	225 / 552 / 28	184 / 686 / 23	272 / 463 / 52	216 / 564 / 41	215 / 458 / 81	195 / 567 / 66	214 / 575 / 27	174 / 707 / 22	257 / 478 / 49	207 / 587 / 40	207 / 482 / 78	195 / 590 / 63
	3	199 / 628 / 25	164 / 781 / 21	222 / 572 / 42	176 / 691 / 34	167 / 599 / 63	143 / 731 / 51	189 / 653 / 24	153 / 802 / 19	211 / 599 / 41	171 / 735 / 33	158 / 625 / 60	145 / 776 / 49	184 / 693 / 23	149 / 845 / 19	201 / 622 / 39	162 / 755 / 31	150 / 647 / 57	143 / 793 / 46
Wind Speed [mph]		110						115											
0	1	175 / 523 / 31	148 / 630 / 24	218 / 412 / 44	186 / 507 / 35	194 / 455 / 52	210 / 556 / 42	167 / 544 / 30	153 / 665 / 24	210 / 433 / 43	190 / 527 / 34	190 / 467 / 49	215 / 575 / 40						
	2	149 / 611 / 26	129 / 746 / 21	178 / 501 / 36	155 / 623 / 30	173 / 504 / 47	191 / 626 / 38	142 / 631 / 25	133 / 784 / 21	171 / 522 / 35	157 / 642 / 28	172 / 525 / 45	194 / 645 / 36						
	3	124 / 712 / 22	109 / 887 / 18	138 / 643 / 28	120 / 795 / 23	127 / 684 / 34	139 / 833 / 28	120 / 749 / 21	112 / 926 / 18	134 / 679 / 27	124 / 833 / 22	125 / 700 / 32	143 / 871 / 27						
5	1	193 / 523 / 31	160 / 630 / 24	239 / 412 / 47	200 / 507 / 37	194 / 455 / 65	210 / 556 / 52	185 / 544 / 30	163 / 665 / 24	231 / 433 / 45	200 / 527 / 36	190 / 467 / 61	215 / 575 / 50						
	2	165 / 611 / 26	139 / 746 / 21	195 / 501 / 38	167 / 623 / 31	173 / 504 / 58	191 / 626 / 47	157 / 631 / 25	141 / 784 / 21	187 / 522 / 37	166 / 642 / 30	172 / 525 / 55	194 / 645 / 45						
	3	137 / 712 / 22	118 / 887 / 18	152 / 643 / 30	130 / 795 / 24	127 / 684 / 43	139 / 833 / 34	133 / 749 / 21	119 / 926 / 18	148 / 679 / 29	131 / 833 / 24	125 / 700 / 40	143 / 871 / 33						
10	1	245 / 523 / 31	201 / 630 / 24	302 / 412 / 58	251 / 507 / 46	223 / 455 / 84	220 / 556 / 67	235 / 544 / 30	203 / 665 / 24	292 / 433 / 56	249 / 527 / 44	216 / 467 / 80	220 / 575 / 64						
	2	209 / 611 / 26	175 / 746 / 21	247 / 501 / 47	209 / 623 / 39	199 / 504 / 75	200 / 626 / 61	199 / 631 / 25	175 / 784 / 21	237 / 522 / 45	205 / 642 / 37	196 / 525 / 72	199 / 645 / 58						
	3	174 / 712 / 22	148 / 887 / 18	191 / 643 / 37	162 / 795 / 30	146 / 684 / 55	145 / 833 / 45	169 / 749 / 21	148 / 926 / 18	186 / 679 / 36	162 / 833 / 29	142 / 700 / 52	147 / 871 / 43						
Wind Speed [mph]		120						130											
0	1	160 / 562 / 28	154 / 680 / 23	199 / 445 / 41	197 / 558 / 33	194 / 486 / 48	224 / 607 / 39	167 / 544 / 30	153 / 665 / 24	210 / 433 / 43	190 / 527 / 34	190 / 467 / 49	215 / 575 / 40						
	2	135 / 647 / 24	132 / 794 / 19	163 / 540 / 33	162 / 676 / 27	175 / 543 / 43	202 / 678 / 35	142 / 631 / 25	133 / 784 / 21	171 / 522 / 35	157 / 642 / 28	172 / 525 / 45	194 / 645 / 36						
	3	117 / 784 / 21	114 / 963 / 17	127 / 694 / 26	123 / 840 / 21	128 / 734 / 32	147 / 907 / 26	120 / 749 / 21	112 / 926 / 18	134 / 679 / 27	124 / 833 / 22	125 / 700 / 32	143 / 871 / 27						
5	1	177 / 562 / 28	161 / 680 / 23	219 / 445 / 43	205 / 558 / 35	194 / 486 / 59	224 / 607 / 48	185 / 544 / 30	163 / 665 / 24	231 / 433 / 45	200 / 527 / 36	190 / 467 / 61	215 / 575 / 50						
	2	149 / 647 / 24	138 / 794 / 19	179 / 540 / 35	168 / 676 / 29	175 / 543 / 53	202 / 678 / 44	157 / 631 / 25	141 / 784 / 21	187 / 522 / 37	166 / 642 / 30	172 / 525 / 55	194 / 645 / 45						
	3	129 / 784 / 21	120 / 963 / 17	140 / 694 / 27	128 / 840 / 22	128 / 734 / 39	147 / 907 / 32	133 / 749 / 21	119 / 926 / 18	148 / 679 / 29	131 / 833 / 24	125 / 700 / 40	143 / 871 / 33						
10	1	225 / 562 / 28	199 / 680 / 23	277 / 445 / 53	252 / 558 / 43	216 / 486 / 77	226 / 607 / 63	235 / 544 / 30	203 / 665 / 24	292 / 433 / 56	249 / 527 / 44	216 / 467 / 80	220 / 575 / 64						
	2	189 / 647 / 24	170 / 794 / 19	227 / 540 / 43	207 / 676 / 36	195 / 543 / 69	204 / 678 / 57	199 / 631 / 25	175 / 784 / 21	237 / 522 / 45	205 / 642 / 37	196 / 525 / 72	199 / 645 / 58						
	3	164 / 784 / 21	148 / 963 / 17	176 / 694 / 34	157 / 840 / 27	143 / 734 / 51	149 / 907 / 42	169 / 749 / 21	148 / 926 / 18	186 / 679 / 36	162 / 833 / 29	142 / 700 / 52	147 / 871 / 43						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph] 140								150								160																	
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30															
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																											
0	1	153 / 579 / 27	158 / 712 / 22	192 / 464 / 39	200 / 575 / 32	198 / 504 / 46	226 / 622 / 37	147 / 620 / 25	167 / 771 / 21	184 / 496 / 36	208 / 617 / 30	208 / 545 / 43	236 / 662 / 34	154 / 672 / 24	175 / 825 / 19	191 / 533 / 34	215 / 652 / 27	216 / 581 / 40	250 / 713 / 32															
	2	131 / 678 / 23	135 / 827 / 19	160 / 570 / 33	163 / 689 / 26	177 / 560 / 41	203 / 691 / 33	128 / 738 / 22	141 / 886 / 18	154 / 613 / 30	172 / 748 / 25	185 / 600 / 38	216 / 750 / 32	129 / 767 / 20	146 / 935 / 16	158 / 649 / 28	180 / 802 / 23	196 / 651 / 36	228 / 804 / 30															
	3	109 / 792 / 19	117 / 996 / 16	124 / 726 / 25	126 / 872 / 20	132 / 766 / 31	151 / 940 / 25	106 / 851 / 18	120 / 1054 / 15	117 / 763 / 23	136 / 966 / 19	139 / 827 / 29	157 / 997 / 23	109 / 901 / 17	122 / 1097 / 14	121 / 814 / 22	140 / 1016 / 18	144 / 880 / 27	169 / 1089 / 22															
	5	1	169 / 579 / 27	163 / 712 / 22	211 / 464 / 41	204 / 575 / 34	198 / 504 / 57	226 / 622 / 46	161 / 620 / 25	167 / 771 / 21	200 / 496 / 38	208 / 617 / 31	208 / 545 / 53	236 / 662 / 43	164 / 672 / 24	175 / 825 / 19	202 / 533 / 36	215 / 652 / 29	216 / 581 / 50	250 / 713 / 40														
		2	145 / 678 / 23	139 / 827 / 19	175 / 570 / 34	166 / 689 / 27	177 / 560 / 51	203 / 691 / 41	140 / 738 / 22	141 / 886 / 18	167 / 613 / 32	172 / 748 / 26	185 / 600 / 47	216 / 750 / 39	137 / 767 / 20	146 / 935 / 16	167 / 649 / 30	180 / 802 / 24	196 / 651 / 45	228 / 804 / 37														
		3	121 / 792 / 19	120 / 996 / 16	136 / 726 / 27	128 / 872 / 21	132 / 766 / 38	151 / 940 / 31	116 / 851 / 18	120 / 1054 / 15	127 / 763 / 24	136 / 966 / 20	139 / 827 / 36	157 / 997 / 29	115 / 901 / 17	122 / 1097 / 14	127 / 814 / 23	140 / 1016 / 19	144 / 880 / 33	169 / 1089 / 27														
	10	1	214 / 579 / 27	200 / 712 / 22	267 / 464 / 51	249 / 575 / 41	216 / 504 / 73	226 / 622 / 60	203 / 620 / 25	201 / 771 / 21	251 / 496 / 47	249 / 617 / 39	220 / 545 / 69	236 / 662 / 55	204 / 672 / 24	202 / 825 / 19	250 / 533 / 44	247 / 652 / 36	222 / 581 / 64	250 / 713 / 52														
		2	184 / 678 / 23	170 / 827 / 19	222 / 570 / 42	203 / 689 / 34	194 / 560 / 66	203 / 691 / 54	177 / 738 / 22	170 / 886 / 18	210 / 613 / 40	205 / 748 / 32	195 / 600 / 61	216 / 750 / 51	171 / 767 / 20	169 / 935 / 16	206 / 649 / 37	207 / 802 / 30	201 / 651 / 58	228 / 804 / 48														
		3	153 / 792 / 19	147 / 996 / 16	171 / 726 / 33	157 / 872 / 26	144 / 766 / 49	151 / 940 / 40	146 / 851 / 18	145 / 1054 / 15	159 / 763 / 30	162 / 966 / 25	147 / 827 / 46	157 / 997 / 37	143 / 901 / 17	142 / 1097 / 14	158 / 814 / 28	160 / 1016 / 23	148 / 880 / 43	169 / 1089 / 35														
0	Wind Speed [mph] 170								180																									
	1	156 / 699 / 22	181 / 871 / 18	197 / 565 / 32	226 / 699 / 26	229 / 627 / 38	262 / 760 / 31	162 / 740 / 21	186 / 908 / 17	206 / 606 / 30	235 / 740 / 25	234 / 652 / 35	273 / 800 / 29	ASCE Group Zone																				
	5	2	133 / 812 / 19	155 / 1014 / 16	165 / 696 / 27	187 / 848 / 22	206 / 698 / 34	238 / 850 / 28	141 / 881 / 18	164 / 1091 / 15	171 / 739 / 25	192 / 887 / 20	209 / 719 / 32	246 / 889 / 26	<table border="1"> <thead> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		Panal Angle	Mono Slope																															
		0 - 3	1 = 1' / 1																															
	2 = 2																																	
	3 = 3																																	
	3 - 10	1 = 1																																
		2 = 2' / 2																																
3 = 3' / 3																																		
10 - 30	1 = 1																																	
	2 = 2																																	
	3 = 3																																	
3	115 / 979 / 16	129 / 1180 / 13	128 / 889 / 21	142 / 1053 / 17	149 / 924 / 25	172 / 1123 / 20	116 / 1011 / 15	136 / 1258 / 12	131 / 927 / 19	150 / 1128 / 16	158 / 997 / 24	182 / 1201 / 19																						
10	1	161 / 699 / 22	181 / 871 / 18	202 / 565 / 34	226 / 699 / 27	229 / 627 / 47	262 / 760 / 38	163 / 740 / 21	186 / 908 / 17	207 / 606 / 32	235 / 740 / 26	234 / 652 / 44	273 / 800 / 36																					
	2	138 / 812 / 19	155 / 1014 / 16	169 / 696 / 28	187 / 848 / 23	206 / 698 / 43	238 / 850 / 34	142 / 881 / 18	164 / 1091 / 15	171 / 739 / 27	192 / 887 / 21	209 / 719 / 39	246 / 889 / 32																					
	3	119 / 979 / 16	129 / 1180 / 13	132 / 889 / 22	142 / 1053 / 17	149 / 924 / 31	172 / 1123 / 25	117 / 1011 / 15	136 / 1258 / 12	131 / 927 / 20	150 / 1128 / 17	158 / 997 / 30	182 / 1201 / 24																					
0	1	198 / 699 / 22	202 / 871 / 18	247 / 565 / 41	250 / 699 / 34	229 / 627 / 61	262 / 760 / 49	197 / 740 / 21	201 / 908 / 17	250 / 606 / 40	253 / 740 / 32	234 / 652 / 57	273 / 800 / 46																					
	2	169 / 812 / 19	173 / 1014 / 16	207 / 696 / 35	207 / 848 / 28	206 / 698 / 55	238 / 850 / 45	173 / 881 / 18	178 / 1091 / 15	207 / 739 / 33	207 / 887 / 26	209 / 719 / 51	246 / 889 / 42																					
	3	146 / 979 / 16	145 / 1180 / 13	161 / 889 / 27	157 / 1053 / 21	149 / 924 / 40	172 / 1123 / 32	142 / 1011 / 15	147 / 1258 / 12	158 / 927 / 25	161 / 1128 / 21	158 / 997 / 39	182 / 1201 / 31																					
0	Wind Speed [mph] 190								200																									
	1	171 / 800 / 20	196 / 975 / 16	215 / 645 / 29	243 / 777 / 23	243 / 689 / 33	292 / 863 / 28	175 / 831 / 19	207 / 1038 / 16	222 / 680 / 27	258 / 834 / 22	252 / 722 / 32	299 / 892 / 26																					
	5	2	144 / 913 / 17	165 / 1112 / 14	176 / 777 / 24	204 / 953 / 19	223 / 779 / 31	262 / 955 / 25	151 / 974 / 16	172 / 1174 / 13	180 / 809 / 22	206 / 977 / 18	229 / 811 / 29	266 / 978 / 23																				
		3	122 / 1079 / 14	141 / 1329 / 12	138 / 994 / 19	157 / 1198 / 15	160 / 1023 / 22	191 / 1272 / 18	127 / 1143 / 14	146 / 1392 / 11	138 / 1015 / 17	163 / 1262 / 14	168 / 1085 / 21	199 / 1336 / 17																				
		1	171 / 800 / 20	196 / 975 / 16	215 / 645 / 30	243 / 777 / 24	243 / 689 / 41	292 / 863 / 34	175 / 831 / 19	207 / 1038 / 16	222 / 680 / 29	258 / 834 / 24	252 / 722 / 39	299 / 892 / 32																				
	10	2	144 / 913 / 17	165 / 1112 / 14	176 / 777 / 25	204 / 953 / 20	223 / 779 / 38	262 / 955 / 31	151 / 974 / 16	172 / 1174 / 13	180 / 809 / 24	206 / 977 / 19	229 / 811 / 36	266 / 978 / 29																				
		3	122 / 1079 / 14	141 / 1329 / 12	138 / 994 / 20	157 / 1198 / 16	160 / 1023 / 27	191 / 1272 / 23	127 / 1143 / 14	146 / 1392 / 11	138 / 1015 / 18	163 / 1262 / 15	168 / 1085 / 26	199 / 1336 / 22																				
		1	202 / 800 / 20	207 / 975 / 16	251 / 645 / 38	254 / 777 / 30	243 / 689 / 54	292 / 863 / 45	200 / 831 / 19	212 / 1038 / 16	252 / 680 / 36	263 / 834 / 29	252 / 722 / 51	299 / 892 / 42																				
	0	2	170 / 913 / 17	174 / 1112 / 14	206 / 777 / 31	213 / 953 / 25	223 / 779 / 49	262 / 955 / 40	172 / 974 / 16	177 / 1174 / 13	205 / 809 / 29	210 / 977 / 23	229 / 811 / 46	266 / 978 / 37																				
3		144 / 1079 / 14	149 / 1329 / 12	161 / 994 / 24	164 / 1198 / 20	160 / 1023 / 35	191 / 1272 / 29	145 / 1143 / 14	150 / 1392 / 11	157 / 1015 / 22	167 / 1262 / 19	168 / 1085 / 34	199 / 1336 / 28																					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		95						100						105						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	15	1	340 / 457 / 36	272 / 560 / 29	419 / 359 / 79	334 / 443 / 63	294 / 397 / 119	247 / 484 / 94	321 / 475 / 35	260 / 586 / 28	401 / 379 / 76	322 / 470 / 61	280 / 416 / 113	247 / 510 / 90	309 / 500 / 33	248 / 610 / 27	383 / 396 / 72	305 / 485 / 57	266 / 433 / 107	247 / 534 / 87
2		284 / 526 / 31	235 / 661 / 25	340 / 437 / 64	274 / 538 / 52	262 / 440 / 105	222 / 541 / 85	272 / 552 / 29	223 / 686 / 24	328 / 463 / 62	262 / 564 / 49	248 / 458 / 100	222 / 567 / 81	260 / 575 / 28	211 / 707 / 23	310 / 478 / 59	250 / 587 / 47	238 / 482 / 96	221 / 590 / 77	
3		241 / 628 / 26	198 / 781 / 21	268 / 572 / 51	213 / 691 / 40	192 / 599 / 77	163 / 731 / 62	229 / 653 / 25	186 / 802 / 20	255 / 599 / 48	207 / 735 / 39	182 / 625 / 74	165 / 776 / 60	223 / 693 / 24	180 / 845 / 19	243 / 622 / 46	195 / 755 / 37	173 / 647 / 70	161 / 793 / 57	
20		1	399 / 457 / 40	319 / 560 / 32	470 / 344 / 88	392 / 443 / 73	333 / 397 / 147	277 / 484 / 116	377 / 475 / 37	305 / 586 / 30	470 / 379 / 88	378 / 470 / 71	317 / 416 / 140	277 / 510 / 112	363 / 500 / 36	291 / 610 / 29	449 / 396 / 84	357 / 485 / 67	301 / 433 / 133	276 / 534 / 107
		2	334 / 526 / 33	276 / 661 / 27	399 / 437 / 75	321 / 538 / 60	296 / 440 / 130	250 / 541 / 105	319 / 552 / 32	261 / 686 / 26	385 / 463 / 72	307 / 564 / 57	280 / 458 / 123	248 / 567 / 100	305 / 575 / 30	247 / 707 / 25	364 / 478 / 68	293 / 587 / 55	270 / 482 / 119	246 / 590 / 96
		3	283 / 628 / 28	232 / 781 / 23	314 / 572 / 59	250 / 691 / 47	217 / 599 / 96	183 / 731 / 77	269 / 653 / 27	218 / 802 / 22	299 / 599 / 56	243 / 735 / 45	206 / 625 / 91	185 / 776 / 75	261 / 693 / 26	211 / 845 / 21	285 / 622 / 53	229 / 755 / 43	196 / 647 / 86	180 / 793 / 70
25		1	399 / 457 / 40	319 / 560 / 32	470 / 344 / 88	392 / 443 / 73	371 / 397 / 176	308 / 484 / 140	377 / 475 / 37	305 / 586 / 30	470 / 379 / 88	378 / 470 / 71	354 / 416 / 168	306 / 510 / 134	363 / 500 / 36	291 / 610 / 29	449 / 396 / 84	357 / 485 / 67	336 / 433 / 160	304 / 534 / 129
		2	334 / 526 / 33	276 / 661 / 27	399 / 437 / 75	321 / 538 / 60	330 / 440 / 157	277 / 541 / 126	319 / 552 / 32	261 / 686 / 26	385 / 463 / 72	307 / 564 / 57	313 / 458 / 148	274 / 567 / 121	305 / 575 / 30	247 / 707 / 25	364 / 478 / 68	293 / 587 / 55	301 / 482 / 143	271 / 590 / 115
		3	283 / 628 / 28	232 / 781 / 23	314 / 572 / 59	250 / 691 / 47	242 / 599 / 115	203 / 731 / 93	269 / 653 / 27	218 / 802 / 22	299 / 599 / 56	243 / 735 / 45	230 / 625 / 109	204 / 776 / 90	261 / 693 / 26	211 / 845 / 21	285 / 622 / 53	229 / 755 / 43	218 / 647 / 104	198 / 793 / 84
Wind Speed [mph]		110						115												
15	1	297 / 523 / 32	242 / 630 / 25	365 / 412 / 69	301 / 507 / 55	257 / 455 / 104	247 / 556 / 83	284 / 544 / 31	243 / 665 / 25	353 / 433 / 66	297 / 527 / 53	248 / 467 / 98	246 / 575 / 79							
	2	254 / 611 / 27	210 / 746 / 22	298 / 501 / 56	251 / 623 / 46	229 / 504 / 92	225 / 626 / 75	241 / 631 / 26	210 / 784 / 21	286 / 522 / 54	245 / 642 / 44	224 / 525 / 89	223 / 645 / 72							
	3	210 / 712 / 23	179 / 887 / 19	231 / 643 / 44	194 / 795 / 36	168 / 684 / 68	163 / 833 / 55	204 / 749 / 22	177 / 926 / 18	225 / 679 / 43	194 / 833 / 35	162 / 700 / 64	164 / 871 / 53							
	20	1	348 / 523 / 35	283 / 630 / 27	428 / 412 / 80	351 / 507 / 64	291 / 455 / 128	274 / 556 / 103	334 / 544 / 33	282 / 665 / 27	413 / 433 / 77	345 / 527 / 61	280 / 467 / 121	272 / 575 / 98						
		2	298 / 611 / 30	246 / 746 / 24	349 / 501 / 65	293 / 623 / 53	259 / 504 / 114	249 / 626 / 93	283 / 631 / 28	244 / 784 / 23	335 / 522 / 63	285 / 642 / 51	253 / 525 / 109	246 / 645 / 89						
		3	247 / 712 / 25	209 / 887 / 20	271 / 643 / 51	227 / 795 / 41	190 / 684 / 84	181 / 833 / 68	240 / 749 / 24	206 / 926 / 20	264 / 679 / 49	225 / 833 / 40	183 / 700 / 79	181 / 871 / 65						
	25	1	348 / 523 / 35	283 / 630 / 27	428 / 412 / 80	351 / 507 / 64	324 / 455 / 154	301 / 556 / 123	334 / 544 / 33	282 / 665 / 27	413 / 433 / 77	345 / 527 / 61	312 / 467 / 146	298 / 575 / 118						
		2	298 / 611 / 30	246 / 746 / 24	349 / 501 / 65	293 / 623 / 53	289 / 504 / 137	274 / 626 / 112	283 / 631 / 28	244 / 784 / 23	335 / 522 / 63	285 / 642 / 51	282 / 525 / 132	269 / 645 / 107						
		3	247 / 712 / 25	209 / 887 / 20	271 / 643 / 51	227 / 795 / 41	212 / 684 / 101	199 / 833 / 81	240 / 749 / 24	206 / 926 / 20	264 / 679 / 49	225 / 833 / 40	204 / 700 / 95	199 / 871 / 79						
Wind Speed [mph]		120						130												
15	1	272 / 562 / 29	236 / 680 / 23	334 / 445 / 63	299 / 558 / 52	247 / 486 / 94	251 / 607 / 77	284 / 544 / 31	243 / 665 / 25	353 / 433 / 66	297 / 527 / 53	248 / 467 / 98	246 / 575 / 79							
	2	229 / 647 / 25	203 / 794 / 20	274 / 540 / 52	246 / 676 / 43	222 / 543 / 85	226 / 678 / 70	241 / 631 / 26	210 / 784 / 21	286 / 522 / 54	245 / 642 / 44	224 / 525 / 89	223 / 645 / 72							
	3	198 / 784 / 21	176 / 963 / 18	213 / 694 / 40	186 / 840 / 32	163 / 734 / 62	165 / 907 / 51	204 / 749 / 22	177 / 926 / 18	225 / 679 / 43	194 / 833 / 35	162 / 700 / 64	164 / 871 / 53							
	20	1	319 / 562 / 32	274 / 680 / 25	392 / 445 / 73	346 / 558 / 60	278 / 486 / 116	276 / 607 / 96	334 / 544 / 33	282 / 665 / 27	413 / 433 / 77	345 / 527 / 61	280 / 467 / 121	272 / 575 / 98						
		2	269 / 647 / 27	235 / 794 / 22	321 / 540 / 60	285 / 676 / 49	250 / 543 / 105	249 / 678 / 86	283 / 631 / 28	244 / 784 / 23	335 / 522 / 63	285 / 642 / 51	253 / 525 / 109	246 / 645 / 89						
		3	232 / 784 / 23	204 / 963 / 19	250 / 694 / 47	216 / 840 / 38	183 / 734 / 77	182 / 907 / 63	240 / 749 / 24	206 / 926 / 20	264 / 679 / 49	225 / 833 / 40	183 / 700 / 79	181 / 871 / 65						
	25	1	319 / 562 / 32	274 / 680 / 25	392 / 445 / 73	346 / 558 / 60	308 / 486 / 140	301 / 607 / 115	334 / 544 / 33	282 / 665 / 27	413 / 433 / 77	345 / 527 / 61	312 / 467 / 146	298 / 575 / 118						
		2	269 / 647 / 27	235 / 794 / 22	321 / 540 / 60	285 / 676 / 49	278 / 543 / 126	272 / 678 / 104	283 / 631 / 28	244 / 784 / 23	335 / 522 / 63	285 / 642 / 51	282 / 525 / 132	269 / 645 / 107						
		3	232 / 784 / 23	204 / 963 / 19	250 / 694 / 47	216 / 840 / 38	204 / 734 / 93	198 / 907 / 76	240 / 749 / 24	206 / 926 / 20	264 / 679 / 49	225 / 833 / 40	204 / 700 / 95	199 / 871 / 79						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																		
	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
15	1	260 / 579 / 28	236 / 712 / 23	322 / 464 / 61	294 / 575 / 49	246 / 504 / 90	249 / 622 / 74	245 / 620 / 26	236 / 771 / 21	303 / 496 / 56	291 / 617 / 46	247 / 545 / 85	250 / 662 / 68	243 / 672 / 25	235 / 825 / 20	298 / 533 / 53	285 / 652 / 43	248 / 581 / 79	256 / 713 / 64
	2	223 / 678 / 24	202 / 827 / 19	268 / 570 / 51	240 / 689 / 40	220 / 560 / 81	223 / 691 / 66	214 / 738 / 23	199 / 886 / 18	253 / 613 / 47	240 / 748 / 38	220 / 600 / 75	229 / 750 / 62	204 / 767 / 21	196 / 935 / 17	246 / 649 / 44	239 / 802 / 36	224 / 651 / 72	234 / 804 / 59
	3	186 / 792 / 20	174 / 996 / 17	207 / 726 / 39	185 / 872 / 31	164 / 766 / 60	166 / 940 / 49	176 / 851 / 19	170 / 1054 / 16	192 / 763 / 36	189 / 966 / 30	165 / 827 / 57	167 / 997 / 45	171 / 901 / 18	164 / 1097 / 14	188 / 814 / 33	185 / 1016 / 28	165 / 880 / 53	174 / 1089 / 44
	1	305 / 579 / 30	273 / 712 / 25	378 / 464 / 71	339 / 575 / 57	275 / 504 / 112	273 / 622 / 91	287 / 620 / 28	270 / 771 / 23	354 / 496 / 65	333 / 617 / 53	275 / 545 / 105	272 / 662 / 84	283 / 672 / 27	267 / 825 / 22	346 / 533 / 61	324 / 652 / 49	273 / 581 / 98	277 / 713 / 79
	2	261 / 678 / 26	233 / 827 / 21	314 / 570 / 59	276 / 689 / 47	247 / 560 / 100	245 / 691 / 82	250 / 738 / 25	228 / 886 / 20	296 / 613 / 55	274 / 748 / 44	244 / 600 / 93	249 / 750 / 77	238 / 767 / 23	223 / 935 / 18	286 / 649 / 51	272 / 802 / 41	247 / 651 / 89	253 / 804 / 72
	3	218 / 792 / 22	201 / 996 / 18	243 / 726 / 45	213 / 872 / 36	184 / 766 / 75	182 / 940 / 61	206 / 851 / 20	194 / 1054 / 17	224 / 763 / 41	216 / 966 / 35	183 / 827 / 70	182 / 997 / 56	199 / 901 / 19	187 / 1097 / 15	218 / 814 / 39	211 / 1016 / 32	182 / 880 / 65	188 / 1089 / 54
	1	305 / 579 / 30	273 / 712 / 25	378 / 464 / 71	339 / 575 / 57	305 / 504 / 134	297 / 622 / 109	287 / 620 / 28	270 / 771 / 23	354 / 496 / 65	333 / 617 / 53	302 / 545 / 126	294 / 662 / 101	283 / 672 / 27	267 / 825 / 22	346 / 533 / 61	324 / 652 / 49	299 / 581 / 118	298 / 713 / 95
	2	261 / 678 / 26	233 / 827 / 21	314 / 570 / 59	276 / 689 / 47	273 / 560 / 121	266 / 691 / 98	250 / 738 / 25	228 / 886 / 20	296 / 613 / 55	274 / 748 / 44	269 / 600 / 112	270 / 750 / 93	238 / 767 / 23	223 / 935 / 18	286 / 649 / 51	272 / 802 / 41	271 / 651 / 107	272 / 804 / 87
	3	218 / 792 / 22	201 / 996 / 18	243 / 726 / 45	213 / 872 / 36	203 / 766 / 90	198 / 940 / 73	206 / 851 / 20	194 / 1054 / 17	224 / 763 / 41	216 / 966 / 35	202 / 827 / 84	196 / 997 / 67	199 / 901 / 19	187 / 1097 / 15	218 / 814 / 39	211 / 1016 / 32	199 / 880 / 79	202 / 1089 / 65
20	1	235 / 699 / 23	232 / 871 / 19	292 / 565 / 49	287 / 699 / 40	253 / 627 / 75	262 / 760 / 60	232 / 740 / 21	229 / 908 / 18	293 / 606 / 47	287 / 740 / 38	250 / 652 / 70	273 / 800 / 57	203 / 881 / 19	203 / 1091 / 16	243 / 739 / 39	235 / 887 / 31	223 / 719 / 62	246 / 889 / 51
	2	200 / 812 / 19	199 / 1014 / 16	245 / 696 / 41	238 / 848 / 33	228 / 698 / 68	238 / 850 / 55	167 / 1011 / 16	167 / 1258 / 13	186 / 927 / 30	183 / 1128 / 24	169 / 997 / 47	182 / 1201 / 38	266 / 740 / 23	257 / 908 / 19	336 / 606 / 55	322 / 740 / 44	273 / 652 / 86	284 / 800 / 70
	3	173 / 979 / 17	166 / 1180 / 14	190 / 889 / 32	180 / 1053 / 26	164 / 924 / 49	172 / 1123 / 40	233 / 881 / 20	227 / 1091 / 17	278 / 739 / 45	263 / 887 / 36	244 / 719 / 77	256 / 889 / 63	191 / 1011 / 17	188 / 1258 / 14	213 / 927 / 35	205 / 1128 / 28	185 / 997 / 58	190 / 1201 / 47
	1	271 / 699 / 25	263 / 871 / 20	337 / 565 / 57	323 / 699 / 47	277 / 627 / 93	281 / 760 / 75	266 / 740 / 23	257 / 908 / 19	336 / 606 / 55	322 / 740 / 44	273 / 652 / 86	284 / 800 / 70	233 / 881 / 20	227 / 1091 / 17	278 / 739 / 45	263 / 887 / 36	244 / 719 / 77	256 / 889 / 63
	2	231 / 812 / 21	225 / 1014 / 18	282 / 696 / 48	268 / 848 / 39	250 / 698 / 84	255 / 850 / 68	191 / 1011 / 17	188 / 1258 / 14	213 / 927 / 35	205 / 1128 / 28	185 / 997 / 58	190 / 1201 / 47	266 / 740 / 23	257 / 908 / 19	336 / 606 / 55	322 / 740 / 44	296 / 652 / 104	302 / 800 / 84
	3	200 / 979 / 18	188 / 1180 / 15	220 / 889 / 38	204 / 1053 / 30	180 / 924 / 61	185 / 1123 / 49	233 / 881 / 20	227 / 1091 / 17	278 / 739 / 45	263 / 887 / 36	264 / 719 / 93	272 / 889 / 76	191 / 1011 / 17	188 / 1258 / 14	213 / 927 / 35	205 / 1128 / 28	200 / 997 / 70	202 / 1201 / 56
	1	271 / 699 / 25	263 / 871 / 20	337 / 565 / 57	323 / 699 / 47	302 / 627 / 112	301 / 760 / 90	266 / 740 / 23	257 / 908 / 19	336 / 606 / 55	322 / 740 / 44	296 / 652 / 104	302 / 800 / 84	233 / 881 / 20	227 / 1091 / 17	278 / 739 / 45	263 / 887 / 36	264 / 719 / 93	272 / 889 / 76
	2	231 / 812 / 21	225 / 1014 / 18	282 / 696 / 48	268 / 848 / 39	272 / 698 / 101	273 / 850 / 81	191 / 1011 / 17	188 / 1258 / 14	213 / 927 / 35	205 / 1128 / 28	200 / 997 / 70	202 / 1201 / 56	266 / 740 / 23	257 / 908 / 19	336 / 606 / 55	322 / 740 / 44	296 / 652 / 104	302 / 800 / 84
	3	200 / 979 / 18	188 / 1180 / 15	220 / 889 / 38	204 / 1053 / 30	196 / 924 / 73	198 / 1123 / 59	233 / 881 / 20	227 / 1091 / 17	278 / 739 / 45	263 / 887 / 36	264 / 719 / 93	272 / 889 / 76	191 / 1011 / 17	188 / 1258 / 14	213 / 927 / 35	205 / 1128 / 28	200 / 997 / 70	202 / 1201 / 56
25	1	236 / 800 / 21	234 / 975 / 17	292 / 645 / 45	286 / 777 / 36	254 / 689 / 66	292 / 863 / 55	231 / 831 / 19	238 / 1038 / 16	291 / 680 / 43	294 / 834 / 35	256 / 722 / 62	299 / 892 / 51	199 / 974 / 17	198 / 1174 / 14	236 / 809 / 35	235 / 977 / 28	233 / 811 / 57	266 / 978 / 45
	2	198 / 913 / 18	196 / 1112 / 14	240 / 777 / 37	240 / 953 / 30	232 / 779 / 60	262 / 955 / 49	168 / 1143 / 14	169 / 1392 / 12	181 / 1015 / 27	186 / 1262 / 22	171 / 1085 / 42	199 / 1336 / 34	269 / 800 / 23	261 / 975 / 18	333 / 645 / 52	319 / 777 / 41	275 / 689 / 82	295 / 863 / 68
	3	167 / 1079 / 15	168 / 1329 / 12	187 / 994 / 29	185 / 1198 / 23	167 / 1023 / 44	191 / 1272 / 36	263 / 831 / 21	264 / 1038 / 18	330 / 680 / 49	326 / 834 / 40	276 / 722 / 77	299 / 892 / 63	226 / 913 / 19	219 / 1112 / 15	273 / 777 / 43	268 / 953 / 35	252 / 779 / 75	265 / 955 / 61
	1	269 / 800 / 23	261 / 975 / 18	333 / 645 / 52	319 / 777 / 41	275 / 689 / 82	295 / 863 / 68	226 / 974 / 18	220 / 1174 / 15	268 / 809 / 40	261 / 977 / 32	251 / 811 / 70	266 / 978 / 56	191 / 1079 / 16	188 / 1329 / 13	214 / 994 / 34	206 / 1198 / 27	181 / 1023 / 54	194 / 1272 / 45
	2	226 / 913 / 19	219 / 1112 / 15	273 / 777 / 43	268 / 953 / 35	252 / 779 / 75	265 / 955 / 61	263 / 831 / 21	264 / 1038 / 18	330 / 680 / 49	326 / 834 / 40	296 / 722 / 93	312 / 892 / 76	226 / 913 / 19	219 / 1112 / 15	273 / 777 / 43	268 / 953 / 35	271 / 779 / 90	281 / 955 / 73
	3	191 / 1079 / 16	188 / 1329 / 13	214 / 994 / 34	206 / 1198 / 27	181 / 1023 / 54	194 / 1272 / 45	190 / 1143 / 15	187 / 1392 / 13	205 / 1015 / 31	206 / 1262 / 26	184 / 1085 / 52	199 / 1336 / 42	269 / 800 / 23	261 / 975 / 18	333 / 645 / 52	319 / 777 / 41	297 / 689 / 98	313 / 863 / 81
	1	269 / 800 / 23	261 / 975 / 18	333 / 645 / 52	319 / 777 / 41	297 / 689 / 98	313 / 863 / 81	226 / 974 / 18	220 / 1174 / 15	268 / 809 / 40	261 / 977 / 32	269 / 811 / 84	277 / 978 / 67	191 / 1079 / 16	188 / 1329 / 13	214 / 994 / 34	206 / 1198 / 27	195 / 1023 / 65	205 / 1272 / 54
	2	226 / 913 / 19	219 / 1112 / 15	273 / 777 / 43	268 / 953 / 35	271 / 779 / 90	281 / 955 / 73	226 / 974 / 18	220 / 1174 / 15	268 / 809 / 40	261 / 977 / 32	269 / 811 / 84	277 / 978 / 67	191 / 1079 / 16	188 / 1329 / 13	214 / 994 / 34	206 / 1198 / 27	195 / 1023 / 65	205 / 1272 / 54
	3	191 / 1079 / 16	188 / 1329 / 13	214 / 994 / 34	206 / 1198 / 27	195 / 1023 / 65	205 / 1272 / 54	190 / 1143 / 15	187 / 1392 / 13	205 / 1015 / 31	206 / 1262 / 26	198 / 1085 / 62	208 / 1336 / 51	269 / 800 / 23	261 / 975 / 18	333 / 645 / 52	319 / 777 / 41	297 / 689 / 98	313 / 863 / 81

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Exposure Category : C

Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																
100	1	927 / 171 / 147	927 / 267 / 147	924 / 219 / 233	924 / 339 / 233	821 / 303 / 474	821 / 465 / 474	927 / 189 / 147	927 / 293 / 147	924 / 241 / 233	924 / 372 / 233	821 / 333 / 474	821 / 510 / 474	927 / 207 / 147	904 / 610 / 144	924 / 264 / 233	924 / 407 / 233	821 / 364 / 474	787 / 534 / 454
	2	927 / 469 / 147	859 / 661 / 136	924 / 328 / 233	924 / 502 / 233	821 / 378 / 474	770 / 541 / 444	927 / 514 / 147	814 / 686 / 129	924 / 360 / 233	924 / 551 / 233	821 / 415 / 474	735 / 567 / 425	927 / 562 / 147	769 / 707 / 122	924 / 394 / 233	902 / 587 / 227	821 / 453 / 474	701 / 590 / 405
	3	882 / 628 / 140	723 / 781 / 115	924 / 546 / 233	770 / 691 / 194	701 / 599 / 405	564 / 731 / 326	836 / 653 / 133	678 / 802 / 108	924 / 599 / 233	748 / 735 / 188	667 / 625 / 385	547 / 776 / 316	814 / 693 / 129	656 / 845 / 104	880 / 622 / 222	704 / 755 / 177	633 / 647 / 366	513 / 793 / 296

Wind Speed [mph]		110						115					
100	1	927 / 227 / 147	859 / 630 / 136	924 / 289 / 233	924 / 444 / 233	821 / 397 / 474	752 / 556 / 435	927 / 247 / 147	836 / 665 / 133	924 / 314 / 233	924 / 481 / 233	821 / 431 / 474	718 / 575 / 415
	2	927 / 611 / 147	746 / 746 / 119	924 / 429 / 233	880 / 623 / 222	821 / 494 / 474	684 / 626 / 395	882 / 631 / 140	723 / 784 / 115	924 / 466 / 233	836 / 642 / 211	804 / 525 / 464	650 / 645 / 375
	3	769 / 712 / 122	633 / 887 / 101	836 / 643 / 211	682 / 795 / 172	616 / 684 / 356	496 / 833 / 287	746 / 749 / 119	610 / 926 / 97	814 / 679 / 205	660 / 833 / 166	582 / 700 / 336	479 / 871 / 277

Wind Speed [mph]		120						130					
100	1	927 / 268 / 147	791 / 680 / 126	924 / 340 / 233	924 / 521 / 233	821 / 467 / 474	701 / 607 / 405	927 / 247 / 147	836 / 665 / 133	924 / 314 / 233	924 / 481 / 233	821 / 431 / 474	718 / 575 / 415
	2	836 / 647 / 133	678 / 794 / 108	924 / 504 / 233	814 / 676 / 205	770 / 543 / 444	633 / 678 / 366	882 / 631 / 140	723 / 784 / 115	924 / 466 / 233	836 / 642 / 211	804 / 525 / 464	650 / 645 / 375
	3	723 / 784 / 115	588 / 963 / 94	770 / 694 / 194	616 / 840 / 155	564 / 734 / 326	462 / 907 / 267	746 / 749 / 119	610 / 926 / 97	814 / 679 / 205	660 / 833 / 166	582 / 700 / 336	479 / 871 / 277

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]	140						150						160					
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	927 / 289 / 147	769 / 712 / 122	924 / 367 / 233	924 / 562 / 233	821 / 504 / 474	667 / 622 / 385	882 / 620 / 140	723 / 771 / 115	924 / 425 / 233	880 / 617 / 222	770 / 545 / 444	625 / 662 / 356	836 / 672 / 133	678 / 825 / 108	924 / 486 / 233	814 / 652 / 205	718 / 581 / 415	611 / 713 / 336
	2	814 / 678 / 129	656 / 827 / 104	924 / 544 / 233	770 / 689 / 194	735 / 560 / 425	599 / 691 / 346	769 / 738 / 122	610 / 886 / 97	902 / 613 / 227	726 / 748 / 183	684 / 600 / 395	573 / 750 / 326	701 / 767 / 111	565 / 935 / 90	836 / 649 / 211	682 / 802 / 172	650 / 651 / 375	557 / 804 / 306
	3	678 / 792 / 108	565 / 996 / 90	748 / 726 / 188	594 / 872 / 150	547 / 766 / 316	445 / 940 / 257	633 / 851 / 101	520 / 1054 / 83	682 / 763 / 172	572 / 966 / 144	513 / 827 / 296	417 / 997 / 237	588 / 901 / 94	475 / 1097 / 76	638 / 814 / 161	528 / 1016 / 133	479 / 880 / 277	413 / 1089 / 227
100	1	769 / 699 / 122	633 / 871 / 101	924 / 552 / 233	770 / 699 / 194	684 / 627 / 395	595 / 760 / 316	723 / 740 / 115	588 / 908 / 94	902 / 606 / 227	726 / 740 / 183	636 / 652 / 366	578 / 800 / 296						
	2	656 / 812 / 104	543 / 1014 / 86	792 / 696 / 199	638 / 848 / 161	616 / 698 / 356	539 / 850 / 287	633 / 881 / 101	520 / 1091 / 83	748 / 739 / 188	594 / 887 / 150	567 / 719 / 326	520 / 889 / 267						
	3	565 / 979 / 90	452 / 1180 / 72	616 / 889 / 155	484 / 1053 / 122	445 / 924 / 257	391 / 1123 / 208	520 / 1011 / 83	430 / 1258 / 68	572 / 927 / 144	462 / 1128 / 117	430 / 997 / 247	386 / 1201 / 198						
100	1	701 / 800 / 111	565 / 975 / 90	858 / 645 / 216	682 / 777 / 172	618 / 689 / 346	580 / 863 / 287	656 / 831 / 104	551 / 1038 / 86	814 / 680 / 205	675 / 834 / 166	600 / 722 / 326	560 / 892 / 267						
	2	588 / 913 / 94	475 / 1112 / 76	704 / 777 / 177	572 / 953 / 144	565 / 779 / 316	520 / 955 / 257	565 / 974 / 90	460 / 1174 / 72	660 / 809 / 166	540 / 977 / 133	545 / 811 / 296	498 / 978 / 237						
	3	498 / 1079 / 79	407 / 1329 / 65	550 / 994 / 139	440 / 1198 / 111	406 / 1023 / 227	380 / 1272 / 188	475 / 1143 / 76	391 / 1392 / 61	506 / 1015 / 128	428 / 1262 / 106	400 / 1085 / 218	374 / 1336 / 178						

Exposure Category : C

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
Ground Snow	45	1	488 / 491 / 93	392 / 603 / 75	568 / 370 / 157	475 / 476 / 131	449 / 424 / 250	392 / 526 / 203	459 / 508 / 87	374 / 629 / 71	568 / 407 / 157	461 / 503 / 126	425 / 442 / 237	387 / 552 / 194	440 / 532 / 84	362 / 651 / 67	540 / 424 / 149	451 / 527 / 121	413 / 466 / 229	381 / 576 / 186
		2	411 / 568 / 78	335 / 703 / 64	484 / 470 / 134	391 / 580 / 108	402 / 473 / 225	351 / 583 / 181	392 / 594 / 75	317 / 726 / 60	466 / 496 / 129	376 / 606 / 103	387 / 500 / 216	344 / 608 / 173	373 / 617 / 71	313 / 768 / 58	447 / 521 / 123	374 / 645 / 100	374 / 524 / 207	337 / 631 / 164
		3	344 / 669 / 66	278 / 816 / 53	373 / 600 / 103	308 / 751 / 85	294 / 641 / 164	259 / 791 / 134	335 / 712 / 64	269 / 862 / 51	363 / 642 / 100	292 / 773 / 80	279 / 665 / 156	258 / 838 / 130	316 / 733 / 60	264 / 906 / 49	345 / 664 / 95	288 / 816 / 77	273 / 705 / 151	248 / 852 / 121
	50	1	537 / 491 / 99	432 / 603 / 80	605 / 357 / 165	523 / 476 / 142	480 / 424 / 273	418 / 526 / 221	505 / 508 / 94	411 / 629 / 76	605 / 393 / 165	502 / 503 / 137	455 / 442 / 259	411 / 552 / 212	484 / 532 / 90	390 / 651 / 72	595 / 424 / 162	484 / 527 / 131	442 / 466 / 249	404 / 576 / 202
		2	453 / 568 / 84	369 / 703 / 68	533 / 470 / 145	431 / 580 / 117	431 / 473 / 245	373 / 583 / 198	432 / 594 / 80	348 / 726 / 65	513 / 496 / 140	410 / 606 / 112	414 / 500 / 235	366 / 608 / 188	411 / 617 / 76	337 / 768 / 63	492 / 521 / 134	402 / 645 / 109	400 / 524 / 226	357 / 631 / 179
		3	379 / 669 / 70	306 / 816 / 57	410 / 600 / 112	339 / 751 / 92	315 / 641 / 179	276 / 791 / 146	369 / 712 / 68	295 / 862 / 55	400 / 642 / 109	318 / 773 / 87	298 / 665 / 170	274 / 838 / 141	348 / 733 / 65	285 / 906 / 53	379 / 664 / 103	309 / 816 / 84	292 / 705 / 165	263 / 852 / 132
	60	1	636 / 491 / 113	511 / 603 / 91	679 / 339 / 181	619 / 476 / 165	549 / 424 / 318	469 / 526 / 258	598 / 508 / 106	486 / 629 / 86	679 / 373 / 181	594 / 503 / 158	521 / 442 / 302	460 / 552 / 247	573 / 532 / 102	461 / 651 / 82	679 / 409 / 181	570 / 527 / 152	502 / 466 / 291	451 / 576 / 236
		2	536 / 568 / 95	436 / 703 / 78	631 / 470 / 168	510 / 580 / 136	493 / 473 / 285	419 / 583 / 230	511 / 594 / 91	411 / 726 / 73	607 / 496 / 162	485 / 606 / 129	474 / 500 / 274	409 / 608 / 219	486 / 617 / 86	399 / 768 / 71	582 / 521 / 155	473 / 645 / 126	455 / 524 / 263	399 / 631 / 208
		3	449 / 669 / 80	362 / 816 / 64	485 / 600 / 129	400 / 751 / 107	360 / 641 / 208	310 / 791 / 170	436 / 712 / 78	349 / 862 / 62	473 / 642 / 126	376 / 773 / 100	341 / 665 / 198	307 / 838 / 165	411 / 733 / 73	337 / 906 / 60	449 / 664 / 120	364 / 816 / 97	332 / 705 / 192	294 / 852 / 154
ASCE Group Zone	Wind Speed [mph]		110						115											
	45	1	421 / 554 / 80	360 / 689 / 66	522 / 446 / 144	441 / 549 / 116	407 / 488 / 220	374 / 598 / 177	402 / 574 / 77	347 / 705 / 62	494 / 459 / 136	431 / 570 / 111	400 / 509 / 212	367 / 616 / 169						
		2	364 / 654 / 69	310 / 808 / 57	428 / 544 / 118	363 / 666 / 95	367 / 547 / 199	338 / 668 / 160	344 / 672 / 66	296 / 819 / 53	410 / 564 / 113	351 / 682 / 90	359 / 567 / 190	329 / 685 / 151						
		3	306 / 773 / 58	260 / 948 / 48	326 / 683 / 90	284 / 857 / 75	263 / 723 / 143	247 / 893 / 117	297 / 811 / 57	255 / 987 / 46	317 / 720 / 88	281 / 896 / 72	261 / 759 / 138	245 / 931 / 113						
	50	1	463 / 554 / 86	386 / 689 / 70	574 / 446 / 156	473 / 549 / 126	434 / 488 / 240	397 / 598 / 193	442 / 574 / 82	372 / 705 / 66	543 / 459 / 148	461 / 570 / 120	427 / 509 / 231	388 / 616 / 184						
		2	400 / 654 / 74	332 / 808 / 61	472 / 544 / 128	389 / 666 / 103	392 / 547 / 217	358 / 668 / 174	379 / 672 / 70	317 / 819 / 57	451 / 564 / 123	375 / 682 / 98	383 / 567 / 207	349 / 685 / 165						
		3	337 / 773 / 63	279 / 948 / 51	359 / 683 / 98	305 / 857 / 81	281 / 723 / 155	261 / 893 / 127	327 / 811 / 61	273 / 987 / 49	349 / 720 / 95	300 / 896 / 78	279 / 759 / 151	259 / 931 / 123						
	60	1	548 / 554 / 97	449 / 689 / 80	679 / 446 / 181	546 / 549 / 145	490 / 488 / 280	441 / 598 / 225	523 / 574 / 93	424 / 705 / 75	643 / 459 / 171	522 / 570 / 139	480 / 509 / 269	431 / 616 / 214						
		2	474 / 654 / 84	386 / 808 / 69	558 / 544 / 149	449 / 666 / 120	442 / 547 / 252	398 / 668 / 203	449 / 672 / 80	362 / 819 / 64	534 / 564 / 142	425 / 682 / 113	431 / 567 / 241	387 / 685 / 192						
3		399 / 773 / 71	324 / 948 / 58	425 / 683 / 113	352 / 857 / 94	317 / 723 / 181	291 / 893 / 148	386 / 811 / 69	312 / 987 / 56	413 / 720 / 110	340 / 896 / 91	314 / 759 / 176	287 / 931 / 143							
ASCE Group Zone	Wind Speed [mph]		120						130											
	45	1	392 / 605 / 75	344 / 739 / 60	475 / 478 / 131	420 / 587 / 105	393 / 528 / 203	369 / 649 / 164	402 / 574 / 77	347 / 705 / 62	494 / 459 / 136	431 / 570 / 111	400 / 509 / 212	367 / 616 / 169						
		2	335 / 706 / 64	292 / 854 / 51	391 / 583 / 108	348 / 716 / 88	351 / 585 / 181	330 / 718 / 147	344 / 672 / 66	296 / 819 / 53	410 / 564 / 113	351 / 682 / 90	359 / 567 / 190	329 / 685 / 151						
		3	278 / 819 / 53	250 / 1023 / 44	308 / 754 / 85	266 / 898 / 67	259 / 794 / 134	243 / 966 / 108	297 / 811 / 57	255 / 987 / 46	317 / 720 / 88	281 / 896 / 72	261 / 759 / 138	245 / 931 / 113						
	50	1	432 / 605 / 80	368 / 739 / 65	523 / 478 / 142	448 / 587 / 115	418 / 528 / 221	390 / 649 / 179	442 / 574 / 82	372 / 705 / 66	543 / 459 / 148	461 / 570 / 120	427 / 509 / 231	388 / 616 / 184						
		2	369 / 706 / 68	312 / 854 / 55	431 / 583 / 117	372 / 716 / 95	374 / 585 / 198	349 / 718 / 160	379 / 672 / 70	317 / 819 / 57	451 / 564 / 123	375 / 682 / 98	383 / 567 / 207	349 / 685 / 165						
		3	306 / 819 / 57	268 / 1023 / 47	339 / 754 / 92	285 / 898 / 73	276 / 794 / 146	256 / 966 / 118	327 / 811 / 61	273 / 987 / 49	349 / 720 / 95	300 / 896 / 78	279 / 759 / 151	259 / 931 / 123						
	60	1	511 / 605 / 91	416 / 739 / 73	619 / 478 / 165	506 / 587 / 133	470 / 528 / 258	431 / 649 / 208	523 / 574 / 93	424 / 705 / 75	643 / 459 / 171	522 / 570 / 139	480 / 509 / 269	431 / 616 / 214						
		2	436 / 706 / 78	353 / 854 / 62	510 / 583 / 136	420 / 716 / 110	420 / 585 / 230	386 / 718 / 187	449 / 672 / 80	362 / 819 / 64	534 / 564 / 142	425 / 682 / 113	431 / 567 / 241	387 / 685 / 192						
3		362 / 819 / 64	303 / 1023 / 53	400 / 754 / 107	321 / 898 / 84	310 / 794 / 170	284 / 966 / 137	386 / 811 / 69	312 / 987 / 56	413 / 720 / 110	340 / 896 / 91	314 / 759 / 176	287 / 931 / 143							

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in						Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	45	1	373 / 621 / 71	341 / 772 / 58	459 / 496 / 126	419 / 618 / 103	385 / 545 / 194	360 / 663 / 156	366 / 679 / 67	334 / 833 / 55	446 / 538 / 118	405 / 659 / 95	378 / 587 / 181	362 / 721 / 147	348 / 712 / 62	326 / 887 / 51	432 / 575 / 111	401 / 711 / 90	369 / 623 / 169	363 / 774 / 138															
2		325 / 738 / 62	288 / 886 / 49	384 / 613 / 105	345 / 749 / 85	342 / 601 / 173	330 / 751 / 143	307 / 775 / 57	279 / 944 / 46	369 / 655 / 98	339 / 810 / 80	342 / 658 / 164	320 / 786 / 130	297 / 827 / 53	280 / 1033 / 44	352 / 689 / 90	333 / 864 / 75	331 / 691 / 151	329 / 866 / 125																
3		268 / 852 / 51	245 / 1055 / 42	291 / 763 / 80	272 / 967 / 67	257 / 828 / 130	240 / 998 / 104	257 / 910 / 48	234 / 1108 / 39	281 / 822 / 75	263 / 1026 / 62	252 / 888 / 121	235 / 1052 / 95	256 / 997 / 46	233 / 1202 / 37	271 / 873 / 70	252 / 1072 / 57	246 / 940 / 113	238 / 1144 / 91																
50		1	411 / 621 / 76	364 / 772 / 63	502 / 496 / 137	447 / 618 / 112	410 / 545 / 212	380 / 663 / 170	393 / 679 / 72	356 / 833 / 59	478 / 538 / 128	431 / 659 / 103	400 / 587 / 198	381 / 721 / 160	373 / 712 / 66	347 / 887 / 55	462 / 575 / 120	426 / 711 / 98	390 / 623 / 184	380 / 774 / 151															
		2	358 / 738 / 66	307 / 886 / 53	420 / 613 / 115	369 / 749 / 92	364 / 601 / 188	348 / 751 / 155	329 / 775 / 61	297 / 944 / 49	395 / 655 / 106	361 / 810 / 87	362 / 658 / 179	336 / 786 / 141	318 / 827 / 57	297 / 1033 / 47	376 / 689 / 98	353 / 864 / 81	350 / 691 / 165	345 / 866 / 137															
		3	295 / 852 / 55	262 / 1055 / 45	318 / 763 / 87	291 / 967 / 73	273 / 828 / 141	254 / 998 / 113	276 / 910 / 51	249 / 1108 / 41	302 / 822 / 81	280 / 1026 / 67	267 / 888 / 132	247 / 1052 / 104	274 / 997 / 49	248 / 1202 / 39	290 / 873 / 76	268 / 1072 / 62	260 / 940 / 123	250 / 1144 / 99															
60		1	486 / 621 / 86	411 / 772 / 71	594 / 496 / 158	503 / 618 / 129	459 / 545 / 247	419 / 663 / 198	461 / 679 / 82	399 / 833 / 67	558 / 538 / 149	483 / 659 / 120	446 / 587 / 230	418 / 721 / 187	424 / 712 / 75	387 / 887 / 62	523 / 575 / 139	475 / 711 / 113	432 / 623 / 214	415 / 774 / 176															
		2	424 / 738 / 75	347 / 886 / 60	497 / 613 / 133	415 / 749 / 107	408 / 601 / 219	384 / 751 / 181	386 / 775 / 69	333 / 944 / 56	461 / 655 / 123	405 / 810 / 100	404 / 658 / 208	369 / 786 / 165	362 / 827 / 64	332 / 1033 / 53	425 / 689 / 113	394 / 864 / 94	388 / 691 / 192	376 / 866 / 159															
		3	349 / 852 / 62	295 / 1055 / 51	376 / 763 / 100	327 / 967 / 84	306 / 828 / 165	280 / 998 / 132	324 / 910 / 58	280 / 1108 / 47	352 / 822 / 94	314 / 1026 / 78	298 / 888 / 154	271 / 1052 / 121	312 / 997 / 56	277 / 1202 / 45	328 / 873 / 87	299 / 1072 / 71	288 / 940 / 143	273 / 1144 / 115															
Wind Speed [mph]		170						180																											
45	1	339 / 759 / 58	317 / 931 / 48	416 / 607 / 103	396 / 759 / 85	368 / 669 / 160	362 / 820 / 130	330 / 799 / 55	320 / 1006 / 46	410 / 649 / 98	390 / 802 / 80	366 / 711 / 151	360 / 860 / 121	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	286 / 871 / 49	269 / 1070 / 40	344 / 736 / 85	324 / 910 / 70	328 / 738 / 143	326 / 911 / 117	286 / 942 / 48	269 / 1147 / 39	335 / 777 / 80	315 / 946 / 65	324 / 779 / 134	321 / 947 / 108																							
3	244 / 1037 / 42	232 / 1290 / 35	271 / 950 / 67	252 / 1156 / 54	239 / 981 / 104	242 / 1231 / 87	242 / 1113 / 40	230 / 1371 / 33	259 / 985 / 62	252 / 1236 / 52	241 / 1055 / 100	244 / 1312 / 82																							
50	1	362 / 759 / 63	336 / 931 / 51	445 / 607 / 112	420 / 759 / 92	388 / 669 / 174	379 / 820 / 141	351 / 799 / 59	338 / 1006 / 49	437 / 649 / 106	412 / 802 / 87	385 / 711 / 165	375 / 860 / 132																						
	2	306 / 871 / 53	285 / 1070 / 43	367 / 736 / 92	343 / 910 / 76	346 / 738 / 155	341 / 911 / 127	305 / 942 / 51	284 / 1147 / 41	357 / 777 / 87	333 / 946 / 70	341 / 779 / 146	335 / 947 / 118																						
	3	261 / 1037 / 45	246 / 1290 / 37	289 / 950 / 73	267 / 1156 / 59	252 / 981 / 113	253 / 1231 / 94	258 / 1113 / 43	243 / 1371 / 35	276 / 985 / 67	266 / 1236 / 56	253 / 1055 / 109	255 / 1312 / 90																						
60	1	409 / 759 / 71	374 / 931 / 58	501 / 607 / 129	466 / 759 / 107	428 / 669 / 203	411 / 820 / 165	395 / 799 / 67	374 / 1006 / 56	491 / 649 / 123	456 / 802 / 100	423 / 711 / 192	406 / 860 / 154																						
	2	345 / 871 / 60	316 / 1070 / 49	413 / 736 / 107	382 / 910 / 87	382 / 738 / 181	370 / 911 / 148	342 / 942 / 58	314 / 1147 / 47	400 / 777 / 100	368 / 946 / 81	375 / 779 / 170	362 / 947 / 137																						
	3	294 / 1037 / 51	273 / 1290 / 42	326 / 950 / 84	297 / 1156 / 68	278 / 981 / 132	274 / 1231 / 110	290 / 1113 / 49	270 / 1371 / 40	310 / 985 / 78	294 / 1236 / 65	278 / 1055 / 126	275 / 1312 / 104																						
Wind Speed [mph]		190						200																											
45	1	331 / 863 / 53	308 / 1032 / 42	403 / 687 / 93	383 / 837 / 75	363 / 749 / 143	369 / 925 / 117	320 / 891 / 49	309 / 1095 / 40	396 / 721 / 88	388 / 897 / 72	359 / 781 / 134	364 / 950 / 108																						
	2	274 / 970 / 44	268 / 1218 / 37	325 / 811 / 75	317 / 1013 / 62	319 / 813 / 125	328 / 1015 / 104	272 / 1032 / 42	267 / 1283 / 35	326 / 869 / 72	319 / 1077 / 59	324 / 871 / 121	335 / 1079 / 100																						
	3	240 / 1185 / 39	228 / 1444 / 31	258 / 1053 / 59	251 / 1309 / 49	242 / 1126 / 95	246 / 1386 / 78	237 / 1252 / 37	225 / 1506 / 29	256 / 1117 / 57	250 / 1375 / 47	243 / 1192 / 91	247 / 1451 / 74																						
	50	1	352 / 863 / 57	325 / 1032 / 45	429 / 687 / 101	404 / 837 / 81	381 / 749 / 155	384 / 925 / 127	339 / 891 / 53	325 / 1095 / 43	420 / 721 / 95	408 / 897 / 78	376 / 781 / 146							377 / 950 / 118															
		2	291 / 970 / 47	283 / 1218 / 39	346 / 811 / 81	334 / 1013 / 67	335 / 813 / 137	341 / 1015 / 113	289 / 1032 / 45	281 / 1283 / 37	346 / 869 / 78	335 / 1077 / 64	340 / 871 / 132							347 / 1079 / 109															
		3	255 / 1185 / 41	240 / 1444 / 33	274 / 1053 / 64	265 / 1309 / 53	254 / 1126 / 104	256 / 1386 / 85	251 / 1252 / 39	237 / 1506 / 32	272 / 1117 / 62	262 / 1375 / 51	255 / 1192 / 99							257 / 1451 / 80															
	60	1	394 / 863 / 64	358 / 1032 / 51	480 / 687 / 116	444 / 837 / 94	417 / 749 / 181	413 / 925 / 148	378 / 891 / 60	357 / 1095 / 49	468 / 721 / 110	447 / 897 / 91	410 / 781 / 170							404 / 950 / 137															
		2	326 / 970 / 53	312 / 1218 / 45	386 / 811 / 94	368 / 1013 / 78	367 / 813 / 159	368 / 1015 / 132	322 / 1032 / 51	308 / 1283 / 42	385 / 869 / 91	368 / 1077 / 75	370 / 871 / 154							372 / 1079 / 126															
		3	285 / 1185 / 47	265 / 1444 / 38	307 / 1053 / 75	291 / 1309 / 62	278 / 1126 / 121	276 / 1386 / 99	280 / 1252 / 45	260 / 1506 / 36	303 / 1117 / 71	288 / 1375 / 58	278 / 1192 / 115							275 / 1451 / 94															

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						83in x 41.5in				Load: Up / Down / Side , lbs							
Wind Speed [mph]		95						100				105							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
	70	1	734 / 491 / 126	590 / 603 / 102	728 / 315 / 191	714 / 476 / 187	634 / 424 / 366	520 / 526 / 297	691 / 508 / 119	561 / 629 / 97	728 / 347 / 191	686 / 503 / 180	601 / 442 / 347	509 / 552 / 284	662 / 532 / 114	533 / 651 / 92	728 / 380 / 191	658 / 527 / 172	579 / 466 / 335
2		619 / 568 / 106	504 / 703 / 87	728 / 470 / 191	588 / 580 / 154	568 / 473 / 328	465 / 583 / 265	590 / 594 / 102	475 / 726 / 82	700 / 496 / 183	560 / 606 / 147	546 / 500 / 316	453 / 608 / 253	561 / 617 / 97	461 / 768 / 79	672 / 521 / 176	546 / 645 / 143	524 / 524 / 303	440 / 631 / 240
3		518 / 669 / 89	418 / 816 / 72	560 / 600 / 147	462 / 751 / 121	415 / 641 / 240	343 / 791 / 196	504 / 712 / 87	403 / 862 / 70	546 / 642 / 143	434 / 773 / 114	393 / 665 / 227	340 / 838 / 190	475 / 733 / 82	389 / 906 / 67	518 / 664 / 136	420 / 816 / 110	383 / 705 / 221	324 / 852 / 177
80	1	800 / 238 / 134	669 / 603 / 112	779 / 297 / 201	779 / 458 / 201	693 / 410 / 400	582 / 526 / 336	784 / 508 / 131	637 / 629 / 107	779 / 327 / 201	779 / 503 / 201	681 / 442 / 393	558 / 552 / 322	751 / 532 / 126	604 / 651 / 101	779 / 358 / 201	747 / 527 / 193	656 / 466 / 379	545 / 576 / 308
	2	702 / 568 / 118	572 / 703 / 96	779 / 443 / 201	667 / 580 / 173	644 / 473 / 372	520 / 583 / 300	669 / 594 / 112	539 / 726 / 90	779 / 487 / 201	636 / 606 / 164	619 / 500 / 358	496 / 608 / 286	637 / 617 / 107	523 / 768 / 88	763 / 521 / 197	620 / 645 / 160	594 / 524 / 343	481 / 631 / 272
	3	588 / 669 / 99	474 / 816 / 80	636 / 600 / 164	524 / 751 / 136	471 / 641 / 272	384 / 791 / 222	572 / 712 / 96	457 / 862 / 77	620 / 642 / 160	493 / 773 / 128	446 / 665 / 258	372 / 838 / 215	539 / 733 / 90	441 / 906 / 74	588 / 664 / 152	477 / 816 / 123	433 / 705 / 250	355 / 852 / 200
90	1	840 / 224 / 138	749 / 603 / 123	835 / 285 / 214	835 / 439 / 214	733 / 388 / 423	650 / 526 / 376	840 / 247 / 138	712 / 629 / 117	835 / 314 / 214	835 / 482 / 214	733 / 426 / 423	622 / 552 / 360	840 / 271 / 138	676 / 651 / 111	835 / 343 / 214	835 / 527 / 214	733 / 466 / 423	595 / 576 / 344
	2	785 / 568 / 129	639 / 703 / 105	835 / 425 / 214	746 / 580 / 191	719 / 473 / 415	581 / 583 / 336	749 / 594 / 123	603 / 726 / 99	835 / 467 / 214	711 / 606 / 182	692 / 500 / 399	553 / 608 / 320	712 / 617 / 117	584 / 768 / 96	835 / 510 / 214	693 / 645 / 177	664 / 524 / 384	526 / 631 / 304
	3	657 / 669 / 108	530 / 816 / 87	711 / 600 / 182	586 / 751 / 150	526 / 641 / 304	429 / 791 / 248	639 / 712 / 105	511 / 862 / 84	693 / 642 / 177	551 / 773 / 141	498 / 665 / 288	415 / 838 / 240	603 / 733 / 99	493 / 906 / 81	657 / 664 / 168	533 / 816 / 137	484 / 705 / 280	387 / 852 / 224
Wind Speed [mph]		110						115											
70	1	633 / 554 / 109	518 / 689 / 89	728 / 414 / 191	630 / 549 / 165	557 / 488 / 322	486 / 598 / 259	605 / 574 / 104	490 / 705 / 84	728 / 450 / 191	602 / 570 / 158	535 / 509 / 309	473 / 616 / 246						
	2	547 / 654 / 94	446 / 808 / 77	644 / 544 / 169	518 / 666 / 136	503 / 547 / 290	439 / 668 / 234	518 / 672 / 89	418 / 819 / 72	616 / 564 / 162	490 / 682 / 129	481 / 567 / 278	425 / 685 / 221						
	3	461 / 773 / 79	374 / 948 / 65	490 / 683 / 129	406 / 857 / 107	361 / 723 / 208	320 / 893 / 171	446 / 811 / 77	360 / 987 / 62	476 / 720 / 125	392 / 896 / 103	350 / 759 / 202	316 / 931 / 164						
80	1	718 / 554 / 120	588 / 689 / 99	779 / 391 / 201	715 / 549 / 185	631 / 488 / 365	531 / 598 / 293	686 / 574 / 115	555 / 705 / 93	779 / 424 / 201	683 / 570 / 177	607 / 509 / 350	516 / 616 / 279						
	2	620 / 654 / 104	506 / 808 / 85	731 / 544 / 189	588 / 666 / 152	569 / 547 / 329	479 / 668 / 265	588 / 672 / 99	474 / 819 / 80	699 / 564 / 181	556 / 682 / 144	545 / 567 / 315	463 / 685 / 250						
	3	523 / 773 / 88	425 / 948 / 71	556 / 683 / 144	461 / 857 / 119	409 / 723 / 236	350 / 893 / 193	506 / 811 / 85	408 / 987 / 69	540 / 720 / 140	445 / 896 / 115	396 / 759 / 229	344 / 931 / 186						
90	1	803 / 554 / 132	657 / 689 / 108	835 / 375 / 214	800 / 549 / 205	705 / 488 / 407	575 / 598 / 328	767 / 574 / 126	621 / 705 / 102	835 / 407 / 214	764 / 570 / 196	678 / 509 / 392	558 / 616 / 312						
	2	694 / 654 / 114	566 / 808 / 93	817 / 544 / 209	657 / 666 / 168	636 / 547 / 368	519 / 668 / 296	657 / 672 / 108	530 / 819 / 87	782 / 564 / 200	622 / 682 / 159	609 / 567 / 352	501 / 685 / 280						
	3	584 / 773 / 96	475 / 948 / 78	622 / 683 / 159	515 / 857 / 132	457 / 723 / 264	379 / 893 / 216	566 / 811 / 93	457 / 987 / 75	604 / 720 / 155	498 / 896 / 128	443 / 759 / 256	372 / 931 / 208						
Wind Speed [mph]		120						130											
70	1	590 / 605 / 102	475 / 739 / 82	714 / 478 / 187	574 / 587 / 151	521 / 528 / 297	472 / 649 / 240	605 / 574 / 104	490 / 705 / 84	728 / 450 / 191	602 / 570 / 158	535 / 509 / 309	473 / 616 / 246						
	2	504 / 706 / 87	403 / 854 / 70	588 / 583 / 154	476 / 716 / 125	465 / 585 / 265	423 / 718 / 215	518 / 672 / 89	418 / 819 / 72	616 / 564 / 162	490 / 682 / 129	481 / 567 / 278	425 / 685 / 221						
	3	418 / 819 / 72	346 / 1023 / 60	462 / 754 / 121	364 / 898 / 96	344 / 794 / 196	311 / 966 / 158	446 / 811 / 77	360 / 987 / 62	476 / 720 / 125	392 / 896 / 103	350 / 759 / 202	316 / 931 / 164						
80	1	669 / 605 / 112	539 / 739 / 90	779 / 460 / 201	651 / 587 / 169	582 / 528 / 336	514 / 649 / 272	686 / 574 / 115	555 / 705 / 93	779 / 424 / 201	683 / 570 / 177	607 / 509 / 350	516 / 616 / 279						
	2	572 / 706 / 96	457 / 854 / 77	667 / 583 / 173	540 / 716 / 140	520 / 585 / 300	460 / 718 / 243	588 / 672 / 99	474 / 819 / 80	699 / 564 / 181	556 / 682 / 144	545 / 567 / 315	463 / 685 / 250						
	3	474 / 819 / 80	392 / 1023 / 66	524 / 754 / 136	413 / 898 / 107	384 / 794 / 222	338 / 966 / 179	506 / 811 / 85	408 / 987 / 69	540 / 720 / 140	445 / 896 / 115	396 / 759 / 229	344 / 931 / 186						
90	1	749 / 605 / 123	603 / 739 / 99	835 / 441 / 214	728 / 587 / 187	650 / 528 / 376	555 / 649 / 304	767 / 574 / 126	621 / 705 / 102	835 / 407 / 214	764 / 570 / 196	678 / 509 / 392	558 / 616 / 312						
	2	639 / 706 / 105	511 / 854 / 84	746 / 583 / 191	604 / 716 / 155	581 / 585 / 336	497 / 718 / 272	657 / 672 / 108	530 / 819 / 87	782 / 564 / 200	622 / 682 / 159	609 / 567 / 352	501 / 685 / 280						
	3	530 / 819 / 87	438 / 1023 / 72	586 / 754 / 150	462 / 898 / 118	429 / 794 / 248	365 / 966 / 200	566 / 811 / 93	457 / 987 / 75	604 / 720 / 155	498 / 896 / 128	443 / 759 / 256	372 / 931 / 208						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Exposure Category : D	Enclosed Mono Slope Roof 30-60ft 83in x 41.5in Load: Up / Down / Side , lbs																		
	Wind Speed [mph] 95						100						105						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
100	1	888 / 214 / 144	828 / 603 / 134	864 / 267 / 220	864 / 411 / 220	764 / 366 / 441	718 / 526 / 415	888 / 236 / 144	787 / 629 / 127	864 / 294 / 220	864 / 451 / 220	764 / 402 / 441	688 / 552 / 397	888 / 259 / 144	747 / 651 / 121	864 / 322 / 220	864 / 493 / 220	764 / 439 / 441	657 / 576 / 380
	2	868 / 568 / 140	707 / 703 / 114	864 / 398 / 220	825 / 580 / 210	764 / 455 / 441	642 / 583 / 371	828 / 594 / 134	666 / 726 / 108	864 / 437 / 220	786 / 606 / 200	764 / 500 / 441	611 / 608 / 353	787 / 617 / 127	646 / 768 / 105	864 / 478 / 220	766 / 645 / 195	734 / 524 / 424	581 / 631 / 336
	3	727 / 669 / 118	586 / 816 / 95	786 / 600 / 200	648 / 751 / 165	581 / 641 / 336	474 / 791 / 274	707 / 712 / 114	565 / 862 / 92	766 / 642 / 195	609 / 773 / 155	550 / 665 / 318	459 / 838 / 265	666 / 733 / 108	545 / 906 / 88	727 / 664 / 185	590 / 816 / 150	535 / 705 / 309	428 / 852 / 247
100	1	888 / 283 / 144	727 / 689 / 118	864 / 351 / 220	864 / 537 / 220	764 / 479 / 441	627 / 598 / 362	848 / 574 / 137	687 / 705 / 111	864 / 381 / 220	845 / 570 / 215	749 / 509 / 433	601 / 616 / 344						
	2	767 / 654 / 124	626 / 808 / 101	864 / 520 / 220	727 / 666 / 185	703 / 547 / 406	566 / 668 / 327	727 / 672 / 118	586 / 819 / 95	864 / 564 / 220	688 / 682 / 175	673 / 567 / 389	539 / 685 / 309						
	3	646 / 773 / 105	525 / 948 / 85	688 / 683 / 175	570 / 857 / 145	505 / 723 / 292	413 / 893 / 239	626 / 811 / 101	505 / 987 / 82	668 / 720 / 170	550 / 896 / 140	489 / 759 / 283	401 / 931 / 230						
100	1	828 / 605 / 134	666 / 739 / 108	864 / 413 / 220	805 / 587 / 205	718 / 528 / 415	597 / 649 / 336	848 / 574 / 137	687 / 705 / 111	864 / 381 / 220	845 / 570 / 215	749 / 509 / 433	601 / 616 / 344						
	2	707 / 706 / 114	565 / 854 / 92	825 / 583 / 210	668 / 716 / 170	642 / 585 / 371	534 / 718 / 300	727 / 672 / 118	586 / 819 / 95	864 / 564 / 220	688 / 682 / 175	673 / 567 / 389	539 / 685 / 309						
	3	586 / 819 / 95	485 / 1023 / 79	648 / 754 / 165	511 / 898 / 130	474 / 794 / 274	393 / 966 / 221	626 / 811 / 101	505 / 987 / 82	668 / 720 / 170	550 / 896 / 140	489 / 759 / 283	401 / 931 / 230						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 83in x 41.5in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]	140						150						160					
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Group	Panel Angle	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	787 / 621 / 127	646 / 772 / 105	864 / 446 / 220	786 / 618 / 200	688 / 545 / 397	576 / 663 / 318	747 / 679 / 121	606 / 833 / 98	864 / 515 / 220	727 / 659 / 185	642 / 587 / 371	566 / 721 / 300	687 / 712 / 111	565 / 887 / 92	845 / 575 / 215	688 / 711 / 175	602 / 623 / 344	555 / 774 / 283
	2	687 / 738 / 111	545 / 886 / 88	805 / 613 / 205	648 / 749 / 165	611 / 601 / 353	528 / 751 / 292	626 / 775 / 101	505 / 944 / 82	747 / 655 / 190	609 / 810 / 155	581 / 658 / 336	499 / 786 / 265	586 / 827 / 95	485 / 1033 / 79	688 / 689 / 175	570 / 864 / 145	540 / 691 / 309	503 / 866 / 256
	3	565 / 852 / 92	465 / 1055 / 75	609 / 763 / 155	511 / 967 / 130	459 / 828 / 265	384 / 998 / 212	525 / 910 / 85	424 / 1108 / 69	570 / 822 / 145	472 / 1026 / 120	428 / 888 / 247	366 / 1052 / 195	505 / 997 / 82	404 / 1202 / 66	531 / 873 / 135	432 / 1072 / 110	402 / 940 / 230	364 / 1144 / 186
100	1	646 / 759 / 105	525 / 931 / 85	786 / 607 / 200	652 / 759 / 165	589 / 669 / 327	542 / 820 / 265	606 / 799 / 98	519 / 1006 / 82	747 / 649 / 190	631 / 802 / 155	576 / 711 / 309	528 / 860 / 247	525 / 942 / 85	436 / 1147 / 69	609 / 777 / 155	509 / 946 / 125	510 / 779 / 274	471 / 947 / 221
	2	545 / 871 / 88	444 / 1070 / 72	648 / 736 / 165	534 / 910 / 135	526 / 738 / 292	488 / 911 / 239	525 / 942 / 85	436 / 1147 / 69	609 / 777 / 155	509 / 946 / 125	510 / 779 / 274	471 / 947 / 221	444 / 1113 / 72	374 / 1371 / 59	472 / 985 / 120	407 / 1236 / 100	378 / 1055 / 203	358 / 1312 / 168
	3	465 / 1037 / 75	384 / 1290 / 62	511 / 950 / 130	415 / 1156 / 105	382 / 981 / 212	362 / 1231 / 177	444 / 1113 / 72	374 / 1371 / 59	472 / 985 / 120	407 / 1236 / 100	378 / 1055 / 203	358 / 1312 / 168	586 / 863 / 95	492 / 1032 / 75	707 / 687 / 180	608 / 837 / 145	561 / 749 / 292	531 / 925 / 239
100	1	485 / 970 / 79	428 / 1218 / 66	570 / 811 / 145	503 / 1013 / 120	493 / 813 / 256	472 / 1015 / 212	465 / 1032 / 75	419 / 1283 / 62	550 / 869 / 140	497 / 1077 / 115	492 / 871 / 247	472 / 1079 / 203	424 / 1185 / 69	364 / 1444 / 56	452 / 1053 / 115	398 / 1309 / 95	374 / 1126 / 195	354 / 1386 / 159
	2	424 / 1185 / 69	364 / 1444 / 56	452 / 1053 / 115	398 / 1309 / 95	374 / 1126 / 195	354 / 1386 / 159	404 / 1252 / 66	353 / 1506 / 53	432 / 1117 / 110	389 / 1375 / 90	369 / 1192 / 186	349 / 1451 / 150	586 / 863 / 95	492 / 1032 / 75	707 / 687 / 180	608 / 837 / 145	561 / 749 / 292	531 / 925 / 239
	3	424 / 1185 / 69	364 / 1444 / 56	452 / 1053 / 115	398 / 1309 / 95	374 / 1126 / 195	354 / 1386 / 159	404 / 1252 / 66	353 / 1506 / 53	432 / 1117 / 110	389 / 1375 / 90	369 / 1192 / 186	349 / 1451 / 150	586 / 863 / 95	492 / 1032 / 75	707 / 687 / 180	608 / 837 / 145	561 / 749 / 292	531 / 925 / 239

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	272 / 366 / 48	219 / 458 / 39	303 / 251 / 62	275 / 360 / 56	294 / 309 / 79	243 / 399 / 66	259 / 386 / 46	207 / 476 / 37	303 / 278 / 62	263 / 380 / 54	283 / 328 / 76	232 / 418 / 63	247 / 404 / 44	199 / 500 / 35	303 / 307 / 62	250 / 398 / 51	275 / 350 / 74	220 / 434 / 59	
	2	231 / 433 / 41	187 / 538 / 33	283 / 358 / 58	226 / 446 / 46	271 / 358 / 73	216 / 442 / 58	219 / 451 / 39	179 / 564 / 32	267 / 373 / 54	214 / 464 / 44	259 / 377 / 70	208 / 468 / 56	211 / 476 / 37	170 / 589 / 30	255 / 391 / 52	206 / 489 / 42	247 / 395 / 67	200 / 492 / 54	
	3	195 / 518 / 35	158 / 643 / 28	214 / 460 / 44	174 / 572 / 36	196 / 490 / 53	161 / 613 / 44	187 / 545 / 33	150 / 669 / 27	206 / 486 / 42	166 / 598 / 34	189 / 517 / 51	153 / 640 / 42	179 / 570 / 32	142 / 690 / 25	198 / 511 / 41	158 / 621 / 32	181 / 541 / 49	145 / 662 / 39	
	5	1	300 / 366 / 48	242 / 458 / 39	333 / 251 / 65	302 / 360 / 59	294 / 309 / 98	243 / 399 / 81	287 / 386 / 46	229 / 476 / 37	333 / 278 / 65	288 / 380 / 56	283 / 328 / 94	232 / 418 / 77	274 / 404 / 44	220 / 500 / 35	333 / 307 / 65	275 / 398 / 54	275 / 350 / 92	220 / 434 / 74
	2	256 / 433 / 41	206 / 538 / 33	311 / 358 / 61	249 / 446 / 49	271 / 358 / 91	216 / 442 / 72	242 / 451 / 39	197 / 564 / 32	293 / 373 / 57	235 / 464 / 46	259 / 377 / 87	208 / 468 / 70	233 / 476 / 37	188 / 589 / 30	280 / 391 / 55	226 / 489 / 44	247 / 395 / 83	200 / 492 / 67	
	3	215 / 518 / 35	175 / 643 / 28	235 / 460 / 46	191 / 572 / 37	196 / 490 / 66	161 / 613 / 54	206 / 545 / 33	166 / 669 / 27	226 / 486 / 44	182 / 598 / 36	189 / 517 / 63	153 / 640 / 51	197 / 570 / 32	157 / 690 / 25	218 / 511 / 43	173 / 621 / 34	181 / 541 / 61	145 / 662 / 49	
	10	1	381 / 366 / 48	307 / 458 / 39	398 / 237 / 76	381 / 360 / 73	339 / 309 / 128	280 / 399 / 106	364 / 386 / 46	290 / 476 / 37	398 / 263 / 76	364 / 380 / 70	325 / 328 / 123	267 / 418 / 101	347 / 404 / 44	279 / 500 / 35	398 / 290 / 76	348 / 398 / 67	316 / 350 / 119	253 / 434 / 96
	2	324 / 433 / 41	262 / 538 / 33	392 / 358 / 75	314 / 446 / 60	312 / 358 / 118	249 / 442 / 94	307 / 451 / 39	250 / 564 / 32	370 / 373 / 71	297 / 464 / 57	298 / 377 / 113	240 / 468 / 91	296 / 476 / 37	239 / 589 / 30	353 / 391 / 68	286 / 489 / 55	285 / 395 / 108	231 / 492 / 87	
	3	273 / 518 / 35	222 / 643 / 28	297 / 460 / 57	241 / 572 / 46	226 / 490 / 85	186 / 613 / 70	262 / 545 / 33	211 / 669 / 27	286 / 486 / 55	230 / 598 / 44	217 / 517 / 82	176 / 640 / 67	250 / 570 / 32	199 / 690 / 25	275 / 511 / 53	219 / 621 / 42	208 / 541 / 79	167 / 662 / 63	
5	1	239 / 426 / 42	191 / 523 / 34	295 / 327 / 60	238 / 413 / 49	263 / 366 / 71	212 / 456 / 57	227 / 440 / 40	183 / 544 / 32	287 / 348 / 58	230 / 435 / 47	255 / 387 / 69	204 / 477 / 55							
	2	203 / 499 / 36	162 / 610 / 29	242 / 407 / 50	198 / 512 / 41	236 / 411 / 64	189 / 505 / 51	195 / 520 / 35	154 / 629 / 27	234 / 428 / 48	190 / 533 / 39	228 / 432 / 62	181 / 525 / 49							
	3	170 / 593 / 30	138 / 729 / 25	190 / 534 / 39	154 / 659 / 32	173 / 564 / 47	138 / 681 / 37	162 / 612 / 29	130 / 744 / 23	182 / 555 / 37	146 / 676 / 30	165 / 584 / 45	134 / 717 / 36							
	5	1	265 / 426 / 42	211 / 523 / 34	324 / 327 / 63	262 / 413 / 51	263 / 366 / 88	212 / 456 / 71	251 / 440 / 40	202 / 544 / 32	315 / 348 / 62	253 / 435 / 50	255 / 387 / 85	204 / 477 / 68						
	2	224 / 499 / 36	180 / 610 / 29	266 / 407 / 52	218 / 512 / 43	236 / 411 / 79	189 / 505 / 63	215 / 520 / 35	171 / 629 / 27	257 / 428 / 50	209 / 533 / 41	228 / 432 / 76	181 / 525 / 61							
	3	188 / 593 / 30	153 / 729 / 25	209 / 534 / 41	169 / 659 / 33	173 / 564 / 58	138 / 681 / 46	180 / 612 / 29	144 / 744 / 23	200 / 555 / 39	160 / 676 / 31	165 / 584 / 55	134 / 717 / 45							
	10	1	335 / 426 / 42	267 / 523 / 34	398 / 318 / 76	331 / 413 / 63	303 / 366 / 114	244 / 456 / 92	318 / 440 / 40	256 / 544 / 32	398 / 348 / 76	320 / 435 / 61	294 / 387 / 111	235 / 477 / 89						
	2	284 / 499 / 36	228 / 610 / 29	336 / 407 / 64	275 / 512 / 53	271 / 411 / 102	217 / 505 / 82	273 / 520 / 35	216 / 629 / 27	325 / 428 / 62	264 / 533 / 51	262 / 432 / 99	208 / 525 / 79							
	3	239 / 593 / 30	194 / 729 / 25	264 / 534 / 51	213 / 659 / 41	199 / 564 / 75	158 / 681 / 60	228 / 612 / 29	182 / 744 / 23	252 / 555 / 48	202 / 676 / 39	190 / 584 / 72	154 / 717 / 58							
10	1	219 / 460 / 39	174 / 562 / 31	275 / 362 / 56	222 / 455 / 45	243 / 401 / 66	203 / 497 / 53	227 / 440 / 40	183 / 544 / 32	287 / 348 / 58	230 / 435 / 47	255 / 387 / 69	204 / 477 / 55							
	2	187 / 540 / 33	150 / 662 / 27	226 / 448 / 46	182 / 553 / 37	216 / 444 / 58	182 / 556 / 48	195 / 520 / 35	154 / 629 / 27	234 / 428 / 48	190 / 533 / 39	228 / 432 / 62	181 / 525 / 49							
	3	154 / 629 / 27	126 / 779 / 22	174 / 574 / 36	142 / 711 / 29	157 / 601 / 43	134 / 752 / 35	162 / 612 / 29	130 / 744 / 23	182 / 555 / 37	146 / 676 / 30	165 / 584 / 45	134 / 717 / 36							
	5	1	242 / 460 / 39	193 / 562 / 31	302 / 362 / 59	244 / 455 / 48	243 / 401 / 81	203 / 497 / 66	251 / 440 / 40	202 / 544 / 32	315 / 348 / 62	253 / 435 / 50	255 / 387 / 85	204 / 477 / 68						
	2	206 / 540 / 33	166 / 662 / 27	249 / 448 / 49	200 / 553 / 39	216 / 444 / 72	182 / 556 / 59	215 / 520 / 35	171 / 629 / 27	257 / 428 / 50	209 / 533 / 41	228 / 432 / 76	181 / 525 / 61							
	3	171 / 629 / 27	139 / 779 / 22	191 / 574 / 37	156 / 711 / 31	157 / 601 / 53	134 / 752 / 44	180 / 612 / 29	144 / 744 / 23	200 / 555 / 39	160 / 676 / 31	165 / 584 / 55	134 / 717 / 45							
	10	1	307 / 460 / 39	245 / 562 / 31	381 / 362 / 73	308 / 455 / 59	280 / 401 / 106	231 / 497 / 85	318 / 440 / 40	256 / 544 / 32	398 / 348 / 76	320 / 435 / 61	294 / 387 / 111	235 / 477 / 89						
	2	262 / 540 / 33	211 / 662 / 27	314 / 448 / 60	252 / 553 / 48	249 / 444 / 94	208 / 556 / 77	273 / 520 / 35	216 / 629 / 27	325 / 428 / 62	264 / 533 / 51	262 / 432 / 99	208 / 525 / 79							
	3	216 / 629 / 27	176 / 779 / 22	241 / 574 / 46	196 / 711 / 38	181 / 601 / 68	153 / 752 / 57	228 / 612 / 29	182 / 744 / 23	252 / 555 / 48	202 / 676 / 39	190 / 584 / 72	154 / 717 / 58							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft (m).
 h=Mean roof height, in ft (m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	0	1	211 / 479 / 37	170 / 592 / 30	267 / 381 / 54	214 / 473 / 44	236 / 419 / 64	206 / 515 / 51	195 / 512 / 35	158 / 635 / 28	246 / 409 / 50	198 / 507 / 41	216 / 445 / 58	216 / 558 / 48	183 / 549 / 32	157 / 670 / 26	230 / 439 / 47	200 / 545 / 38	204 / 482 / 55
	2	179 / 557 / 32	146 / 694 / 26	214 / 458 / 44	174 / 570 / 36	208 / 462 / 56	185 / 573 / 46	166 / 600 / 30	134 / 733 / 24	202 / 500 / 41	162 / 612 / 33	192 / 494 / 52	192 / 615 / 43	154 / 635 / 27	135 / 786 / 22	186 / 527 / 38	161 / 647 / 31	181 / 531 / 49	198 / 649 / 39
	3	150 / 660 / 27	122 / 812 / 22	166 / 590 / 34	134 / 722 / 27	153 / 632 / 42	138 / 785 / 34	138 / 699 / 25	114 / 872 / 20	154 / 631 / 32	125 / 781 / 26	142 / 672 / 38	140 / 819 / 31	130 / 752 / 23	113 / 923 / 19	146 / 683 / 30	126 / 834 / 24	134 / 724 / 36	145 / 870 / 29
5	1	233 / 479 / 37	188 / 592 / 30	293 / 381 / 57	235 / 473 / 46	236 / 419 / 79	206 / 515 / 63	215 / 512 / 35	175 / 635 / 28	271 / 409 / 53	218 / 507 / 43	216 / 445 / 72	216 / 558 / 59	202 / 549 / 32	170 / 670 / 26	253 / 439 / 50	215 / 545 / 40	204 / 482 / 68	225 / 595 / 55
	2	197 / 557 / 32	162 / 694 / 26	235 / 458 / 46	191 / 570 / 37	208 / 462 / 70	185 / 573 / 57	184 / 600 / 30	148 / 733 / 24	222 / 500 / 44	178 / 612 / 35	192 / 494 / 64	192 / 615 / 53	171 / 635 / 27	146 / 786 / 22	204 / 527 / 40	173 / 647 / 32	181 / 531 / 61	198 / 649 / 49
	3	166 / 660 / 27	135 / 812 / 22	182 / 590 / 36	147 / 722 / 29	153 / 632 / 51	138 / 785 / 42	153 / 699 / 25	126 / 872 / 20	169 / 631 / 33	138 / 781 / 27	142 / 672 / 47	140 / 819 / 38	144 / 752 / 23	123 / 923 / 19	160 / 683 / 31	135 / 834 / 25	134 / 724 / 45	145 / 870 / 36
10	1	296 / 479 / 37	239 / 592 / 30	370 / 381 / 71	297 / 473 / 57	271 / 419 / 102	230 / 515 / 82	273 / 512 / 35	222 / 635 / 28	342 / 409 / 66	275 / 507 / 53	249 / 445 / 94	233 / 558 / 77	256 / 549 / 32	213 / 670 / 26	320 / 439 / 61	268 / 545 / 50	235 / 482 / 89	235 / 595 / 72
	2	250 / 557 / 32	205 / 694 / 26	297 / 458 / 57	241 / 570 / 46	240 / 462 / 91	206 / 573 / 74	233 / 600 / 30	188 / 733 / 24	280 / 500 / 54	224 / 612 / 43	222 / 494 / 84	207 / 615 / 68	216 / 635 / 27	183 / 786 / 22	258 / 527 / 50	216 / 647 / 40	208 / 531 / 79	207 / 649 / 63
	3	211 / 660 / 27	171 / 812 / 22	230 / 590 / 44	185 / 722 / 36	176 / 632 / 67	154 / 785 / 55	194 / 699 / 25	159 / 872 / 20	213 / 631 / 41	174 / 781 / 34	163 / 672 / 62	150 / 819 / 50	182 / 752 / 23	154 / 923 / 19	202 / 683 / 39	169 / 834 / 31	154 / 724 / 58	151 / 870 / 46

Exposure Category : B

Wind Speed [mph]		170						180					
0	1	170 / 582 / 30	163 / 716 / 25	214 / 465 / 44	205 / 578 / 36	203 / 506 / 51	232 / 626 / 42	162 / 624 / 29	168 / 758 / 23	202 / 495 / 41	210 / 605 / 33	214 / 546 / 49	243 / 668 / 39
	2	146 / 682 / 26	139 / 832 / 21	174 / 560 / 36	167 / 693 / 29	182 / 563 / 46	208 / 696 / 37	138 / 725 / 25	142 / 871 / 20	166 / 601 / 34	173 / 735 / 27	191 / 604 / 44	216 / 737 / 35
	3	122 / 798 / 22	120 / 1004 / 18	138 / 731 / 28	129 / 878 / 23	136 / 772 / 34	155 / 947 / 28	118 / 866 / 21	121 / 1037 / 17	130 / 774 / 27	136 / 950 / 22	140 / 813 / 32	157 / 981 / 26
5	1	188 / 582 / 30	171 / 716 / 25	235 / 465 / 46	215 / 578 / 37	203 / 506 / 63	232 / 626 / 51	180 / 624 / 29	172 / 758 / 23	222 / 495 / 44	214 / 605 / 35	214 / 546 / 61	243 / 668 / 49
	2	162 / 682 / 26	146 / 832 / 21	191 / 560 / 37	175 / 693 / 31	182 / 563 / 57	208 / 696 / 46	153 / 725 / 25	146 / 871 / 20	182 / 601 / 36	176 / 735 / 29	191 / 604 / 54	216 / 737 / 44
	3	135 / 798 / 22	126 / 1004 / 18	151 / 731 / 30	135 / 878 / 24	136 / 772 / 42	155 / 947 / 34	130 / 866 / 21	124 / 1037 / 17	142 / 774 / 28	139 / 950 / 23	140 / 813 / 40	157 / 981 / 32
10	1	239 / 582 / 30	212 / 716 / 25	297 / 465 / 57	265 / 578 / 46	228 / 506 / 82	235 / 626 / 67	228 / 624 / 29	211 / 758 / 23	280 / 495 / 54	260 / 605 / 43	233 / 546 / 79	243 / 668 / 63
	2	205 / 682 / 26	181 / 832 / 21	241 / 560 / 46	216 / 693 / 38	205 / 563 / 74	211 / 696 / 60	194 / 725 / 25	178 / 871 / 20	230 / 601 / 44	215 / 735 / 36	208 / 604 / 70	216 / 737 / 57
	3	171 / 798 / 22	156 / 1004 / 18	191 / 731 / 37	167 / 878 / 29	152 / 772 / 55	157 / 947 / 45	165 / 866 / 21	152 / 1037 / 17	180 / 774 / 35	169 / 950 / 28	152 / 813 / 51	157 / 981 / 41
Wind Speed [mph]		190						200					
0	1	154 / 646 / 27	172 / 794 / 22	195 / 522 / 39	218 / 643 / 32	219 / 571 / 46	252 / 706 / 37	162 / 698 / 26	182 / 852 / 21	202 / 556 / 37	225 / 677 / 30	227 / 606 / 44	261 / 740 / 35
	2	133 / 762 / 23	149 / 936 / 19	161 / 640 / 32	178 / 771 / 26	198 / 642 / 42	223 / 773 / 33	135 / 793 / 22	157 / 999 / 18	166 / 675 / 31	187 / 829 / 25	205 / 677 / 39	237 / 831 / 32
	3	112 / 900 / 20	127 / 1107 / 16	124 / 810 / 25	138 / 979 / 20	143 / 847 / 30	166 / 1049 / 25	117 / 962 / 19	132 / 1172 / 15	126 / 839 / 23	144 / 1041 / 19	150 / 906 / 29	174 / 1113 / 24
5	1	169 / 646 / 27	173 / 794 / 22	212 / 522 / 41	218 / 643 / 33	219 / 571 / 57	252 / 706 / 46	173 / 698 / 26	182 / 852 / 21	215 / 556 / 39	225 / 677 / 31	227 / 606 / 54	261 / 740 / 44
	2	146 / 762 / 23	150 / 936 / 19	176 / 640 / 34	178 / 771 / 27	198 / 642 / 51	223 / 773 / 41	145 / 793 / 22	157 / 999 / 18	177 / 675 / 32	187 / 829 / 26	205 / 677 / 49	237 / 831 / 40
	3	123 / 900 / 20	127 / 1107 / 16	136 / 810 / 26	138 / 979 / 21	143 / 847 / 37	166 / 1049 / 31	125 / 962 / 19	132 / 1172 / 15	134 / 839 / 25	144 / 1041 / 20	150 / 906 / 36	174 / 1113 / 29
10	1	213 / 646 / 27	209 / 794 / 22	267 / 522 / 51	261 / 643 / 41	232 / 571 / 74	252 / 706 / 60	217 / 698 / 26	213 / 852 / 21	267 / 556 / 48	261 / 677 / 39	235 / 606 / 70	261 / 740 / 57
	2	184 / 762 / 23	181 / 936 / 19	222 / 640 / 42	213 / 771 / 34	210 / 642 / 67	223 / 773 / 53	181 / 793 / 22	184 / 999 / 18	220 / 675 / 40	218 / 829 / 32	212 / 677 / 63	237 / 831 / 51
	3	156 / 900 / 20	153 / 1107 / 16	171 / 810 / 32	165 / 979 / 26	151 / 847 / 48	166 / 1049 / 40	157 / 962 / 19	154 / 1172 / 15	166 / 839 / 30	167 / 1041 / 25	155 / 906 / 46	174 / 1113 / 38

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ASCE 7-22)
 a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 Θ = Angle of roof from horizontal, in degrees.

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																														
Exposure Category : B	Wind Speed [mph]	95						100						105																						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
15	15	1	461 / 176 / 50	372 / 458 / 40	454 / 224 / 86	454 / 355 / 86	375 / 297 / 151	323 / 399 / 130	441 / 386 / 47	351 / 476 / 38	454 / 248 / 86	440 / 380 / 83	375 / 328 / 151	307 / 418 / 124	420 / 404 / 45	338 / 500 / 36	454 / 274 / 86	420 / 398 / 79	364 / 350 / 147	291 / 434 / 118																
		2	393 / 433 / 42	317 / 538 / 34	454 / 343 / 86	379 / 446 / 72	359 / 358 / 145	286 / 442 / 116	372 / 451 / 40	303 / 564 / 33	447 / 373 / 84	359 / 464 / 68	343 / 377 / 139	276 / 468 / 111	358 / 476 / 39	289 / 589 / 31	427 / 391 / 81	346 / 489 / 65	328 / 395 / 132	265 / 492 / 107																
		3	331 / 518 / 36	269 / 643 / 29	359 / 460 / 68	291 / 572 / 55	260 / 490 / 105	214 / 613 / 86	317 / 545 / 34	255 / 669 / 28	346 / 486 / 65	278 / 598 / 53	250 / 517 / 101	203 / 640 / 82	303 / 570 / 33	241 / 690 / 26	332 / 511 / 63	264 / 621 / 50	240 / 541 / 97	193 / 662 / 78																
	20	1	518 / 168 / 51	437 / 458 / 43	508 / 214 / 95	508 / 339 / 95	412 / 289 / 181	365 / 399 / 161	518 / 187 / 51	413 / 476 / 41	508 / 237 / 95	508 / 374 / 95	412 / 319 / 181	347 / 418 / 153	493 / 404 / 49	396 / 500 / 40	508 / 262 / 95	492 / 398 / 92	412 / 350 / 181	330 / 434 / 145																
		2	461 / 433 / 46	372 / 538 / 37	508 / 328 / 95	445 / 446 / 83	406 / 358 / 179	324 / 442 / 143	437 / 451 / 43	356 / 564 / 36	508 / 362 / 95	421 / 464 / 79	388 / 377 / 171	312 / 468 / 137	421 / 476 / 42	340 / 589 / 34	500 / 391 / 94	405 / 489 / 76	371 / 395 / 163	300 / 492 / 132																
		3	388 / 518 / 39	316 / 643 / 32	421 / 460 / 79	342 / 572 / 64	294 / 490 / 130	242 / 613 / 106	372 / 545 / 37	299 / 669 / 30	405 / 486 / 76	326 / 598 / 61	283 / 517 / 125	230 / 640 / 101	356 / 570 / 36	283 / 690 / 28	389 / 511 / 73	310 / 621 / 58	271 / 541 / 119	218 / 662 / 96																
	25	1	518 / 168 / 51	437 / 458 / 43	508 / 214 / 95	508 / 339 / 95	447 / 280 / 212	407 / 399 / 193	518 / 187 / 51	413 / 476 / 41	508 / 237 / 95	508 / 374 / 95	447 / 310 / 212	388 / 418 / 184	493 / 404 / 49	396 / 500 / 40	508 / 262 / 95	492 / 398 / 92	447 / 340 / 212	368 / 434 / 175																
		2	461 / 433 / 46	372 / 538 / 37	508 / 328 / 95	445 / 446 / 83	447 / 353 / 212	361 / 442 / 172	437 / 451 / 43	356 / 564 / 36	508 / 362 / 95	421 / 464 / 79	434 / 377 / 206	348 / 468 / 165	421 / 476 / 42	340 / 589 / 34	500 / 391 / 94	405 / 489 / 76	414 / 395 / 196	335 / 492 / 159																
		3	388 / 518 / 39	316 / 643 / 32	421 / 460 / 79	342 / 572 / 64	329 / 490 / 156	270 / 613 / 128	372 / 545 / 37	299 / 669 / 30	405 / 486 / 76	326 / 598 / 61	315 / 517 / 150	256 / 640 / 122	356 / 570 / 36	283 / 690 / 28	389 / 511 / 73	310 / 621 / 58	302 / 541 / 144	243 / 662 / 116																
15	110	1	406 / 426 / 44	324 / 523 / 35	454 / 300 / 86	400 / 413 / 76	349 / 366 / 141	281 / 456 / 114	386 / 440 / 42	310 / 544 / 33	454 / 328 / 86	386 / 435 / 73	338 / 387 / 137	271 / 477 / 109	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panel Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
		2 = 2																																		
		3 = 3																																		
	3 - 10	1 = 1																																		
		2 = 2' / 2																																		
		3 = 3' / 3																																		
10 - 30	1 = 1																																			
	2 = 2																																			
	3 = 3																																			
2	344 / 499 / 37	276 / 610 / 30	406 / 407 / 77	332 / 512 / 63	312 / 411 / 126	250 / 505 / 101	331 / 520 / 36	262 / 629 / 28	393 / 428 / 74	318 / 533 / 60	302 / 432 / 122	240 / 525 / 97																								
3	289 / 593 / 31	234 / 729 / 25	318 / 534 / 60	258 / 659 / 49	229 / 564 / 93	182 / 681 / 74	276 / 612 / 30	221 / 744 / 24	305 / 555 / 58	244 / 676 / 46	219 / 584 / 88	177 / 717 / 72																								
20	1	477 / 426 / 47	380 / 523 / 38	508 / 287 / 95	469 / 413 / 88	394 / 366 / 174	318 / 456 / 140	453 / 440 / 45	364 / 544 / 36	508 / 313 / 95	453 / 435 / 85	383 / 387 / 168	306 / 477 / 135																							
	2	404 / 499 / 40	324 / 610 / 32	477 / 407 / 89	389 / 512 / 73	353 / 411 / 156	283 / 505 / 125	388 / 520 / 39	308 / 629 / 31	461 / 428 / 86	373 / 533 / 70	341 / 432 / 150	271 / 525 / 119																							
	3	340 / 593 / 34	275 / 729 / 28	373 / 534 / 70	302 / 659 / 57	259 / 564 / 114	206 / 681 / 91	324 / 612 / 32	259 / 744 / 26	358 / 555 / 67	286 / 676 / 54	247 / 584 / 109	200 / 717 / 88																							
25	1	477 / 426 / 47	380 / 523 / 38	508 / 287 / 95	469 / 413 / 88	440 / 366 / 209	355 / 456 / 168	453 / 440 / 45	364 / 544 / 36	508 / 313 / 95	453 / 435 / 85	427 / 387 / 203	342 / 477 / 162																							
	2	404 / 499 / 40	324 / 610 / 32	477 / 407 / 89	389 / 512 / 73	394 / 411 / 187	315 / 505 / 150	388 / 520 / 39	308 / 629 / 31	461 / 428 / 86	373 / 533 / 70	381 / 432 / 181	302 / 525 / 144																							
	3	340 / 593 / 34	275 / 729 / 28	373 / 534 / 70	302 / 659 / 57	289 / 564 / 137	230 / 681 / 109	324 / 612 / 32	259 / 744 / 26	358 / 555 / 67	286 / 676 / 54	276 / 584 / 131	224 / 717 / 106																							
15	120	1	372 / 460 / 40	296 / 562 / 32	454 / 357 / 86	373 / 455 / 70	323 / 401 / 130	265 / 497 / 105	386 / 440 / 42	310 / 544 / 33	454 / 328 / 86	386 / 435 / 73	338 / 387 / 137													271 / 477 / 109										
		2	317 / 540 / 34	255 / 662 / 28	379 / 448 / 72	305 / 553 / 58	286 / 444 / 116	239 / 556 / 95	331 / 520 / 36	262 / 629 / 28	393 / 428 / 74	318 / 533 / 60	302 / 432 / 122													240 / 525 / 97										
		3	262 / 629 / 28	214 / 779 / 23	291 / 574 / 55	237 / 711 / 45	208 / 601 / 84	175 / 752 / 70	276 / 612 / 30	221 / 744 / 24	305 / 555 / 58	244 / 676 / 46	219 / 584 / 88													177 / 717 / 72										
	20	1	437 / 460 / 43	348 / 562 / 35	508 / 341 / 95	437 / 455 / 82	365 / 401 / 161	299 / 497 / 130	453 / 440 / 45	364 / 544 / 36	508 / 313 / 95	453 / 435 / 85	383 / 387 / 168	306 / 477 / 135																						
		2	372 / 540 / 37	299 / 662 / 30	445 / 448 / 83	358 / 553 / 67	324 / 444 / 143	269 / 556 / 117	388 / 520 / 39	308 / 629 / 31	461 / 428 / 86	373 / 533 / 70	341 / 432 / 150	271 / 525 / 119																						
		3	308 / 629 / 31	251 / 779 / 25	342 / 574 / 64	278 / 711 / 52	236 / 601 / 104	198 / 752 / 86	324 / 612 / 32	259 / 744 / 26	358 / 555 / 67	286 / 676 / 54	247 / 584 / 109	200 / 717 / 88																						
	25	1	437 / 460 / 43	348 / 562 / 35	508 / 341 / 95	437 / 455 / 82	407 / 401 / 193	333 / 497 / 156	453 / 440 / 45	364 / 544 / 36	508 / 313 / 95	453 / 435 / 85	427 / 387 / 203	342 / 477 / 162																						
		2	372 / 540 / 37	299 / 662 / 30	445 / 448 / 83	358 / 553 / 67	361 / 444 / 172	300 / 556 / 140	388 / 520 / 39	308 / 629 / 31	461 / 428 / 86	373 / 533 / 70	381 / 432 / 181	302 / 525 / 144																						
		3	308 / 629 / 31	251 / 779 / 25	342 / 574 / 64	278 / 711 / 52	263 / 601 / 125	220 / 752 / 103	324 / 612 / 32	259 / 744 / 26	358 / 555 / 67	286 / 676 / 54	276 / 584 / 131	224 / 717 / 106																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ASCE 7-22)
 a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft(m).
 h = Mean roof height, in ft(m).
 Θ = Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																		
Wind Speed [mph]	140								150								160							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30					
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge					
	30	1	454 / 479 / 44	367 / 592 / 35	540 / 363 / 101	454 / 473 / 85	435 / 419 / 219	362 / 515 / 175	419 / 512 / 40	341 / 635 / 33	523 / 409 / 97	420 / 507 / 78	399 / 445 / 200	356 / 558 / 164	393 / 549 / 38	323 / 670 / 30	488 / 439 / 91	405 / 545 / 74	377 / 482 / 190	350 / 595 / 153				
2		384 / 557 / 37	315 / 694 / 30	454 / 458 / 85	369 / 570 / 69	384 / 462 / 193	324 / 573 / 157	358 / 600 / 35	288 / 733 / 28	428 / 500 / 80	343 / 612 / 64	355 / 494 / 179	317 / 615 / 146	332 / 635 / 32	278 / 786 / 26	394 / 527 / 74	325 / 647 / 59	334 / 531 / 168	308 / 649 / 135					
3		323 / 660 / 31	262 / 812 / 25	351 / 590 / 66	283 / 722 / 53	283 / 632 / 142	241 / 785 / 117	297 / 699 / 29	245 / 872 / 24	326 / 631 / 61	266 / 781 / 50	261 / 672 / 131	230 / 819 / 106	280 / 752 / 27	233 / 923 / 22	309 / 683 / 58	255 / 834 / 47	247 / 724 / 124	225 / 870 / 99					
35	1	501 / 479 / 46	405 / 592 / 37	567 / 346 / 105	501 / 473 / 93	476 / 419 / 250	394 / 515 / 200	463 / 512 / 43	376 / 635 / 35	567 / 402 / 105	463 / 507 / 86	437 / 445 / 229	387 / 558 / 188	434 / 549 / 40	355 / 670 / 32	539 / 439 / 100	445 / 545 / 81	413 / 482 / 217	378 / 595 / 175					
	2	424 / 557 / 39	347 / 694 / 32	501 / 458 / 93	407 / 570 / 76	421 / 462 / 221	353 / 573 / 179	395 / 600 / 36	318 / 733 / 29	473 / 500 / 88	378 / 612 / 70	389 / 494 / 204	344 / 615 / 167	366 / 635 / 34	306 / 786 / 28	435 / 527 / 81	358 / 647 / 65	365 / 531 / 192	333 / 649 / 154					
	3	357 / 660 / 33	289 / 812 / 27	388 / 590 / 72	312 / 722 / 58	310 / 632 / 163	263 / 785 / 134	328 / 699 / 30	270 / 872 / 25	359 / 631 / 67	293 / 781 / 55	286 / 672 / 150	250 / 819 / 121	309 / 752 / 29	257 / 923 / 23	340 / 683 / 63	281 / 834 / 51	270 / 724 / 142	243 / 870 / 113					
40	1	554 / 479 / 106	448 / 592 / 86	602 / 335 / 167	550 / 473 / 152	517 / 419 / 289	427 / 515 / 231	512 / 512 / 98	416 / 635 / 80	602 / 389 / 167	509 / 507 / 141	474 / 445 / 265	418 / 558 / 217	480 / 549 / 92	388 / 670 / 74	592 / 439 / 164	486 / 545 / 132	448 / 482 / 251	407 / 595 / 203					
	2	469 / 557 / 90	384 / 694 / 74	550 / 458 / 152	446 / 570 / 124	457 / 462 / 256	383 / 573 / 207	437 / 600 / 84	352 / 733 / 68	519 / 500 / 144	415 / 612 / 115	422 / 494 / 236	371 / 615 / 193	405 / 635 / 78	334 / 786 / 64	477 / 527 / 132	391 / 647 / 107	397 / 531 / 222	359 / 649 / 179					
	3	394 / 660 / 76	320 / 812 / 62	426 / 590 / 118	343 / 722 / 95	336 / 632 / 188	285 / 785 / 154	363 / 699 / 70	299 / 872 / 57	395 / 631 / 109	322 / 781 / 89	310 / 672 / 174	269 / 819 / 140	341 / 752 / 66	280 / 923 / 53	374 / 683 / 104	306 / 834 / 84	293 / 724 / 164	262 / 870 / 130					

Exposure Category : B

Wind Speed [mph]	170								180										
	30	1	367 / 582 / 35	316 / 716 / 29	454 / 465 / 85	392 / 578 / 69	359 / 506 / 175	342 / 626 / 142	349 / 624 / 34	308 / 758 / 27	428 / 495 / 80	379 / 605 / 64	359 / 546 / 168	341 / 668 / 135	297 / 725 / 29	260 / 871 / 23	351 / 601 / 66	313 / 735 / 53	320 / 604 / 150
2		315 / 682 / 30	269 / 832 / 25	369 / 560 / 69	319 / 693 / 56	322 / 563 / 157	307 / 696 / 128	253 / 866 / 25	222 / 1037 / 20	274 / 774 / 51	246 / 950 / 42	234 / 813 / 110	222 / 981 / 88	386 / 624 / 36	337 / 758 / 29	473 / 495 / 88	414 / 605 / 70	390 / 546 / 192	367 / 668 / 154
3		262 / 798 / 25	232 / 1004 / 21	292 / 731 / 55	246 / 878 / 43	240 / 772 / 117	228 / 947 / 95	280 / 866 / 26	243 / 1037 / 21	303 / 774 / 56	269 / 950 / 46	255 / 813 / 125	238 / 981 / 100	328 / 725 / 30	285 / 871 / 24	388 / 601 / 72	342 / 735 / 58	348 / 604 / 171	327 / 737 / 138
35	1	405 / 582 / 37	347 / 716 / 30	501 / 465 / 93	430 / 578 / 76	392 / 506 / 200	368 / 626 / 163	426 / 624 / 82	366 / 758 / 66	519 / 495 / 144	449 / 605 / 115	421 / 546 / 222	392 / 668 / 179	289 / 798 / 27	255 / 1004 / 22	322 / 731 / 60	270 / 878 / 48	262 / 772 / 134	246 / 947 / 109
	2	347 / 682 / 32	296 / 832 / 26	407 / 560 / 76	350 / 693 / 62	351 / 563 / 179	331 / 696 / 146	328 / 725 / 30	285 / 871 / 24	388 / 601 / 72	342 / 735 / 58	348 / 604 / 171	327 / 737 / 138	448 / 582 / 86	378 / 716 / 70	550 / 465 / 152	468 / 578 / 124	425 / 506 / 231	395 / 626 / 188
	3	289 / 798 / 27	255 / 1004 / 22	322 / 731 / 60	270 / 878 / 48	262 / 772 / 134	246 / 947 / 109	363 / 725 / 70	309 / 871 / 55	426 / 601 / 118	371 / 735 / 95	376 / 604 / 198	350 / 737 / 159	320 / 798 / 62	278 / 1004 / 51	353 / 731 / 98	294 / 878 / 78	283 / 772 / 154	263 / 947 / 126
40	1	448 / 582 / 86	378 / 716 / 70	550 / 465 / 152	468 / 578 / 124	425 / 506 / 231	395 / 626 / 188	309 / 866 / 60	264 / 1037 / 47	332 / 774 / 92	292 / 950 / 75	275 / 813 / 145	254 / 981 / 116	326 / 646 / 31	300 / 794 / 25	406 / 522 / 75	374 / 643 / 61	349 / 571 / 157	340 / 706 / 128
	2	384 / 682 / 74	322 / 832 / 60	446 / 560 / 124	381 / 693 / 101	381 / 563 / 207	355 / 696 / 169	272 / 793 / 25	260 / 999 / 21	329 / 675 / 59	307 / 829 / 48	313 / 677 / 135	307 / 831 / 110	282 / 762 / 27	260 / 936 / 22	337 / 640 / 62	305 / 771 / 50	317 / 642 / 142	301 / 773 / 113
	3	320 / 798 / 62	278 / 1004 / 51	353 / 731 / 98	294 / 878 / 78	283 / 772 / 154	263 / 947 / 126	236 / 962 / 22	218 / 1172 / 18	249 / 839 / 45	235 / 1041 / 37	229 / 906 / 99	225 / 1113 / 80	360 / 646 / 33	327 / 794 / 27	448 / 522 / 82	407 / 643 / 67	379 / 571 / 179	364 / 706 / 146

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	617 / 479 / 115	499 / 592 / 93	647 / 323 / 177	612 / 473 / 167	558 / 419 / 318	460 / 515 / 255	570 / 512 / 106	463 / 635 / 86	647 / 375 / 177	566 / 507 / 155	512 / 445 / 292	448 / 558 / 239	534 / 549 / 100	427 / 670 / 80	647 / 432 / 177	532 / 545 / 145	484 / 482 / 276	436 / 595 / 223
Wind Speed [mph]		170				180													
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	499 / 582 / 93	408 / 716 / 75	612 / 465 / 167	506 / 578 / 136	458 / 506 / 255	422 / 626 / 207	475 / 624 / 89	396 / 758 / 71	578 / 495 / 158	485 / 605 / 126	453 / 546 / 244	417 / 668 / 197						
Wind Speed [mph]		190				200													
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	439 / 646 / 82	382 / 794 / 67	543 / 522 / 148	474 / 643 / 120	437 / 571 / 228	412 / 706 / 186	427 / 698 / 80	380 / 852 / 64	520 / 556 / 142	463 / 677 / 114	431 / 606 / 218	405 / 740 / 175						

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95								100								105																	
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Exposure Category : B	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																					
	70	1		824 / 121 / 140	824 / 195 / 140	820 / 157 / 213	820 / 249 / 213	720 / 219 / 416	720 / 341 / 416	824 / 135 / 140	824 / 215 / 140	820 / 174 / 213	820 / 275 / 213	720 / 241 / 416	720 / 375 / 416	824 / 149 / 140	824 / 236 / 140	820 / 192 / 213	820 / 302 / 213	720 / 265 / 416	720 / 411 / 416														
2			824 / 350 / 140	824 / 538 / 140	820 / 241 / 213	820 / 374 / 213	720 / 275 / 416	720 / 426 / 416	824 / 385 / 140	789 / 564 / 134	820 / 266 / 213	820 / 412 / 213	720 / 303 / 416	720 / 468 / 416	824 / 421 / 140	753 / 589 / 128	820 / 292 / 213	820 / 451 / 213	720 / 332 / 416	693 / 492 / 400															
3			824 / 497 / 140	699 / 643 / 119	820 / 408 / 213	750 / 572 / 195	680 / 490 / 393	557 / 613 / 322	824 / 545 / 140	663 / 669 / 113	820 / 448 / 213	715 / 598 / 186	652 / 517 / 377	530 / 640 / 306	789 / 570 / 134	627 / 690 / 107	820 / 490 / 213	680 / 621 / 177	625 / 541 / 361	503 / 662 / 291															
80		1		895 / 116 / 148	895 / 186 / 148	871 / 147 / 224	871 / 233 / 224	771 / 206 / 445	771 / 322 / 445	895 / 129 / 148	895 / 206 / 148	871 / 163 / 224	871 / 257 / 224	771 / 228 / 445	771 / 354 / 445	895 / 142 / 148	895 / 226 / 148	871 / 180 / 224	871 / 282 / 224	771 / 250 / 445	771 / 388 / 445														
		2		895 / 335 / 148	895 / 514 / 148	871 / 225 / 224	871 / 351 / 224	771 / 260 / 445	771 / 402 / 445	895 / 368 / 148	895 / 564 / 148	871 / 249 / 224	871 / 385 / 224	771 / 286 / 445	771 / 441 / 445	895 / 403 / 148	855 / 589 / 142	871 / 273 / 224	871 / 422 / 224	771 / 314 / 445	771 / 483 / 445														
		3		895 / 475 / 148	794 / 643 / 132	871 / 382 / 224	851 / 572 / 219	771 / 490 / 445	632 / 613 / 365	895 / 522 / 148	753 / 669 / 125	871 / 420 / 224	812 / 598 / 209	740 / 517 / 427	601 / 640 / 347	895 / 570 / 148	712 / 690 / 118	871 / 459 / 224	772 / 621 / 199	709 / 541 / 410	570 / 662 / 330														
90		1		933 / 108 / 152	933 / 173 / 152	931 / 141 / 237	931 / 223 / 237	810 / 194 / 468	810 / 302 / 468	933 / 120 / 152	933 / 192 / 152	931 / 156 / 237	931 / 246 / 237	810 / 214 / 468	810 / 333 / 468	933 / 133 / 152	933 / 211 / 152	931 / 172 / 237	931 / 270 / 237	810 / 235 / 468	810 / 364 / 468														
		2		933 / 312 / 152	933 / 479 / 152	931 / 215 / 237	931 / 335 / 237	810 / 244 / 468	810 / 378 / 468	933 / 343 / 152	933 / 526 / 152	931 / 237 / 237	931 / 368 / 237	810 / 269 / 468	810 / 415 / 468	933 / 375 / 152	933 / 575 / 152	931 / 261 / 237	931 / 403 / 237	810 / 295 / 468	810 / 454 / 468														
		3		933 / 443 / 152	888 / 643 / 144	931 / 364 / 237	931 / 558 / 237	810 / 461 / 468	707 / 613 / 408	933 / 486 / 152	842 / 669 / 137	931 / 400 / 237	908 / 598 / 231	810 / 506 / 468	672 / 640 / 388	933 / 531 / 152	797 / 690 / 130	931 / 438 / 237	864 / 621 / 220	793 / 541 / 458	638 / 662 / 368														
70	1		824 / 164 / 140	824 / 259 / 140	820 / 211 / 213	820 / 329 / 213	720 / 290 / 416	720 / 448 / 416	824 / 179 / 140	807 / 544 / 137	820 / 230 / 213	820 / 358 / 213	720 / 316 / 416	707 / 477 / 408	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center;">0 - 3</td> <td style="text-align: center;">1 = 1' / 1</td> </tr> <tr> <td style="text-align: center;">2 = 2</td> </tr> <tr> <td style="text-align: center;">3 = 3</td> </tr> <tr> <td rowspan="3" style="text-align: center;">3 - 10</td> <td style="text-align: center;">1 = 1</td> </tr> <tr> <td style="text-align: center;">2 = 2' / 2</td> </tr> <tr> <td style="text-align: center;">3 = 3' / 3</td> </tr> <tr> <td rowspan="3" style="text-align: center;">10 - 30</td> <td style="text-align: center;">1 = 1</td> </tr> <tr> <td style="text-align: center;">2 = 2</td> </tr> <tr> <td style="text-align: center;">3 = 3</td> </tr> </tbody> </table>					ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
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	3 - 10	1 = 1																																	
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		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2		824 / 459 / 140	717 / 610 / 122	820 / 319 / 213	820 / 491 / 213	720 / 363 / 416	652 / 505 / 377	824 / 499 / 140	681 / 629 / 116	820 / 347 / 213	820 / 533 / 213	720 / 395 / 416	625 / 525 / 361																						
3		753 / 593 / 128	610 / 729 / 103	820 / 534 / 213	663 / 659 / 173	598 / 564 / 346	476 / 681 / 275	717 / 612 / 122	574 / 744 / 97	785 / 555 / 204	628 / 676 / 163	571 / 584 / 330	462 / 717 / 267																						
80	1		895 / 157 / 148	895 / 248 / 148	871 / 197 / 224	871 / 308 / 224	771 / 274 / 445	771 / 423 / 445	895 / 172 / 148	895 / 270 / 148	871 / 216 / 224	871 / 336 / 224	771 / 298 / 445	771 / 459 / 445																					
	2		895 / 439 / 148	814 / 610 / 135	871 / 298 / 224	871 / 460 / 224	771 / 342 / 445	740 / 505 / 427	895 / 477 / 148	773 / 629 / 128	871 / 325 / 224	871 / 499 / 224	771 / 372 / 445	709 / 525 / 410																					
	3		855 / 593 / 142	692 / 729 / 115	871 / 500 / 224	752 / 659 / 194	678 / 564 / 392	540 / 681 / 312	814 / 612 / 135	651 / 744 / 108	871 / 543 / 224	713 / 676 / 183	647 / 584 / 374	524 / 717 / 303																					
90	1		933 / 146 / 152	933 / 231 / 152	931 / 188 / 237	931 / 294 / 237	810 / 257 / 468	810 / 397 / 468	933 / 160 / 152	933 / 251 / 152	931 / 206 / 237	931 / 320 / 237	810 / 280 / 468	810 / 432 / 468																					
	2		933 / 409 / 152	911 / 610 / 148	931 / 285 / 237	931 / 439 / 237	810 / 322 / 468	810 / 494 / 468	933 / 445 / 152	865 / 629 / 141	931 / 310 / 237	931 / 477 / 237	810 / 350 / 468	793 / 525 / 458																					
	3		933 / 579 / 152	774 / 729 / 126	931 / 477 / 237	842 / 659 / 215	758 / 564 / 438	603 / 681 / 349	911 / 612 / 148	729 / 744 / 119	931 / 518 / 237	798 / 676 / 203	724 / 584 / 418	586 / 717 / 339																					
70	1		824 / 195 / 140	771 / 562 / 131	820 / 250 / 213	820 / 389 / 213	720 / 343 / 416	680 / 497 / 393	824 / 179 / 140	807 / 544 / 137	820 / 230 / 213	820 / 358 / 213	720 / 316 / 416	707 / 477 / 408																					
	2		824 / 540 / 140	663 / 662 / 113	820 / 376 / 213	785 / 553 / 204	720 / 428 / 416	612 / 556 / 353	824 / 499 / 140	681 / 629 / 116	820 / 347 / 213	820 / 533 / 213	720 / 395 / 416	625 / 525 / 361																					
	3		681 / 629 / 116	556 / 779 / 94	750 / 574 / 195	611 / 711 / 159	544 / 601 / 314	449 / 752 / 259	717 / 612 / 122	574 / 744 / 97	785 / 555 / 204	628 / 676 / 163	571 / 584 / 330	462 / 717 / 267																					
	80	1		895 / 187 / 148	875 / 562 / 145	871 / 234 / 224	871 / 364 / 224	771 / 323 / 445	771 / 497 / 445	895 / 172 / 148	895 / 270 / 148	871 / 216 / 224	871 / 336 / 224	771 / 298 / 445	771 / 459 / 445																				
		2		895 / 516 / 148	753 / 662 / 125	871 / 352 / 224	871 / 540 / 224	771 / 403 / 445	694 / 556 / 401	895 / 477 / 148	773 / 629 / 128	871 / 325 / 224	871 / 499 / 224	771 / 372 / 445	709 / 525 / 410																				
		3		773 / 629 / 128	631 / 779 / 105	851 / 574 / 219	693 / 711 / 178	617 / 601 / 356	509 / 752 / 294	814 / 612 / 135	651 / 744 / 108	871 / 543 / 224	713 / 676 / 183	647 / 584 / 374	524 / 717 / 303																				
	90	1		933 / 174 / 152	933 / 273 / 152	931 / 224 / 237	931 / 347 / 237	810 / 304 / 468	810 / 467 / 468	933 / 160 / 152	933 / 251 / 152	931 / 206 / 237	931 / 320 / 237	810 / 280 / 468	810 / 432 / 468																				
		2		933 / 481 / 152	842 / 662 / 137	931 / 336 / 237	931 / 516 / 237	810 / 379 / 468	776 / 556 / 448	933 / 445 / 152	865 / 629 / 141	931 / 310 / 237	931 / 477 / 237	810 / 350 / 468	793 / 525 / 458																				
		3		865 / 629 / 141	706 / 779 / 115	931 / 561 / 237	776 / 711 / 198	689 / 601 / 398	569 / 752 / 329	911 / 612 / 148	729 / 744 / 119	931 / 518 / 237	798 / 676 / 203	724 / 584 / 418	586 / 717 / 339																				

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																										
Wind Speed [mph]	140				150				160																							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																			
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																		
1		824 / 212 / 140	753 / 592 / 128	820 / 271 / 213	820 / 420 / 213	720 / 370 / 416	652 / 515 / 377	824 / 247 / 140	699 / 635 / 119	820 / 315 / 213	820 / 486 / 213	720 / 429 / 416	612 / 558 / 353	807 / 549 / 137	645 / 670 / 110	820 / 362 / 213	802 / 545 / 209	707 / 482 / 408	579 / 595 / 330													
70	2	789 / 557 / 134	645 / 694 / 110	820 / 406 / 213	750 / 570 / 195	720 / 462 / 416	585 / 573 / 338	735 / 600 / 125	592 / 733 / 100	820 / 470 / 213	698 / 612 / 182	666 / 494 / 385	544 / 615 / 314	681 / 635 / 116	556 / 786 / 94	802 / 527 / 209	646 / 647 / 168	625 / 531 / 361	510 / 649 / 291													
	3	663 / 660 / 113	538 / 812 / 91	715 / 590 / 186	576 / 722 / 150	530 / 632 / 306	435 / 785 / 251	610 / 699 / 103	502 / 872 / 85	663 / 631 / 173	541 / 781 / 141	489 / 672 / 283	394 / 819 / 228	574 / 752 / 97	466 / 923 / 79	628 / 683 / 163	506 / 834 / 132	462 / 724 / 267	372 / 870 / 212													
	1	895 / 203 / 148	855 / 592 / 142	871 / 254 / 224	871 / 393 / 224	771 / 349 / 445	740 / 515 / 427	895 / 237 / 148	794 / 635 / 132	871 / 295 / 224	871 / 455 / 224	771 / 405 / 445	694 / 558 / 401	895 / 273 / 148	733 / 670 / 121	871 / 339 / 224	871 / 521 / 224	771 / 464 / 445	647 / 595 / 374													
80	2	895 / 557 / 148	733 / 694 / 121	871 / 380 / 224	851 / 570 / 219	771 / 436 / 445	663 / 573 / 383	834 / 600 / 138	672 / 733 / 111	871 / 440 / 224	792 / 612 / 204	755 / 494 / 436	617 / 615 / 356	773 / 635 / 128	631 / 786 / 105	871 / 504 / 224	733 / 647 / 188	709 / 531 / 410	570 / 649 / 330													
	3	753 / 660 / 125	611 / 812 / 101	812 / 590 / 209	654 / 722 / 168	601 / 632 / 347	493 / 785 / 285	692 / 699 / 115	570 / 872 / 95	752 / 631 / 194	614 / 781 / 158	555 / 672 / 321	447 / 819 / 258	651 / 752 / 108	529 / 923 / 88	713 / 683 / 183	574 / 834 / 148	524 / 724 / 303	416 / 870 / 241													
90	1	933 / 189 / 152	933 / 295 / 152	931 / 242 / 237	931 / 375 / 237	810 / 328 / 468	810 / 504 / 468	933 / 221 / 152	888 / 635 / 144	931 / 282 / 237	931 / 434 / 237	810 / 381 / 468	776 / 558 / 448	933 / 254 / 152	820 / 670 / 133	931 / 324 / 237	931 / 497 / 237	810 / 436 / 468	724 / 595 / 418													
	2	933 / 519 / 152	820 / 694 / 133	931 / 363 / 237	931 / 557 / 237	810 / 410 / 468	741 / 573 / 428	933 / 600 / 152	751 / 733 / 122	931 / 420 / 237	886 / 612 / 226	810 / 474 / 468	689 / 615 / 398	865 / 635 / 141	706 / 786 / 115	931 / 482 / 237	820 / 647 / 209	793 / 531 / 458	638 / 649 / 368													
	3	842 / 660 / 137	683 / 812 / 111	908 / 590 / 231	731 / 722 / 186	672 / 632 / 388	552 / 785 / 319	774 / 699 / 126	638 / 872 / 104	842 / 631 / 215	687 / 781 / 175	621 / 672 / 359	500 / 819 / 289	729 / 752 / 119	592 / 923 / 96	798 / 683 / 203	643 / 834 / 164	586 / 724 / 339	466 / 870 / 269													
Wind Speed [mph]	170				180																											
	70	1	753 / 582 / 128	610 / 716 / 103	820 / 412 / 213	750 / 578 / 195	652 / 506 / 377	555 / 626 / 306	717 / 624 / 122	574 / 758 / 97	820 / 465 / 213	698 / 605 / 182	625 / 546 / 361	543 / 668 / 291	ASCE Group Zone <table border="1"> <thead> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>				Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	Panal Angle	Mono Slope																														
0 - 3	1 = 1' / 1																															
	2 = 2																															
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3 - 10	1 = 1																															
	2 = 2' / 2																															
	3 = 3' / 3																															
10 - 30	1 = 1																															
	2 = 2																															
	3 = 3																															
	2	645 / 682 / 110	520 / 832 / 88	750 / 560 / 195	611 / 693 / 159	585 / 563 / 338	498 / 696 / 275	610 / 725 / 103	484 / 871 / 82	715 / 601 / 186	576 / 735 / 150	557 / 604 / 322	485 / 737 / 259																			
	3	538 / 798 / 91	448 / 1004 / 76	593 / 731 / 154	471 / 878 / 123	435 / 772 / 251	370 / 947 / 204	520 / 866 / 88	412 / 1037 / 70	558 / 774 / 145	454 / 950 / 118	408 / 813 / 236	353 / 981 / 189																			
80	1	855 / 582 / 142	692 / 716 / 115	871 / 386 / 224	851 / 578 / 219	740 / 506 / 427	608 / 626 / 347	814 / 624 / 135	651 / 758 / 108	871 / 436 / 224	792 / 605 / 204	709 / 546 / 410	594 / 668 / 330																			
	2	733 / 682 / 121	590 / 832 / 98	851 / 560 / 219	693 / 693 / 178	663 / 563 / 383	546 / 696 / 312	692 / 725 / 115	550 / 871 / 91	812 / 601 / 209	654 / 735 / 168	632 / 604 / 365	530 / 737 / 294																			
	3	611 / 798 / 101	509 / 1004 / 85	673 / 731 / 173	535 / 878 / 138	493 / 772 / 285	406 / 947 / 232	590 / 866 / 98	468 / 1037 / 78	634 / 774 / 163	515 / 950 / 133	463 / 813 / 267	385 / 981 / 214																			
90	1	933 / 290 / 152	774 / 716 / 126	931 / 369 / 237	931 / 564 / 237	810 / 495 / 468	672 / 626 / 388	911 / 624 / 148	729 / 758 / 119	931 / 416 / 237	886 / 605 / 226	793 / 546 / 458	645 / 668 / 368																			
	2	820 / 682 / 133	660 / 832 / 108	931 / 547 / 237	776 / 693 / 198	741 / 563 / 428	603 / 696 / 349	774 / 725 / 126	615 / 871 / 100	908 / 601 / 231	731 / 735 / 186	707 / 604 / 408	575 / 737 / 329																			
	3	683 / 798 / 111	569 / 1004 / 93	753 / 731 / 192	598 / 878 / 153	552 / 772 / 319	448 / 947 / 259	660 / 866 / 108	524 / 1037 / 85	709 / 774 / 181	576 / 950 / 147	517 / 813 / 299	418 / 981 / 239																			
Wind Speed [mph]	190				200																											
	70	1	663 / 646 / 113	538 / 794 / 91	820 / 522 / 213	663 / 643 / 173	585 / 571 / 338	531 / 706 / 275	645 / 698 / 110	520 / 852 / 88	785 / 556 / 204	628 / 677 / 163	571 / 606 / 322	518 / 740 / 259																		
		2	574 / 762 / 97	466 / 936 / 79	680 / 640 / 177	541 / 771 / 141	530 / 642 / 306	471 / 773 / 244	538 / 793 / 91	448 / 999 / 76	646 / 675 / 168	523 / 829 / 136	515 / 677 / 291	471 / 831 / 236																		
	3	484 / 900 / 82	395 / 1107 / 67	523 / 810 / 136	419 / 979 / 109	381 / 847 / 220	349 / 1049 / 181	466 / 962 / 79	377 / 1172 / 64	489 / 839 / 127	401 / 1041 / 105	376 / 906 / 212	345 / 1113 / 173																			
80	1	753 / 646 / 125	611 / 794 / 101	871 / 488 / 224	752 / 643 / 194	663 / 571 / 383	579 / 706 / 312	733 / 698 / 121	590 / 852 / 98	871 / 544 / 224	713 / 677 / 183	632 / 606 / 365	563 / 740 / 294																			
	2	651 / 762 / 108	529 / 936 / 88	772 / 640 / 199	614 / 771 / 158	601 / 642 / 347	513 / 773 / 276	611 / 793 / 101	509 / 999 / 85	733 / 675 / 188	594 / 829 / 153	570 / 677 / 330	512 / 831 / 267																			
	3	550 / 900 / 91	448 / 1107 / 74	594 / 810 / 153	475 / 979 / 122	432 / 847 / 250	381 / 1049 / 205	529 / 962 / 88	428 / 1172 / 71	555 / 839 / 143	456 / 1041 / 117	416 / 906 / 241	375 / 1113 / 196																			
90	1	842 / 646 / 137	683 / 794 / 111	931 / 466 / 237	842 / 643 / 215	741 / 571 / 428	627 / 706 / 349	820 / 698 / 133	660 / 852 / 108	931 / 519 / 237	798 / 677 / 203	707 / 606 / 408	608 / 740 / 329																			
	2	729 / 762 / 119	592 / 936 / 96	864 / 640 / 220	687 / 771 / 175	672 / 642 / 388	555 / 773 / 309	683 / 793 / 111	569 / 999 / 93	820 / 675 / 209	665 / 829 / 169	638 / 677 / 368	553 / 831 / 299																			
	3	615 / 900 / 100	501 / 1107 / 82	665 / 810 / 169	532 / 979 / 136	483 / 847 / 279	412 / 1049 / 229	592 / 962 / 96	478 / 1172 / 78	621 / 839 / 158	510 / 1041 / 130	466 / 906 / 269	406 / 1113 / 219																			

Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edge shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																		
	95						100						105						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
100	1	982 / 103 / 157	982 / 165 / 157	980 / 134 / 248	980 / 212 / 248	858 / 186 / 495	858 / 290 / 495	982 / 114 / 157	982 / 182 / 157	980 / 149 / 248	980 / 234 / 248	858 / 205 / 495	858 / 319 / 495	982 / 126 / 157	982 / 201 / 157	980 / 164 / 248	980 / 257 / 248	858 / 225 / 495	858 / 349 / 495
	2	982 / 297 / 157	982 / 456 / 157	980 / 205 / 248	980 / 319 / 248	858 / 234 / 495	858 / 362 / 495	982 / 326 / 157	982 / 500 / 157	980 / 226 / 248	980 / 350 / 248	858 / 257 / 495	858 / 397 / 495	982 / 357 / 157	982 / 547 / 157	980 / 248 / 248	980 / 384 / 248	858 / 282 / 495	858 / 434 / 495
	3	982 / 421 / 157	982 / 643 / 157	980 / 347 / 248	980 / 532 / 248	858 / 441 / 495	781 / 613 / 451	982 / 462 / 157	932 / 669 / 149	980 / 381 / 248	980 / 583 / 248	858 / 485 / 495	743 / 640 / 429	982 / 505 / 157	882 / 690 / 141	980 / 417 / 248	956 / 621 / 242	858 / 530 / 495	705 / 662 / 407
100	1	982 / 139 / 157	982 / 219 / 157	980 / 180 / 248	980 / 280 / 248	858 / 246 / 495	858 / 380 / 495	982 / 152 / 157	982 / 239 / 157	980 / 196 / 248	980 / 305 / 248	858 / 268 / 495	858 / 413 / 495						
	2	982 / 389 / 157	982 / 595 / 157	980 / 271 / 248	980 / 418 / 248	858 / 308 / 495	858 / 473 / 495	982 / 423 / 157	957 / 629 / 153	980 / 295 / 248	980 / 454 / 248	858 / 335 / 495	858 / 514 / 495						
	3	982 / 550 / 157	857 / 729 / 137	980 / 455 / 248	931 / 659 / 236	838 / 564 / 484	667 / 681 / 385	982 / 597 / 157	806 / 744 / 129	980 / 494 / 248	882 / 676 / 223	800 / 584 / 462	648 / 717 / 374						
100	1	982 / 166 / 157	982 / 260 / 157	980 / 213 / 248	980 / 331 / 248	858 / 291 / 495	858 / 447 / 495	982 / 152 / 157	982 / 239 / 157	980 / 196 / 248	980 / 305 / 248	858 / 268 / 495	858 / 413 / 495						
	2	982 / 458 / 157	932 / 662 / 149	980 / 320 / 248	980 / 491 / 248	858 / 363 / 495	858 / 556 / 495	982 / 423 / 157	957 / 629 / 153	980 / 295 / 248	980 / 454 / 248	858 / 335 / 495	858 / 514 / 495						
	3	957 / 629 / 153	781 / 779 / 125	980 / 534 / 248	858 / 711 / 217	762 / 601 / 440	629 / 752 / 363	982 / 597 / 157	806 / 744 / 129	980 / 494 / 248	882 / 676 / 223	800 / 584 / 462	648 / 717 / 374						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : B	Enclosed Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs																			
	Wind Speed [mph]		140						150						160					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	982 / 180 / 157	982 / 281 / 157	980 / 231 / 248	980 / 357 / 248	858 / 315 / 495	858 / 483 / 495	982 / 210 / 157	982 / 326 / 157	980 / 268 / 248	980 / 414 / 248	858 / 364 / 495	858 / 558 / 495	982 / 242 / 157	907 / 670 / 145	980 / 308 / 248	980 / 474 / 248	858 / 418 / 495	800 / 595 / 462	
	2	982 / 494 / 157	907 / 694 / 145	980 / 346 / 248	980 / 530 / 248	858 / 392 / 495	819 / 573 / 473	982 / 570 / 157	831 / 733 / 133	980 / 400 / 248	980 / 612 / 248	858 / 453 / 495	762 / 615 / 440	957 / 635 / 153	781 / 786 / 125	980 / 459 / 248	907 / 647 / 229	858 / 519 / 495	705 / 649 / 407	
	3	932 / 660 / 149	756 / 812 / 121	980 / 576 / 248	809 / 722 / 205	743 / 632 / 429	610 / 785 / 352	857 / 699 / 137	705 / 872 / 113	931 / 631 / 236	760 / 781 / 192	686 / 672 / 396	553 / 819 / 319	806 / 752 / 129	655 / 923 / 105	882 / 683 / 223	711 / 834 / 180	648 / 724 / 374	515 / 870 / 297	
Wind Speed [mph]		170						180												
100	1	982 / 276 / 157	857 / 716 / 137	980 / 351 / 248	980 / 538 / 248	858 / 474 / 495	743 / 626 / 429	982 / 312 / 157	806 / 758 / 129	980 / 396 / 248	980 / 605 / 248	858 / 534 / 495	705 / 668 / 407							
	2	907 / 682 / 145	731 / 832 / 117	980 / 521 / 248	858 / 693 / 217	819 / 563 / 473	667 / 696 / 385	857 / 725 / 137	680 / 871 / 109	980 / 586 / 248	809 / 735 / 205	781 / 604 / 451	629 / 737 / 363							
	3	756 / 798 / 121	630 / 1004 / 101	833 / 731 / 211	662 / 878 / 168	610 / 772 / 352	496 / 947 / 286	731 / 866 / 117	580 / 1037 / 93	784 / 774 / 198	637 / 950 / 161	572 / 813 / 330	458 / 981 / 264							
Wind Speed [mph]		190						200												
100	1	932 / 646 / 149	756 / 794 / 121	980 / 444 / 248	931 / 643 / 236	819 / 571 / 473	675 / 706 / 385	907 / 698 / 145	731 / 852 / 117	980 / 494 / 248	882 / 677 / 223	781 / 606 / 451	653 / 740 / 363							
	2	806 / 762 / 129	655 / 936 / 105	956 / 640 / 242	760 / 771 / 192	743 / 642 / 429	598 / 773 / 341	756 / 793 / 121	630 / 999 / 101	907 / 675 / 229	735 / 829 / 186	705 / 677 / 407	594 / 831 / 330							
	3	680 / 900 / 109	554 / 1107 / 89	735 / 810 / 186	588 / 979 / 149	534 / 847 / 308	444 / 1049 / 253	655 / 962 / 105	529 / 1172 / 85	686 / 839 / 174	564 / 1041 / 143	515 / 906 / 297	436 / 1113 / 242							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft (m).
 h=Mean roof height, in ft (m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof				0-30ft				92.5in x 45.9in				Load: Up / Down / Side , lbs									
Wind Speed [mph]				95				100				105									
Panal Angle				0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
0	1	227 / 442 / 40	183 / 545 / 32	287 / 348 / 58	230 / 436 / 47	251 / 382 / 68	204 / 479 / 55	215 / 460 / 38	174 / 572 / 31	275 / 368 / 56	218 / 454 / 45	239 / 401 / 65	201 / 495 / 52	207 / 484 / 37	166 / 596 / 30	263 / 387 / 54	210 / 479 / 43	232 / 425 / 63	207 / 519 / 50		
	2	195 / 522 / 35	154 / 630 / 27	234 / 429 / 48	190 / 535 / 39	228 / 433 / 62	181 / 526 / 49	183 / 537 / 32	150 / 673 / 27	222 / 447 / 45	178 / 549 / 36	216 / 451 / 58	181 / 552 / 47	174 / 561 / 31	142 / 695 / 25	214 / 472 / 44	170 / 573 / 35	204 / 467 / 55	185 / 576 / 45		
	3	162 / 614 / 29	130 / 746 / 23	182 / 557 / 37	146 / 678 / 30	165 / 585 / 45	134 / 719 / 36	154 / 639 / 27	126 / 791 / 22	174 / 584 / 36	138 / 702 / 28	157 / 611 / 43	132 / 741 / 34	150 / 680 / 27	122 / 835 / 22	166 / 608 / 34	134 / 743 / 27	149 / 634 / 41	136 / 783 / 33		
5	1	251 / 442 / 40	202 / 545 / 32	315 / 348 / 62	253 / 436 / 50	251 / 382 / 84	204 / 479 / 68	238 / 460 / 38	193 / 572 / 31	302 / 368 / 59	240 / 454 / 47	239 / 401 / 80	201 / 495 / 64	229 / 484 / 37	184 / 596 / 30	288 / 387 / 56	231 / 479 / 45	232 / 425 / 77	207 / 519 / 62		
	2	215 / 522 / 35	171 / 630 / 27	257 / 429 / 50	209 / 535 / 41	228 / 433 / 76	181 / 526 / 61	202 / 537 / 32	166 / 673 / 27	244 / 447 / 48	195 / 549 / 38	216 / 451 / 72	181 / 552 / 58	193 / 561 / 31	157 / 695 / 25	235 / 472 / 46	187 / 573 / 37	204 / 467 / 68	185 / 576 / 55		
	3	180 / 614 / 29	144 / 746 / 23	200 / 557 / 39	160 / 678 / 31	165 / 585 / 55	134 / 719 / 45	171 / 639 / 27	139 / 791 / 22	191 / 584 / 37	151 / 702 / 30	157 / 611 / 53	132 / 741 / 42	166 / 680 / 27	135 / 835 / 22	182 / 608 / 36	147 / 743 / 29	149 / 634 / 50	136 / 783 / 41		
10	1	318 / 442 / 40	256 / 545 / 32	398 / 348 / 76	320 / 436 / 61	289 / 382 / 109	235 / 479 / 89	301 / 460 / 38	245 / 572 / 31	381 / 368 / 73	303 / 454 / 58	276 / 401 / 104	228 / 495 / 84	290 / 484 / 37	233 / 596 / 30	364 / 387 / 70	292 / 479 / 56	267 / 425 / 101	229 / 519 / 80		
	2	273 / 522 / 35	216 / 630 / 27	325 / 429 / 62	264 / 535 / 51	262 / 433 / 99	208 / 526 / 79	256 / 537 / 32	211 / 673 / 27	308 / 447 / 59	247 / 549 / 47	249 / 451 / 94	205 / 552 / 75	245 / 561 / 31	199 / 695 / 25	297 / 472 / 57	236 / 573 / 45	235 / 467 / 89	205 / 576 / 72		
	3	228 / 614 / 29	182 / 746 / 23	252 / 557 / 48	202 / 678 / 39	190 / 585 / 72	154 / 719 / 58	216 / 639 / 27	176 / 791 / 22	241 / 584 / 46	191 / 702 / 37	181 / 611 / 68	149 / 741 / 55	211 / 680 / 27	171 / 835 / 22	230 / 608 / 44	185 / 743 / 36	172 / 634 / 65	151 / 783 / 53		
Wind Speed [mph]				110				115													
0	1	199 / 507 / 35	158 / 617 / 28	250 / 403 / 51	202 / 502 / 41	220 / 440 / 59	211 / 541 / 48	191 / 528 / 34	156 / 652 / 27	238 / 418 / 49	196 / 523 / 40	212 / 461 / 57	216 / 561 / 46								
	2	170 / 597 / 30	138 / 734 / 25	202 / 486 / 41	166 / 609 / 34	196 / 489 / 53	193 / 612 / 44	162 / 616 / 29	131 / 749 / 23	194 / 507 / 40	159 / 628 / 32	189 / 510 / 51	196 / 631 / 42								
	3	142 / 699 / 25	114 / 847 / 20	158 / 629 / 32	130 / 784 / 27	145 / 671 / 39	141 / 823 / 32	138 / 736 / 25	111 / 885 / 20	150 / 648 / 31	123 / 796 / 25	138 / 688 / 37	146 / 862 / 31								
5	1	220 / 507 / 35	175 / 617 / 28	275 / 403 / 54	222 / 502 / 44	220 / 440 / 74	211 / 541 / 59	211 / 528 / 34	172 / 652 / 27	262 / 418 / 51	215 / 523 / 42	212 / 461 / 71	216 / 561 / 57								
	2	188 / 597 / 30	153 / 734 / 25	222 / 486 / 44	182 / 609 / 36	196 / 489 / 66	193 / 612 / 54	180 / 616 / 29	145 / 749 / 23	213 / 507 / 42	174 / 628 / 34	189 / 510 / 63	196 / 631 / 51								
	3	157 / 699 / 25	126 / 847 / 20	173 / 629 / 34	142 / 784 / 28	145 / 671 / 49	141 / 823 / 40	153 / 736 / 25	122 / 885 / 20	164 / 648 / 32	134 / 796 / 26	138 / 688 / 46	146 / 862 / 38								
10	1	279 / 507 / 35	222 / 617 / 28	348 / 403 / 67	280 / 502 / 54	253 / 440 / 96	230 / 541 / 77	267 / 528 / 34	217 / 652 / 27	331 / 418 / 63	271 / 523 / 52	244 / 461 / 92	229 / 561 / 74								
	2	239 / 597 / 30	194 / 734 / 25	280 / 486 / 54	230 / 609 / 44	226 / 489 / 85	209 / 612 / 70	228 / 616 / 29	183 / 749 / 23	269 / 507 / 52	220 / 628 / 42	217 / 510 / 82	208 / 631 / 67								
	3	199 / 699 / 25	159 / 847 / 20	219 / 629 / 42	180 / 784 / 35	167 / 671 / 63	153 / 823 / 51	194 / 736 / 25	155 / 885 / 20	208 / 648 / 40	169 / 796 / 32	158 / 688 / 60	155 / 862 / 50								
Wind Speed [mph]				120				130													
0	1	183 / 547 / 32	156 / 667 / 26	230 / 438 / 47	199 / 543 / 38	204 / 481 / 55	224 / 593 / 45	191 / 528 / 34	156 / 652 / 27	238 / 418 / 49	196 / 523 / 40	212 / 461 / 57	216 / 561 / 46								
	2	154 / 633 / 27	135 / 784 / 22	186 / 526 / 38	165 / 662 / 32	181 / 529 / 49	198 / 647 / 39	162 / 616 / 29	131 / 749 / 23	194 / 507 / 40	159 / 628 / 32	189 / 510 / 51	196 / 631 / 42								
	3	130 / 749 / 23	113 / 920 / 19	146 / 681 / 30	126 / 831 / 24	134 / 722 / 36	144 / 867 / 29	138 / 736 / 25	111 / 885 / 20	150 / 648 / 31	123 / 796 / 25	138 / 688 / 37	146 / 862 / 31								
5	1	202 / 547 / 32	169 / 667 / 26	253 / 438 / 50	214 / 543 / 40	204 / 481 / 68	224 / 593 / 55	211 / 528 / 34	172 / 652 / 27	262 / 418 / 51	215 / 523 / 42	212 / 461 / 71	216 / 561 / 57								
	2	171 / 633 / 27	146 / 784 / 22	204 / 526 / 40	177 / 662 / 33	181 / 529 / 61	198 / 647 / 49	180 / 616 / 29	145 / 749 / 23	213 / 507 / 42	174 / 628 / 34	189 / 510 / 63	196 / 631 / 51								
	3	144 / 749 / 23	122 / 920 / 19	160 / 681 / 31	135 / 831 / 25	134 / 722 / 45	144 / 867 / 36	153 / 736 / 25	122 / 885 / 20	164 / 648 / 32	134 / 796 / 26	138 / 688 / 46	146 / 862 / 38								
10	1	256 / 547 / 32	213 / 667 / 26	320 / 438 / 61	268 / 543 / 50	235 / 481 / 89	234 / 593 / 72	267 / 528 / 34	217 / 652 / 27	331 / 418 / 63	271 / 523 / 52	244 / 461 / 92	229 / 561 / 74								
	2	216 / 633 / 27	183 / 784 / 22	258 / 526 / 50	221 / 662 / 41	208 / 529 / 79	207 / 647 / 63	228 / 616 / 29	183 / 749 / 23	269 / 507 / 52	220 / 628 / 42	217 / 510 / 82	208 / 631 / 67								
	3	182 / 749 / 23	154 / 920 / 19	202 / 681 / 39	169 / 831 / 31	154 / 722 / 58	151 / 867 / 46	194 / 736 / 25	155 / 885 / 20	208 / 648 / 40	169 / 796 / 32	158 / 688 / 60	155 / 862 / 50								

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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Notation (ASCE 7-22)
 a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft (m).
 h=Mean roof height, in ft (m).
 θ =Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph] 140				150				160											
	Panal Angle 0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
0	1	174 / 564 / 31	161 / 699 / 25	222 / 456 / 45	202 / 560 / 36	203 / 499 / 53	227 / 609 / 43	162 / 606 / 29	170 / 760 / 24	206 / 490 / 42	210 / 603 / 34	209 / 530 / 49	237 / 649 / 39	157 / 658 / 27	171 / 788 / 22	193 / 518 / 39	216 / 638 / 32	217 / 567 / 46	251 / 701 / 37	
	2	150 / 665 / 27	138 / 817 / 22	182 / 555 / 37	165 / 676 / 30	183 / 558 / 48	205 / 678 / 38	138 / 704 / 25	144 / 878 / 20	170 / 598 / 35	174 / 736 / 28	186 / 587 / 44	217 / 738 / 36	132 / 756 / 23	149 / 929 / 19	161 / 635 / 32	177 / 766 / 26	197 / 637 / 42	222 / 768 / 33	
	3	126 / 782 / 22	115 / 953 / 18	142 / 714 / 29	129 / 864 / 23	134 / 755 / 35	148 / 898 / 28	118 / 842 / 21	118 / 1008 / 17	130 / 752 / 27	133 / 923 / 22	136 / 790 / 32	160 / 994 / 27	112 / 894 / 20	126 / 1099 / 16	124 / 804 / 25	137 / 972 / 20	142 / 841 / 30	165 / 1042 / 25	
	5	1	193 / 564 / 31	171 / 699 / 25	244 / 456 / 48	213 / 560 / 38	203 / 499 / 66	227 / 609 / 53	180 / 606 / 29	175 / 760 / 24	226 / 490 / 44	215 / 603 / 36	209 / 530 / 61	237 / 649 / 49	173 / 658 / 27	172 / 788 / 22	211 / 518 / 41	216 / 638 / 33	217 / 567 / 57	251 / 701 / 46
		2	166 / 665 / 27	147 / 817 / 22	200 / 555 / 39	175 / 676 / 31	183 / 558 / 59	205 / 678 / 47	153 / 704 / 25	148 / 878 / 20	187 / 598 / 37	179 / 736 / 30	186 / 587 / 54	217 / 738 / 45	145 / 756 / 23	149 / 929 / 19	175 / 635 / 34	177 / 766 / 27	197 / 637 / 51	222 / 768 / 41
		3	139 / 782 / 22	123 / 953 / 18	156 / 714 / 31	136 / 864 / 25	134 / 755 / 44	148 / 898 / 34	130 / 842 / 21	122 / 1008 / 17	142 / 752 / 28	137 / 923 / 23	136 / 790 / 40	160 / 994 / 33	123 / 894 / 20	126 / 1099 / 16	135 / 804 / 26	137 / 972 / 21	142 / 841 / 37	165 / 1042 / 31
	10	1	245 / 564 / 31	213 / 699 / 25	308 / 456 / 59	265 / 560 / 47	231 / 499 / 85	233 / 609 / 68	228 / 606 / 29	215 / 760 / 24	286 / 490 / 55	263 / 603 / 44	229 / 530 / 79	237 / 649 / 63	218 / 658 / 27	208 / 788 / 22	266 / 518 / 51	260 / 638 / 41	231 / 567 / 74	251 / 701 / 60
		2	211 / 665 / 27	183 / 817 / 22	252 / 555 / 48	217 / 676 / 39	208 / 558 / 77	210 / 678 / 62	194 / 704 / 25	182 / 878 / 20	236 / 598 / 45	218 / 736 / 37	204 / 587 / 70	217 / 738 / 58	184 / 756 / 23	180 / 929 / 19	221 / 635 / 42	212 / 766 / 34	209 / 637 / 67	222 / 768 / 53
		3	176 / 782 / 22	153 / 953 / 18	196 / 714 / 38	169 / 864 / 30	153 / 755 / 57	152 / 898 / 45	165 / 842 / 21	150 / 1008 / 17	180 / 752 / 35	167 / 923 / 28	150 / 790 / 51	160 / 994 / 43	155 / 894 / 20	153 / 1099 / 16	170 / 804 / 32	165 / 972 / 26	150 / 841 / 48	165 / 1042 / 40

Exposure Category : C	Wind Speed [mph] 170				180								
	Panal Angle 0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
0	1	159 / 687 / 25	183 / 862 / 21	199 / 550 / 36	227 / 685 / 30	229 / 613 / 44	263 / 748 / 35	164 / 728 / 24	188 / 902 / 20	208 / 592 / 35	236 / 728 / 28	235 / 639 / 41	274 / 790 / 33
	2	136 / 803 / 22	152 / 970 / 18	163 / 664 / 30	183 / 811 / 24	202 / 667 / 38	231 / 813 / 31	139 / 842 / 20	160 / 1044 / 17	169 / 705 / 28	195 / 879 / 23	210 / 708 / 36	248 / 881 / 30
	3	114 / 936 / 18	133 / 1186 / 15	127 / 849 / 23	145 / 1053 / 19	151 / 917 / 29	176 / 1126 / 24	119 / 1009 / 18	133 / 1204 / 14	134 / 920 / 23	153 / 1130 / 18	155 / 953 / 27	177 / 1149 / 22
5	1	170 / 687 / 25	183 / 862 / 21	211 / 550 / 38	227 / 685 / 31	229 / 613 / 54	263 / 748 / 44	171 / 728 / 24	188 / 902 / 20	215 / 592 / 37	236 / 728 / 30	235 / 639 / 50	274 / 790 / 41
	2	146 / 803 / 22	152 / 970 / 18	173 / 664 / 31	183 / 811 / 25	202 / 667 / 47	231 / 813 / 38	145 / 842 / 20	160 / 1044 / 17	174 / 705 / 30	195 / 879 / 25	210 / 708 / 45	248 / 881 / 37
	3	121 / 936 / 18	133 / 1186 / 15	135 / 849 / 25	145 / 1053 / 20	151 / 917 / 36	176 / 1126 / 29	124 / 1009 / 18	133 / 1204 / 14	139 / 920 / 24	153 / 1130 / 19	155 / 953 / 33	177 / 1149 / 27
10	1	212 / 687 / 25	214 / 862 / 21	263 / 550 / 47	263 / 685 / 39	237 / 613 / 70	263 / 748 / 57	210 / 728 / 24	213 / 902 / 20	264 / 592 / 45	265 / 728 / 37	236 / 639 / 65	274 / 790 / 53
	2	182 / 803 / 22	177 / 970 / 18	215 / 664 / 39	212 / 811 / 31	208 / 667 / 62	231 / 813 / 50	179 / 842 / 20	181 / 1044 / 17	214 / 705 / 37	218 / 879 / 30	211 / 708 / 58	248 / 881 / 48
	3	151 / 936 / 18	155 / 1186 / 15	167 / 849 / 30	168 / 1053 / 25	156 / 917 / 46	176 / 1126 / 38	153 / 1009 / 18	150 / 1204 / 14	170 / 920 / 29	172 / 1130 / 24	155 / 953 / 43	177 / 1149 / 34

Exposure Category : C	Wind Speed [mph] 190				200								
	Panal Angle 0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
0	1	168 / 764 / 22	191 / 932 / 18	211 / 615 / 32	244 / 766 / 27	244 / 677 / 38	283 / 825 / 31	177 / 822 / 22	201 / 993 / 18	218 / 648 / 31	251 / 797 / 25	252 / 710 / 36	300 / 884 / 30
	2	147 / 906 / 20	169 / 1114 / 16	173 / 742 / 27	199 / 911 / 22	217 / 744 / 34	254 / 913 / 28	148 / 931 / 18	176 / 1179 / 15	183 / 798 / 26	209 / 973 / 21	230 / 800 / 33	268 / 974 / 27
	3	125 / 1079 / 17	138 / 1272 / 13	135 / 951 / 21	153 / 1146 / 17	163 / 1021 / 26	185 / 1217 / 21	124 / 1093 / 15	143 / 1332 / 13	142 / 1013 / 20	159 / 1208 / 16	171 / 1085 / 25	193 / 1279 / 19
5	1	171 / 764 / 22	191 / 932 / 18	213 / 615 / 34	244 / 766 / 28	244 / 677 / 47	283 / 825 / 38	177 / 822 / 22	201 / 993 / 18	218 / 648 / 32	251 / 797 / 26	252 / 710 / 45	300 / 884 / 37
	2	149 / 906 / 20	169 / 1114 / 16	175 / 742 / 28	199 / 911 / 23	217 / 744 / 42	254 / 913 / 34	148 / 931 / 18	176 / 1179 / 15	183 / 798 / 27	209 / 973 / 22	230 / 800 / 41	268 / 974 / 33
	3	127 / 1079 / 17	138 / 1272 / 13	137 / 951 / 22	153 / 1146 / 18	163 / 1021 / 32	185 / 1217 / 25	124 / 1093 / 15	143 / 1332 / 13	142 / 1013 / 21	159 / 1208 / 17	171 / 1085 / 31	193 / 1279 / 24
10	1	208 / 764 / 22	210 / 932 / 18	259 / 615 / 42	266 / 766 / 35	244 / 677 / 62	283 / 825 / 50	212 / 822 / 22	214 / 993 / 18	259 / 648 / 40	265 / 797 / 32	252 / 710 / 58	300 / 884 / 48
	2	181 / 906 / 20	185 / 1114 / 16	212 / 742 / 35	216 / 911 / 28	217 / 744 / 55	254 / 913 / 45	177 / 931 / 18	188 / 1179 / 15	217 / 798 / 34	221 / 973 / 27	230 / 800 / 53	268 / 974 / 43
	3	155 / 1079 / 17	151 / 1272 / 13	166 / 951 / 27	166 / 1146 / 22	163 / 1021 / 41	185 / 1217 / 33	149 / 1093 / 15	152 / 1332 / 13	168 / 1013 / 26	168 / 1208 / 21	171 / 1085 / 40	193 / 1279 / 31

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	296 / 564 / 32	255 / 699 / 26	373 / 456 / 70	316 / 560 / 56	265 / 499 / 105	261 / 609 / 84	276 / 606 / 30	254 / 760 / 25	346 / 490 / 65	311 / 603 / 53	261 / 530 / 97	261 / 649 / 78	264 / 658 / 28	244 / 788 / 22	321 / 518 / 60	305 / 638 / 49	260 / 567 / 90	267 / 701 / 74
Wind Speed [mph]		170				180													
Exposure Category : C	15	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1
	Wind Speed [mph]		190				200												
Exposure Category : C	20	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1
	25	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the e edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C

Ground Snow	Panal Angle	95						100						105																					
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Group		Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
30	1	489 / 442 / 47	393 / 545 / 38	540 / 309 / 101	488 / 436 / 91	464 / 382 / 233	377 / 479 / 190	463 / 460 / 44	376 / 572 / 36	540 / 341 / 101	463 / 454 / 86	442 / 401 / 222	362 / 495 / 179	445 / 484 / 43	358 / 596 / 35	540 / 375 / 101	446 / 479 / 83	428 / 425 / 215	357 / 519 / 171																
	2	419 / 522 / 40	332 / 630 / 32	497 / 429 / 93	403 / 535 / 75	421 / 433 / 211	334 / 526 / 168	393 / 537 / 38	323 / 673 / 31	471 / 447 / 88	377 / 549 / 70	399 / 451 / 200	325 / 552 / 160	376 / 561 / 36	306 / 695 / 30	454 / 472 / 85	360 / 573 / 67	377 / 467 / 190	319 / 576 / 153																
	3	349 / 614 / 34	280 / 746 / 27	386 / 557 / 72	309 / 678 / 58	305 / 585 / 153	247 / 719 / 124	332 / 639 / 32	271 / 791 / 26	369 / 584 / 69	292 / 702 / 55	290 / 611 / 146	237 / 741 / 117	323 / 680 / 31	262 / 835 / 25	351 / 608 / 66	283 / 743 / 53	276 / 634 / 139	236 / 783 / 113																
35	1	540 / 442 / 50	434 / 545 / 40	567 / 295 / 105	539 / 436 / 100	508 / 382 / 267	413 / 479 / 217	511 / 460 / 47	415 / 572 / 38	567 / 325 / 105	510 / 454 / 95	484 / 401 / 254	395 / 495 / 204	492 / 484 / 45	395 / 596 / 36	567 / 357 / 105	492 / 479 / 91	468 / 425 / 246	390 / 519 / 196																
	2	463 / 522 / 43	366 / 630 / 34	548 / 429 / 102	444 / 535 / 82	460 / 433 / 242	365 / 526 / 192	434 / 537 / 40	357 / 673 / 33	520 / 447 / 96	416 / 549 / 77	437 / 451 / 229	355 / 552 / 184	415 / 561 / 38	338 / 695 / 31	501 / 472 / 93	397 / 573 / 74	413 / 467 / 217	348 / 576 / 175																
	3	386 / 614 / 36	309 / 746 / 29	425 / 557 / 79	340 / 678 / 63	333 / 585 / 175	270 / 719 / 142	366 / 639 / 34	299 / 791 / 28	407 / 584 / 76	322 / 702 / 60	318 / 611 / 167	258 / 741 / 134	357 / 680 / 33	289 / 835 / 27	388 / 608 / 72	312 / 743 / 58	302 / 634 / 159	257 / 783 / 130																
40	1	597 / 442 / 114	480 / 545 / 92	602 / 285 / 167	592 / 436 / 164	543 / 376 / 304	448 / 479 / 251	565 / 460 / 108	458 / 572 / 88	602 / 314 / 167	560 / 454 / 155	526 / 401 / 294	429 / 495 / 236	544 / 484 / 104	437 / 596 / 84	602 / 345 / 167	540 / 479 / 150	509 / 425 / 284	422 / 519 / 227																
	2	512 / 522 / 98	405 / 630 / 78	602 / 429 / 167	488 / 535 / 135	500 / 433 / 280	397 / 526 / 222	480 / 537 / 92	394 / 673 / 76	571 / 447 / 158	457 / 549 / 127	474 / 451 / 265	385 / 552 / 212	458 / 561 / 88	373 / 695 / 72	550 / 472 / 152	436 / 573 / 121	448 / 467 / 251	377 / 576 / 203																
	3	426 / 614 / 82	341 / 746 / 66	467 / 557 / 130	374 / 678 / 104	362 / 585 / 203	293 / 719 / 164	405 / 639 / 78	331 / 791 / 64	446 / 584 / 124	353 / 702 / 98	345 / 611 / 193	280 / 741 / 154	394 / 680 / 76	320 / 835 / 62	426 / 608 / 118	343 / 743 / 95	328 / 634 / 183	278 / 783 / 150																
30	1	428 / 507 / 41	341 / 617 / 33	531 / 403 / 99	428 / 502 / 80	406 / 440 / 204	352 / 541 / 164	410 / 528 / 40	333 / 652 / 32	506 / 418 / 94	413 / 523 / 77	392 / 461 / 197	347 / 561 / 157	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
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10 - 30	1 = 1																																		
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2	367 / 597 / 35	297 / 734 / 29	428 / 486 / 80	351 / 609 / 66	363 / 489 / 182	321 / 612 / 150	349 / 616 / 34	281 / 749 / 27	411 / 507 / 77	336 / 628 / 62	348 / 510 / 175	315 / 631 / 142																							
3	306 / 699 / 30	245 / 847 / 24	334 / 629 / 62	274 / 784 / 51	269 / 671 / 135	235 / 823 / 110	297 / 736 / 29	237 / 885 / 23	317 / 648 / 59	258 / 796 / 48	254 / 688 / 128	234 / 862 / 106																							
35	1	472 / 507 / 43	376 / 617 / 35	567 / 390 / 105	473 / 502 / 88	444 / 440 / 234	383 / 541 / 188	453 / 528 / 42	368 / 652 / 34	558 / 418 / 103	455 / 523 / 84	429 / 461 / 225	376 / 561 / 179																						
	2	405 / 597 / 37	328 / 734 / 30	473 / 486 / 88	388 / 609 / 72	397 / 489 / 209	349 / 612 / 171	386 / 616 / 36	310 / 749 / 29	454 / 507 / 84	370 / 628 / 69	381 / 510 / 200	341 / 631 / 163																						
	3	338 / 699 / 31	270 / 847 / 25	369 / 629 / 69	303 / 784 / 56	294 / 671 / 154	256 / 823 / 125	328 / 736 / 30	261 / 885 / 24	350 / 648 / 65	285 / 796 / 53	278 / 688 / 146	254 / 862 / 121																						
40	1	522 / 507 / 100	416 / 617 / 80	602 / 377 / 167	519 / 502 / 144	483 / 440 / 270	414 / 541 / 217	501 / 528 / 96	405 / 652 / 78	602 / 411 / 167	498 / 523 / 138	465 / 461 / 260	406 / 561 / 207																						
	2	448 / 597 / 86	363 / 734 / 70	519 / 486 / 144	426 / 609 / 118	431 / 489 / 241	377 / 612 / 198	426 / 616 / 82	341 / 749 / 66	498 / 507 / 138	405 / 628 / 112	414 / 510 / 231	368 / 631 / 188																						
	3	373 / 699 / 72	299 / 847 / 57	405 / 629 / 112	332 / 784 / 92	319 / 671 / 179	276 / 823 / 145	363 / 736 / 70	288 / 885 / 55	384 / 648 / 107	312 / 796 / 87	302 / 688 / 169	274 / 862 / 140																						
30	1	393 / 547 / 38	322 / 667 / 30	488 / 438 / 91	404 / 543 / 74	377 / 481 / 190	349 / 593 / 153	410 / 528 / 40	333 / 652 / 32	506 / 418 / 94	413 / 523 / 77	392 / 461 / 197	347 / 561 / 157																						
	2	332 / 633 / 32	278 / 784 / 26	394 / 526 / 74	334 / 662 / 61	334 / 529 / 168	308 / 647 / 135	349 / 616 / 34	281 / 749 / 27	411 / 507 / 77	336 / 628 / 62	348 / 510 / 175	315 / 631 / 142																						
	3	280 / 749 / 27	233 / 920 / 22	309 / 681 / 58	255 / 831 / 47	247 / 722 / 124	225 / 867 / 99	297 / 736 / 29	237 / 885 / 23	317 / 648 / 59	258 / 796 / 48	254 / 688 / 128	234 / 862 / 106																						
35	1	434 / 547 / 40	355 / 667 / 32	539 / 438 / 100	445 / 543 / 81	413 / 481 / 217	378 / 593 / 175	453 / 528 / 42	368 / 652 / 34	558 / 418 / 103	455 / 523 / 84	429 / 461 / 225	376 / 561 / 179																						
	2	366 / 633 / 34	306 / 784 / 28	435 / 526 / 81	368 / 662 / 67	365 / 529 / 192	333 / 647 / 154	386 / 616 / 36	310 / 749 / 29	454 / 507 / 84	370 / 628 / 69	381 / 510 / 200	341 / 631 / 163																						
	3	309 / 749 / 29	257 / 920 / 23	340 / 681 / 63	281 / 831 / 51	270 / 722 / 142	243 / 867 / 113	328 / 736 / 30	261 / 885 / 24	350 / 648 / 65	285 / 796 / 53	278 / 688 / 146	254 / 862 / 121																						
40	1	480 / 547 / 92	388 / 667 / 74	592 / 438 / 164	485 / 543 / 132	448 / 481 / 251	407 / 593 / 203	501 / 528 / 96	405 / 652 / 78	602 / 411 / 167	498 / 523 / 138	465 / 461 / 260	406 / 561 / 207																						
	2	405 / 633 / 78	334 / 784 / 64	477 / 526 / 132	401 / 662 / 109	397 / 529 / 222	358 / 647 / 179	426 / 616 / 82	341 / 749 / 66	498 / 507 / 138	405 / 628 / 112	414 / 510 / 231	368 / 631 / 188																						
	3	341 / 749 / 66	280 / 920 / 53	374 / 681 / 104	306 / 831 / 84	293 / 722 / 164	262 / 867 / 130	363 / 736 / 70	288 / 885 / 55	384 / 648 / 107	312 / 796 / 87	302 / 688 / 169	274 / 862 / 140																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		140				150				160									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	376 / 564 / 36	320 / 699 / 30	471 / 456 / 88	395 / 560 / 70	368 / 499 / 182	343 / 609 / 146	349 / 606 / 34	315 / 760 / 28	437 / 490 / 82	385 / 603 / 66	355 / 530 / 168	337 / 649 / 135	334 / 658 / 32	299 / 788 / 25	405 / 518 / 75	373 / 638 / 61	348 / 567 / 157	339 / 701 / 128
Wind Speed [mph]		170				180													
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	415 / 564 / 38	352 / 699 / 31	520 / 456 / 96	434 / 560 / 77	402 / 499 / 209	370 / 609 / 167	386 / 606 / 36	345 / 760 / 29	482 / 490 / 89	421 / 603 / 72	386 / 530 / 192	362 / 649 / 154	369 / 658 / 34	327 / 788 / 27	447 / 518 / 82	406 / 638 / 67	378 / 567 / 179	363 / 701 / 146
Wind Speed [mph]		190				200													
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	458 / 564 / 88	384 / 699 / 72	571 / 456 / 158	473 / 560 / 127	436 / 499 / 241	397 / 609 / 193	426 / 606 / 82	375 / 760 / 68	529 / 490 / 147	457 / 603 / 118	418 / 530 / 222	387 / 649 / 179	405 / 658 / 78	354 / 788 / 62	488 / 518 / 135	440 / 638 / 109	407 / 567 / 207	387 / 701 / 169

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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 B=Horizontal dimension of building measured normal to wind direction, in ft (m).
 h=Mean roof height, in ft (m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	653 / 215 / 122	534 / 545 / 100	647 / 275 / 177	647 / 428 / 177	567 / 364 / 324	484 / 479 / 276	629 / 460 / 117	510 / 572 / 95	647 / 303 / 177	624 / 454 / 170	567 / 401 / 324	462 / 495 / 260	605 / 484 / 113	487 / 596 / 91	647 / 333 / 177	601 / 479 / 164	549 / 425 / 313	454 / 519 / 250
Wind Speed [mph]		110				115													
Exposure Category : C	45	1	582 / 507 / 108	463 / 617 / 86	647 / 364 / 177	578 / 502 / 158	521 / 440 / 297	445 / 541 / 239	558 / 528 / 104	451 / 652 / 84	647 / 396 / 177	555 / 523 / 151	502 / 461 / 287	435 / 561 / 228					
	2	499 / 597 / 93	404 / 734 / 75	578 / 486 / 158	474 / 609 / 129	465 / 489 / 265	405 / 612 / 218	475 / 616 / 89	380 / 749 / 71	555 / 507 / 151	451 / 628 / 123	447 / 510 / 255	395 / 631 / 207						
Wind Speed [mph]		120				130													
ASCE Group Zone	Panal Angle		Mono Slope																
	0 - 3		1 = 1' / 1 2 = 2 3 = 3																
3 - 10		1 = 1 2 = 2' / 2 3 = 3' / 3																	
10 - 30		1 = 1 2 = 2 3 = 3																	
ASCE Group Zone	Panal Angle		Mono Slope																
	0 - 3		1 = 1' / 1 2 = 2 3 = 3																
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10 - 30		1 = 1 2 = 2 3 = 3																	

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof

0-30ft

92.5in x 45.9in

Load: Up / Down / Side , lbs

Wind Speed [mph]		140						150						160																					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	45	1	510 / 564 / 95	416 / 699 / 78	636 / 456 / 173	512 / 560 / 139	470 / 499 / 265	425 / 609 / 212	475 / 606 / 89	405 / 760 / 73	589 / 490 / 161	493 / 603 / 129	449 / 530 / 244	413 / 649 / 197	451 / 658 / 84	381 / 788 / 67	543 / 518 / 148	473 / 638 / 120	436 / 567 / 228	411 / 701 / 186															
2		439 / 665 / 82	356 / 817 / 67	520 / 555 / 142	419 / 676 / 114	423 / 558 / 239	382 / 678 / 191	404 / 704 / 75	344 / 878 / 62	485 / 598 / 133	409 / 736 / 107	400 / 587 / 218	379 / 738 / 181	380 / 756 / 71	330 / 929 / 58	451 / 635 / 123	386 / 766 / 98	396 / 637 / 207	364 / 768 / 165																
3		368 / 782 / 69	297 / 953 / 56	405 / 714 / 111	326 / 864 / 89	311 / 755 / 175	276 / 898 / 138	344 / 842 / 64	282 / 1008 / 51	370 / 752 / 101	313 / 923 / 82	293 / 790 / 159	279 / 994 / 133	321 / 894 / 60	280 / 1099 / 49	347 / 804 / 95	299 / 972 / 76	284 / 841 / 149	270 / 1042 / 122																
50	1	562 / 564 / 102	458 / 699 / 83	688 / 448 / 185	560 / 560 / 151	504 / 499 / 290	452 / 609 / 232	523 / 606 / 95	435 / 760 / 79	649 / 490 / 175	529 / 603 / 141	481 / 530 / 267	438 / 649 / 215	497 / 658 / 90	408 / 788 / 71	599 / 518 / 161	507 / 638 / 130	466 / 567 / 249	434 / 701 / 203																
	2	484 / 665 / 88	393 / 817 / 71	573 / 555 / 154	459 / 676 / 124	454 / 558 / 261	407 / 678 / 209	445 / 704 / 81	369 / 878 / 67	535 / 598 / 144	439 / 736 / 117	428 / 587 / 238	403 / 738 / 197	419 / 756 / 76	354 / 929 / 62	497 / 635 / 134	414 / 766 / 107	422 / 637 / 226	385 / 768 / 180																
	3	406 / 782 / 74	327 / 953 / 60	446 / 714 / 120	357 / 864 / 96	333 / 755 / 191	294 / 898 / 151	380 / 842 / 69	303 / 1008 / 55	408 / 752 / 110	336 / 923 / 89	314 / 790 / 174	296 / 994 / 145	353 / 894 / 64	300 / 1099 / 53	382 / 804 / 103	320 / 972 / 83	303 / 841 / 163	286 / 1042 / 134																
60	1	667 / 564 / 116	543 / 699 / 95	754 / 415 / 199	664 / 560 / 175	589 / 499 / 340	507 / 609 / 272	620 / 606 / 108	512 / 760 / 90	754 / 481 / 199	619 / 603 / 163	543 / 530 / 313	489 / 649 / 252	589 / 658 / 103	465 / 788 / 81	709 / 518 / 187	574 / 638 / 151	524 / 567 / 292	482 / 701 / 238																
	2	574 / 665 / 100	465 / 817 / 81	679 / 555 / 179	543 / 676 / 144	530 / 558 / 306	456 / 678 / 245	527 / 704 / 92	434 / 878 / 76	634 / 598 / 167	513 / 736 / 136	484 / 587 / 279	449 / 738 / 231	496 / 756 / 87	403 / 929 / 71	589 / 635 / 155	468 / 766 / 124	476 / 637 / 265	427 / 768 / 211																
	3	481 / 782 / 84	388 / 953 / 68	528 / 714 / 140	423 / 864 / 112	389 / 755 / 225	330 / 898 / 177	450 / 842 / 79	357 / 1008 / 63	483 / 752 / 128	393 / 923 / 104	355 / 790 / 204	330 / 994 / 170	419 / 894 / 73	341 / 1099 / 60	453 / 804 / 120	363 / 972 / 96	342 / 841 / 191	317 / 1042 / 157																
Wind Speed [mph]		170						180																											
45	1	416 / 687 / 78	382 / 862 / 64	510 / 550 / 139	465 / 685 / 114	433 / 613 / 218	407 / 748 / 175	401 / 728 / 73	368 / 902 / 60	500 / 592 / 133	456 / 728 / 107	418 / 639 / 202	403 / 790 / 165	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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	Panal Angle	Mono Slope																																	
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2	356 / 803 / 67	316 / 970 / 53	417 / 664 / 114	375 / 811 / 92	380 / 667 / 191	358 / 813 / 154	340 / 842 / 62	314 / 1044 / 51	405 / 705 / 107	375 / 879 / 89	374 / 708 / 181	364 / 881 / 149																							
3	297 / 936 / 56	277 / 1186 / 47	324 / 849 / 89	297 / 1053 / 73	285 / 917 / 144	272 / 1126 / 117	292 / 1009 / 53	259 / 1204 / 42	322 / 920 / 85	295 / 1130 / 70	275 / 953 / 133	260 / 1149 / 106																							
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2	393 / 803 / 71	338 / 970 / 57	459 / 664 / 124	400 / 811 / 100	405 / 667 / 209	378 / 813 / 168	366 / 842 / 67	335 / 1044 / 55	435 / 705 / 117	400 / 879 / 96	397 / 708 / 197	383 / 881 / 163																							
3	327 / 936 / 60	296 / 1186 / 50	357 / 849 / 96	318 / 1053 / 79	304 / 917 / 157	287 / 1126 / 128	314 / 1009 / 57	277 / 1204 / 45	345 / 920 / 93	315 / 1130 / 76	292 / 953 / 145	274 / 1149 / 116																							
60	1	543 / 687 / 95	461 / 862 / 79	664 / 550 / 175	560 / 685 / 144	517 / 613 / 279	475 / 748 / 225	512 / 728 / 90	442 / 902 / 73	634 / 592 / 167	546 / 728 / 136	495 / 639 / 259	466 / 790 / 211	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
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3	388 / 936 / 68	334 / 1186 / 57	423 / 849 / 112	358 / 1053 / 92	340 / 917 / 184	317 / 1126 / 150	372 / 1009 / 65	311 / 1204 / 52	408 / 920 / 108	353 / 1130 / 88	326 / 953 / 170	301 / 1149 / 136																							
Wind Speed [mph]		190						200																											
45	1	387 / 764 / 69	354 / 932 / 56	478 / 615 / 123	445 / 766 / 101	412 / 677 / 191	397 / 825 / 154	385 / 822 / 67	353 / 993 / 53	467 / 648 / 117	434 / 797 / 95	406 / 710 / 181	403 / 884 / 149	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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2	337 / 906 / 60	312 / 1114 / 49	392 / 742 / 101	362 / 911 / 82	366 / 744 / 170	356 / 913 / 138	321 / 931 / 56	309 / 1179 / 47	391 / 798 / 98	362 / 973 / 79	370 / 800 / 165	360 / 974 / 133																							
3	287 / 1079 / 51	255 / 1272 / 40	306 / 951 / 79	279 / 1146 / 63	275 / 1021 / 128	260 / 1217 / 101	270 / 1093 / 47	250 / 1332 / 38	303 / 1013 / 76	275 / 1208 / 60	274 / 1085 / 122	259 / 1279 / 96																							
50	1	415 / 764 / 74	377 / 932 / 60	512 / 615 / 134	474 / 766 / 110	437 / 677 / 209	416 / 825 / 168	413 / 822 / 71	375 / 993 / 57	499 / 648 / 127	460 / 797 / 103	429 / 710 / 197	422 / 884 / 163	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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2	362 / 906 / 64	332 / 1114 / 53	420 / 742 / 110	385 / 911 / 89	388 / 744 / 186	373 / 913 / 151	344 / 931 / 60	328 / 1179 / 50	418 / 798 / 107	384 / 973 / 86	391 / 800 / 180	377 / 974 / 145																							
3	308 / 1079 / 55	271 / 1272 / 43	328 / 951 / 86	296 / 1146 / 69	291 / 1021 / 139	273 / 1217 / 110	289 / 1093 / 50	266 / 1332 / 41	324 / 1013 / 83	292 / 1208 / 65	290 / 1085 / 134	272 / 1279 / 105																							
60	1	481 / 764 / 84	422 / 932 / 68	589 / 615 / 155	530 / 766 / 128	486 / 677 / 245	456 / 825 / 197	467 / 822 / 81	418 / 993 / 65	565 / 648 / 148	513 / 797 / 120	475 / 710 / 231	460 / 884 / 191	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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3	357 / 1079 / 63	304 / 1272 / 49	377 / 951 / 100	332 / 1146 / 80	324 / 1021 / 163	299 / 1217 / 130	327 / 1093 / 57	296 / 1332 / 46	366 / 1013 / 96	325 / 1208 / 76	322 / 1085 / 157	296 / 1279 / 123																							

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	1	824 / 180 / 140	807 / 545 / 137	820 / 231 / 213	820 / 359 / 213	720 / 317 / 416	707 / 479 / 408	824 / 199 / 140	771 / 572 / 131	820 / 255 / 213	820 / 395 / 213	720 / 348 / 416	666 / 495 / 385	824 / 219 / 140	735 / 596 / 125	820 / 280 / 213	820 / 433 / 213	720 / 382 / 416	639 / 519 / 369	
70	2	824 / 500 / 140	681 / 630 / 116	820 / 348 / 213	820 / 535 / 213	720 / 396 / 416	625 / 526 / 361	807 / 537 / 137	663 / 673 / 113	820 / 382 / 213	768 / 549 / 200	720 / 435 / 416	598 / 552 / 346	771 / 561 / 131	627 / 695 / 107	820 / 419 / 213	733 / 573 / 191	707 / 467 / 408	571 / 576 / 330	
	3	717 / 614 / 122	574 / 746 / 97	785 / 557 / 204	628 / 678 / 163	571 / 585 / 330	462 / 719 / 267	681 / 639 / 116	556 / 791 / 94	750 / 584 / 195	593 / 702 / 154	544 / 611 / 314	435 / 741 / 251	663 / 680 / 113	538 / 835 / 91	715 / 608 / 186	576 / 743 / 150	517 / 634 / 298	422 / 783 / 244	
	1	895 / 172 / 148	895 / 270 / 148	871 / 216 / 224	871 / 336 / 224	771 / 299 / 445	771 / 460 / 445	895 / 190 / 148	875 / 572 / 145	871 / 238 / 224	871 / 370 / 224	771 / 329 / 445	755 / 495 / 436	895 / 209 / 148	834 / 596 / 138	871 / 262 / 224	871 / 405 / 224	771 / 360 / 445	724 / 519 / 418	
80	2	895 / 478 / 148	773 / 630 / 128	871 / 326 / 224	871 / 501 / 224	771 / 373 / 445	709 / 526 / 410	895 / 525 / 148	753 / 673 / 125	871 / 358 / 224	871 / 549 / 224	771 / 410 / 445	678 / 552 / 392	875 / 561 / 145	712 / 695 / 118	871 / 392 / 224	832 / 573 / 214	771 / 449 / 445	647 / 576 / 374	
	3	814 / 614 / 135	651 / 746 / 108	871 / 544 / 224	713 / 678 / 183	647 / 585 / 374	524 / 719 / 303	773 / 639 / 128	631 / 791 / 105	851 / 584 / 219	673 / 702 / 173	617 / 611 / 356	493 / 741 / 285	753 / 680 / 125	611 / 835 / 101	812 / 608 / 209	654 / 743 / 168	586 / 634 / 338	478 / 783 / 276	
	1	933 / 160 / 152	933 / 252 / 152	931 / 206 / 237	931 / 321 / 237	810 / 281 / 468	810 / 433 / 468	933 / 177 / 152	933 / 278 / 152	931 / 228 / 237	931 / 353 / 237	810 / 309 / 468	810 / 475 / 468	933 / 195 / 152	933 / 304 / 152	931 / 250 / 237	931 / 387 / 237	810 / 339 / 468	810 / 519 / 468	
90	2	933 / 446 / 152	865 / 630 / 141	931 / 311 / 237	931 / 478 / 237	810 / 351 / 468	793 / 526 / 458	933 / 489 / 152	842 / 673 / 137	931 / 342 / 237	931 / 524 / 237	810 / 386 / 468	758 / 552 / 438	933 / 535 / 152	797 / 695 / 130	931 / 374 / 237	931 / 573 / 237	810 / 422 / 468	724 / 576 / 418	
	3	911 / 614 / 148	729 / 746 / 119	931 / 520 / 237	798 / 678 / 203	724 / 585 / 418	586 / 719 / 339	865 / 639 / 141	706 / 791 / 115	931 / 570 / 237	753 / 702 / 192	689 / 611 / 398	552 / 741 / 319	842 / 680 / 137	683 / 835 / 111	908 / 608 / 231	731 / 743 / 186	655 / 634 / 378	534 / 783 / 309	
	1	824 / 240 / 140	699 / 617 / 119	820 / 306 / 213	820 / 472 / 213	720 / 416 / 416	612 / 541 / 353	824 / 261 / 140	681 / 652 / 116	820 / 333 / 213	820 / 512 / 213	720 / 452 / 416	585 / 561 / 338							
70	2	753 / 597 / 128	610 / 734 / 103	820 / 457 / 213	715 / 609 / 186	680 / 489 / 393	557 / 612 / 322	717 / 616 / 122	574 / 749 / 97	820 / 496 / 213	680 / 628 / 177	652 / 510 / 377	530 / 631 / 306							
	3	627 / 699 / 107	502 / 847 / 85	680 / 629 / 177	558 / 784 / 145	503 / 671 / 291	408 / 823 / 236	610 / 736 / 103	484 / 885 / 82	646 / 648 / 168	523 / 796 / 136	476 / 688 / 275	394 / 862 / 228							
	1	895 / 229 / 148	794 / 617 / 132	871 / 286 / 224	871 / 442 / 224	771 / 393 / 445	694 / 541 / 401	895 / 250 / 148	773 / 652 / 128	871 / 312 / 224	871 / 480 / 224	771 / 427 / 445	663 / 561 / 383							
80	2	855 / 597 / 142	692 / 734 / 115	871 / 427 / 224	812 / 609 / 209	771 / 489 / 445	632 / 612 / 365	814 / 616 / 135	651 / 749 / 108	871 / 464 / 224	772 / 628 / 199	740 / 510 / 427	601 / 631 / 347							
	3	712 / 699 / 118	570 / 847 / 95	772 / 629 / 199	634 / 784 / 163	570 / 671 / 330	463 / 823 / 267	692 / 736 / 115	550 / 885 / 91	733 / 648 / 188	594 / 796 / 153	540 / 688 / 312	447 / 862 / 258							
	1	933 / 214 / 152	888 / 617 / 144	931 / 273 / 237	931 / 422 / 237	810 / 369 / 468	776 / 541 / 448	933 / 233 / 152	865 / 652 / 141	931 / 297 / 237	931 / 458 / 237	810 / 401 / 468	741 / 561 / 428							
90	2	933 / 582 / 152	774 / 734 / 126	931 / 408 / 237	908 / 609 / 231	810 / 460 / 468	707 / 612 / 408	911 / 616 / 148	729 / 749 / 119	931 / 443 / 237	864 / 628 / 220	810 / 499 / 468	672 / 631 / 388							
	3	797 / 699 / 130	638 / 847 / 104	864 / 629 / 220	709 / 784 / 181	638 / 671 / 368	517 / 823 / 299	774 / 736 / 126	615 / 885 / 100	820 / 648 / 209	665 / 796 / 169	603 / 688 / 349	500 / 862 / 289							
	1	807 / 547 / 137	645 / 667 / 110	820 / 361 / 213	802 / 543 / 209	707 / 481 / 408	579 / 593 / 330	824 / 261 / 140	681 / 652 / 116	820 / 333 / 213	820 / 512 / 213	720 / 452 / 416	585 / 561 / 338							
70	2	681 / 633 / 116	556 / 784 / 94	802 / 526 / 209	663 / 662 / 173	625 / 529 / 361	510 / 647 / 291	717 / 616 / 122	574 / 749 / 97	820 / 496 / 213	680 / 628 / 177	652 / 510 / 377	530 / 631 / 306							
	3	574 / 749 / 97	466 / 920 / 79	628 / 681 / 163	506 / 831 / 132	462 / 722 / 267	372 / 867 / 212	610 / 736 / 103	484 / 885 / 82	646 / 648 / 168	523 / 796 / 136	476 / 688 / 275	394 / 862 / 228							
	1	895 / 272 / 148	733 / 667 / 121	871 / 338 / 224	871 / 519 / 224	771 / 462 / 445	647 / 593 / 374	895 / 250 / 148	773 / 652 / 128	871 / 312 / 224	871 / 480 / 224	771 / 427 / 445	663 / 561 / 383							
80	2	773 / 633 / 128	631 / 784 / 105	871 / 503 / 224	752 / 662 / 194	709 / 529 / 410	570 / 647 / 330	814 / 616 / 135	651 / 749 / 108	871 / 464 / 224	772 / 628 / 199	740 / 510 / 427	601 / 631 / 347							
	3	651 / 749 / 108	529 / 920 / 88	713 / 681 / 183	574 / 831 / 148	524 / 722 / 303	416 / 867 / 241	692 / 736 / 115	550 / 885 / 91	733 / 648 / 188	594 / 796 / 153	540 / 688 / 312	447 / 862 / 258							
	1	933 / 253 / 152	820 / 667 / 133	931 / 323 / 237	931 / 496 / 237	810 / 435 / 468	724 / 593 / 418	933 / 233 / 152	865 / 652 / 141	931 / 297 / 237	931 / 458 / 237	810 / 401 / 468	741 / 561 / 428							
90	2	865 / 633 / 141	706 / 784 / 115	931 / 480 / 237	842 / 662 / 215	793 / 529 / 458	638 / 647 / 368	911 / 616 / 148	729 / 749 / 119	931 / 443 / 237	864 / 628 / 220	810 / 499 / 468	672 / 631 / 388							
	3	729 / 749 / 119	592 / 920 / 96	798 / 681 / 203	643 / 831 / 164	586 / 722 / 339	466 / 867 / 269	774 / 736 / 126	615 / 885 / 100	820 / 648 / 209	665 / 796 / 169	603 / 688 / 349	500 / 862 / 289							

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the e edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	771 / 564 / 131	627 / 699 / 107	820 / 390 / 213	768 / 560 / 200	680 / 499 / 393	561 / 609 / 314	717 / 606 / 122	592 / 760 / 100	820 / 452 / 213	715 / 603 / 186	625 / 530 / 361	539 / 649 / 291	681 / 658 / 116	538 / 788 / 91	820 / 518 / 213	663 / 638 / 173	585 / 567 / 338
2		663 / 665 / 113	538 / 817 / 91	785 / 555 / 204	628 / 676 / 163	612 / 558 / 353	505 / 678 / 283	610 / 704 / 103	502 / 878 / 85	733 / 598 / 191	593 / 736 / 154	557 / 587 / 322	495 / 738 / 267	574 / 756 / 97	466 / 929 / 79	680 / 635 / 177	541 / 766 / 141	530 / 637 / 306	470 / 768 / 244
3		556 / 782 / 94	448 / 953 / 76	611 / 714 / 159	489 / 864 / 127	449 / 755 / 259	365 / 898 / 204	520 / 842 / 88	412 / 1008 / 70	558 / 752 / 145	454 / 923 / 118	408 / 790 / 236	364 / 994 / 197	484 / 894 / 82	395 / 1099 / 67	523 / 804 / 136	419 / 972 / 109	381 / 841 / 220	348 / 1042 / 181
80	1	875 / 564 / 145	712 / 699 / 118	871 / 365 / 224	871 / 560 / 224	771 / 499 / 445	617 / 609 / 356	814 / 606 / 135	672 / 760 / 111	871 / 423 / 224	812 / 603 / 209	709 / 530 / 410	590 / 649 / 330	773 / 658 / 128	611 / 788 / 101	871 / 485 / 224	752 / 638 / 194	663 / 567 / 383	578 / 701 / 312
	2	753 / 665 / 125	611 / 817 / 101	871 / 542 / 224	713 / 676 / 183	694 / 558 / 401	555 / 678 / 321	692 / 704 / 115	570 / 878 / 95	832 / 598 / 214	673 / 736 / 173	632 / 587 / 365	542 / 738 / 303	651 / 756 / 108	529 / 929 / 88	772 / 635 / 199	614 / 766 / 158	601 / 637 / 347	512 / 768 / 276
	3	631 / 782 / 105	509 / 953 / 85	693 / 714 / 178	555 / 864 / 143	509 / 755 / 294	401 / 898 / 232	590 / 842 / 98	468 / 1008 / 78	634 / 752 / 163	515 / 923 / 133	463 / 790 / 267	399 / 994 / 223	550 / 894 / 91	448 / 1099 / 74	594 / 804 / 153	475 / 972 / 122	432 / 841 / 250	380 / 1042 / 205
90	1	933 / 274 / 152	797 / 699 / 130	931 / 349 / 237	931 / 535 / 237	810 / 469 / 468	689 / 609 / 398	911 / 606 / 148	751 / 760 / 122	931 / 404 / 237	908 / 603 / 231	793 / 530 / 458	640 / 649 / 368	865 / 658 / 141	683 / 788 / 111	931 / 463 / 237	842 / 638 / 215	741 / 567 / 428	626 / 701 / 349
	2	842 / 665 / 137	683 / 817 / 111	931 / 518 / 237	798 / 676 / 203	776 / 558 / 448	621 / 678 / 359	774 / 704 / 126	638 / 878 / 104	931 / 598 / 237	753 / 736 / 192	707 / 587 / 408	588 / 738 / 339	729 / 756 / 119	592 / 929 / 96	864 / 635 / 220	687 / 766 / 175	672 / 637 / 388	554 / 768 / 309
	3	706 / 782 / 115	569 / 953 / 93	776 / 714 / 198	621 / 864 / 158	569 / 755 / 329	448 / 898 / 259	660 / 842 / 108	524 / 1008 / 85	709 / 752 / 181	576 / 923 / 147	517 / 790 / 299	433 / 994 / 249	615 / 894 / 100	501 / 1099 / 82	665 / 804 / 169	532 / 972 / 136	483 / 841 / 279	411 / 1042 / 229
Wind Speed [mph]		170						180											
70	1	627 / 687 / 107	520 / 862 / 88	768 / 550 / 200	628 / 685 / 163	573 / 613 / 322	520 / 748 / 259	592 / 728 / 100	491 / 902 / 82	733 / 592 / 191	606 / 728 / 154	547 / 639 / 298	508 / 790 / 244						
	2	538 / 803 / 91	430 / 970 / 73	628 / 664 / 163	506 / 811 / 132	503 / 667 / 283	457 / 813 / 228	502 / 842 / 85	418 / 1044 / 70	593 / 705 / 154	499 / 879 / 127	490 / 708 / 267	459 / 881 / 220						
	3	448 / 936 / 76	377 / 1186 / 64	489 / 849 / 127	401 / 1053 / 105	377 / 917 / 212	347 / 1126 / 173	430 / 1009 / 73	346 / 1204 / 58	471 / 920 / 123	392 / 1130 / 100	360 / 953 / 197	328 / 1149 / 157						
80	1	712 / 687 / 118	590 / 862 / 98	871 / 550 / 224	713 / 685 / 183	632 / 613 / 365	565 / 748 / 294	672 / 728 / 111	550 / 902 / 91	832 / 592 / 214	673 / 728 / 173	599 / 639 / 338	551 / 790 / 276						
	2	611 / 803 / 101	489 / 970 / 81	713 / 664 / 183	574 / 811 / 148	555 / 667 / 321	497 / 813 / 258	570 / 842 / 95	468 / 1044 / 78	673 / 705 / 173	555 / 879 / 143	536 / 708 / 303	498 / 881 / 250						
	3	509 / 936 / 85	428 / 1186 / 71	555 / 849 / 143	456 / 1053 / 117	416 / 917 / 241	377 / 1126 / 196	489 / 1009 / 81	387 / 1204 / 64	535 / 920 / 138	436 / 1130 / 112	394 / 953 / 223	356 / 1149 / 178						
90	1	797 / 687 / 130	660 / 862 / 108	931 / 525 / 237	798 / 685 / 203	707 / 613 / 408	610 / 748 / 329	751 / 728 / 122	615 / 902 / 100	931 / 592 / 237	753 / 728 / 192	655 / 639 / 378	593 / 790 / 309						
	2	683 / 803 / 111	547 / 970 / 89	798 / 664 / 203	643 / 811 / 164	621 / 667 / 359	536 / 813 / 289	638 / 842 / 104	524 / 1044 / 85	753 / 705 / 192	621 / 879 / 158	586 / 708 / 339	536 / 881 / 279						
	3	569 / 936 / 93	478 / 1186 / 78	621 / 849 / 158	510 / 1053 / 130	466 / 917 / 269	407 / 1126 / 219	547 / 1009 / 89	433 / 1204 / 71	598 / 920 / 153	488 / 1130 / 124	431 / 953 / 249	383 / 1149 / 199						
Wind Speed [mph]		190						200											
70	1	556 / 764 / 94	468 / 932 / 76	680 / 615 / 177	587 / 766 / 145	535 / 677 / 283	496 / 825 / 228	538 / 822 / 91	462 / 993 / 73	646 / 648 / 168	566 / 797 / 136	522 / 710 / 267	499 / 884 / 220						
	2	484 / 906 / 82	412 / 1114 / 67	558 / 742 / 145	477 / 911 / 118	476 / 744 / 251	444 / 913 / 204	448 / 931 / 76	404 / 1179 / 64	541 / 798 / 141	472 / 973 / 114	476 / 800 / 244	445 / 974 / 197						
	3	412 / 1079 / 70	337 / 1272 / 55	436 / 951 / 114	367 / 1146 / 91	357 / 1021 / 189	325 / 1217 / 149	377 / 1093 / 64	327 / 1332 / 52	419 / 1013 / 109	359 / 1208 / 87	353 / 1085 / 181	321 / 1279 / 142						
80	1	631 / 764 / 105	513 / 932 / 85	772 / 615 / 199	643 / 766 / 163	584 / 677 / 321	535 / 825 / 258	611 / 822 / 101	505 / 993 / 81	733 / 648 / 188	619 / 797 / 153	568 / 710 / 303	537 / 884 / 250						
	2	550 / 906 / 91	451 / 1114 / 74	634 / 742 / 163	523 / 911 / 133	519 / 744 / 285	480 / 913 / 232	509 / 931 / 85	442 / 1179 / 71	614 / 798 / 158	516 / 973 / 127	518 / 800 / 276	479 / 974 / 223						
	3	468 / 1079 / 78	369 / 1272 / 61	495 / 951 / 127	402 / 1146 / 102	390 / 1021 / 214	351 / 1217 / 169	428 / 1093 / 71	358 / 1332 / 58	475 / 1013 / 122	392 / 1208 / 97	384 / 1085 / 205	345 / 1279 / 161						
90	1	706 / 764 / 115	569 / 932 / 93	864 / 615 / 220	709 / 766 / 181	633 / 677 / 359	575 / 825 / 289	683 / 822 / 111	549 / 993 / 89	820 / 648 / 209	672 / 797 / 169	614 / 710 / 339	575 / 884 / 279						
	2	615 / 906 / 100	501 / 1114 / 82	709 / 742 / 181	576 / 911 / 147	563 / 744 / 319	515 / 913 / 259	569 / 931 / 93	480 / 1179 / 78	687 / 798 / 175	560 / 973 / 141	560 / 800 / 309	514 / 974 / 249						
	3	524 / 1079 / 85	410 / 1272 / 67	554 / 951 / 141	443 / 1146 / 113	422 / 1021 / 239	377 / 1217 / 189	478 / 1093 / 78	389 / 1332 / 63	532 / 1013 / 136	426 / 1208 / 108	416 / 1085 / 229	370 / 1279 / 180						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 Θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																		
	95						100						105						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
100	1	982 / 153 / 157	982 / 240 / 157	980 / 197 / 248	980 / 306 / 248	858 / 269 / 495	858 / 414 / 495	982 / 169 / 157	982 / 264 / 157	980 / 217 / 248	980 / 336 / 248	858 / 296 / 495	858 / 455 / 495	982 / 186 / 157	982 / 290 / 157	980 / 238 / 248	980 / 368 / 248	858 / 324 / 495	858 / 497 / 495
	2	982 / 424 / 157	957 / 630 / 153	980 / 296 / 248	980 / 455 / 248	858 / 336 / 495	858 / 515 / 495	982 / 465 / 157	932 / 673 / 149	980 / 326 / 248	980 / 499 / 248	858 / 369 / 495	838 / 552 / 484	982 / 509 / 157	882 / 695 / 141	980 / 356 / 248	980 / 546 / 248	858 / 404 / 495	800 / 576 / 462
	3	982 / 599 / 157	806 / 746 / 129	980 / 495 / 248	882 / 678 / 223	800 / 585 / 462	648 / 719 / 374	957 / 639 / 153	781 / 791 / 125	980 / 543 / 248	833 / 702 / 211	762 / 611 / 440	610 / 741 / 352	932 / 680 / 149	756 / 835 / 121	980 / 593 / 248	809 / 743 / 205	724 / 634 / 418	591 / 783 / 341
100	1	982 / 203 / 157	982 / 316 / 157	980 / 260 / 248	980 / 402 / 248	858 / 354 / 495	858 / 541 / 495	982 / 222 / 157	957 / 652 / 153	980 / 283 / 248	980 / 436 / 248	858 / 384 / 495	819 / 561 / 473						
	2	982 / 554 / 157	857 / 734 / 137	980 / 389 / 248	980 / 594 / 248	858 / 440 / 495	781 / 612 / 451	982 / 601 / 157	806 / 749 / 129	980 / 422 / 248	956 / 628 / 242	858 / 478 / 495	743 / 631 / 429						
	3	882 / 699 / 141	705 / 847 / 113	956 / 629 / 242	784 / 784 / 198	705 / 671 / 407	572 / 823 / 330	857 / 736 / 137	680 / 885 / 109	907 / 648 / 229	735 / 796 / 186	667 / 688 / 385	553 / 862 / 319						
100	1	982 / 241 / 157	907 / 667 / 145	980 / 307 / 248	980 / 472 / 248	858 / 416 / 495	800 / 593 / 462	982 / 222 / 157	957 / 652 / 153	980 / 283 / 248	980 / 436 / 248	858 / 384 / 495	819 / 561 / 473						
	2	957 / 633 / 153	781 / 784 / 125	980 / 457 / 248	931 / 662 / 236	858 / 517 / 495	705 / 647 / 407	982 / 601 / 157	806 / 749 / 129	980 / 422 / 248	956 / 628 / 242	858 / 478 / 495	743 / 631 / 429						
	3	806 / 749 / 129	655 / 920 / 105	882 / 681 / 223	711 / 831 / 180	648 / 722 / 374	515 / 867 / 297	857 / 736 / 137	680 / 885 / 109	907 / 648 / 229	735 / 796 / 186	667 / 688 / 385	553 / 862 / 319						

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]		140						150						160					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																	
100	1	982 / 261 / 157	882 / 699 / 141	980 / 332 / 248	980 / 509 / 248	858 / 449 / 495	762 / 609 / 440	982 / 303 / 157	831 / 760 / 133	980 / 385 / 248	980 / 588 / 248	858 / 519 / 495	705 / 649 / 407	957 / 658 / 153	756 / 788 / 121	980 / 441 / 248	931 / 638 / 236	819 / 567 / 473	673 / 701 / 385	
	2	932 / 665 / 149	756 / 817 / 121	980 / 493 / 248	882 / 676 / 223	858 / 558 / 495	686 / 678 / 396	857 / 704 / 137	705 / 878 / 113	980 / 569 / 248	833 / 736 / 211	781 / 587 / 451	648 / 738 / 374	806 / 756 / 129	655 / 929 / 105	956 / 635 / 242	760 / 766 / 192	743 / 637 / 429	597 / 768 / 341	
	3	781 / 782 / 125	630 / 953 / 101	858 / 714 / 217	686 / 864 / 174	629 / 755 / 363	496 / 898 / 286	731 / 842 / 117	580 / 1008 / 93	784 / 752 / 198	637 / 923 / 161	572 / 790 / 330	477 / 994 / 275	680 / 894 / 109	554 / 1099 / 89	735 / 804 / 186	588 / 972 / 149	534 / 841 / 308	443 / 1042 / 253	

Ground Snow	Wind Speed [mph]		170						180					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	882 / 687 / 141	731 / 862 / 117	980 / 500 / 248	882 / 685 / 223	781 / 613 / 451	655 / 748 / 363	831 / 728 / 133	680 / 902 / 109	980 / 564 / 248	833 / 728 / 211	724 / 639 / 418	636 / 790 / 341	
	2	756 / 803 / 121	605 / 970 / 97	882 / 664 / 223	711 / 811 / 180	686 / 667 / 396	576 / 813 / 319	705 / 842 / 113	580 / 1044 / 93	833 / 705 / 211	686 / 879 / 174	648 / 708 / 374	574 / 881 / 308	
	3	630 / 936 / 101	529 / 1186 / 85	686 / 849 / 174	564 / 1053 / 143	515 / 917 / 297	437 / 1126 / 242	605 / 1009 / 97	479 / 1204 / 77	662 / 920 / 168	539 / 1130 / 137	477 / 953 / 275	410 / 1149 / 220	

Ground Snow	Wind Speed [mph]		190						200					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	781 / 764 / 125	630 / 932 / 101	956 / 615 / 242	784 / 766 / 198	686 / 677 / 396	614 / 825 / 319	756 / 822 / 121	605 / 993 / 97	907 / 648 / 229	735 / 797 / 186	661 / 710 / 374	613 / 884 / 308	
	2	680 / 906 / 109	554 / 1114 / 89	784 / 742 / 198	637 / 911 / 161	610 / 744 / 352	551 / 913 / 286	630 / 931 / 101	529 / 1179 / 85	760 / 798 / 192	613 / 973 / 155	603 / 800 / 341	548 / 974 / 275	
	3	580 / 1079 / 93	454 / 1272 / 73	613 / 951 / 155	490 / 1146 / 124	458 / 1021 / 264	403 / 1217 / 209	529 / 1093 / 85	429 / 1332 / 69	588 / 1013 / 149	466 / 1208 / 118	447 / 1085 / 253	395 / 1279 / 198	

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs														
Wind Speed [mph]	95						100						105							
Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	207 / 481 / 37	166 / 592 / 30	263 / 384 / 54	210 / 476 / 43	232 / 422 / 63	206 / 516 / 50	199 / 508 / 35	158 / 618 / 28	250 / 404 / 51	202 / 503 / 41	220 / 441 / 59	212 / 542 / 48	191 / 533 / 34	157 / 657 / 27	238 / 422 / 49	193 / 517 / 39	212 / 465 / 57	217 / 566 / 46	
	2	179 / 571 / 32	142 / 691 / 25	214 / 469 / 44	174 / 583 / 36	208 / 473 / 56	184 / 573 / 45	170 / 598 / 30	138 / 735 / 25	202 / 487 / 41	166 / 610 / 34	196 / 490 / 53	193 / 613 / 44	162 / 622 / 29	132 / 755 / 23	194 / 511 / 40	160 / 634 / 32	189 / 514 / 51	197 / 637 / 42	
	3	150 / 676 / 27	122 / 831 / 22	166 / 605 / 34	134 / 739 / 27	149 / 630 / 41	136 / 779 / 33	142 / 701 / 25	114 / 849 / 20	158 / 631 / 32	130 / 785 / 27	145 / 672 / 39	141 / 825 / 32	134 / 721 / 24	112 / 893 / 20	150 / 653 / 31	124 / 803 / 25	138 / 694 / 37	142 / 840 / 30	
	5	1	229 / 481 / 37	184 / 592 / 30	288 / 384 / 56	231 / 476 / 45	232 / 422 / 75	206 / 516 / 60	220 / 508 / 35	175 / 618 / 28	275 / 404 / 54	222 / 503 / 44	220 / 441 / 71	212 / 542 / 57	211 / 533 / 34	173 / 657 / 27	262 / 422 / 51	211 / 517 / 41	212 / 465 / 69	217 / 566 / 55
	2	197 / 571 / 32	157 / 691 / 25	235 / 469 / 46	191 / 583 / 37	208 / 473 / 67	184 / 573 / 53	188 / 598 / 30	153 / 735 / 25	222 / 487 / 44	182 / 610 / 36	196 / 490 / 64	193 / 613 / 52	180 / 622 / 29	145 / 755 / 23	213 / 511 / 42	175 / 634 / 34	189 / 514 / 61	197 / 637 / 50	
	3	166 / 676 / 27	135 / 831 / 22	182 / 605 / 36	147 / 739 / 29	149 / 630 / 48	136 / 779 / 40	157 / 701 / 25	126 / 849 / 20	173 / 631 / 34	142 / 785 / 28	145 / 672 / 47	141 / 825 / 38	148 / 721 / 24	123 / 893 / 20	164 / 653 / 32	135 / 803 / 26	138 / 694 / 45	142 / 840 / 36	
	10	1	290 / 481 / 37	233 / 592 / 30	364 / 384 / 70	292 / 476 / 56	258 / 422 / 96	221 / 516 / 76	279 / 508 / 35	222 / 618 / 28	348 / 404 / 67	280 / 503 / 54	245 / 441 / 91	223 / 542 / 73	267 / 533 / 34	218 / 657 / 27	331 / 422 / 63	266 / 517 / 51	236 / 465 / 87	224 / 566 / 70
	2	250 / 571 / 32	199 / 691 / 25	297 / 469 / 57	241 / 583 / 46	232 / 473 / 86	198 / 573 / 68	239 / 598 / 30	194 / 735 / 25	280 / 487 / 54	230 / 610 / 44	219 / 490 / 81	203 / 613 / 67	228 / 622 / 29	184 / 755 / 23	269 / 511 / 52	221 / 634 / 42	210 / 514 / 78	203 / 637 / 63	
	3	211 / 676 / 27	171 / 831 / 22	230 / 605 / 44	185 / 739 / 36	166 / 630 / 62	146 / 779 / 50	199 / 701 / 25	159 / 849 / 20	219 / 631 / 42	180 / 785 / 35	162 / 672 / 60	149 / 825 / 49	188 / 721 / 24	155 / 893 / 20	208 / 653 / 40	170 / 803 / 32	153 / 694 / 57	146 / 840 / 46	
5	1	183 / 556 / 32	158 / 677 / 26	226 / 437 / 46	197 / 539 / 37	200 / 479 / 54	222 / 588 / 44	174 / 577 / 31	164 / 714 / 25	218 / 458 / 45	200 / 559 / 36	203 / 500 / 52	231 / 622 / 43							
	2	154 / 643 / 27	136 / 795 / 22	186 / 534 / 38	162 / 654 / 31	181 / 537 / 49	200 / 657 / 39	150 / 679 / 27	140 / 834 / 22	178 / 554 / 36	168 / 690 / 30	182 / 557 / 47	208 / 693 / 38							
	3	130 / 760 / 23	114 / 934 / 19	146 / 691 / 30	127 / 844 / 24	134 / 733 / 36	146 / 880 / 29	126 / 798 / 22	117 / 973 / 18	138 / 708 / 28	131 / 882 / 23	132 / 747 / 34	150 / 917 / 28							
	5	1	202 / 556 / 32	171 / 677 / 26	249 / 437 / 49	211 / 539 / 39	200 / 479 / 65	222 / 588 / 52	193 / 577 / 31	173 / 714 / 25	240 / 458 / 47	211 / 559 / 37	203 / 500 / 62	231 / 622 / 51						
	2	171 / 643 / 27	147 / 795 / 22	204 / 534 / 40	174 / 654 / 32	181 / 537 / 58	200 / 657 / 47	166 / 679 / 27	149 / 834 / 22	195 / 554 / 38	177 / 690 / 31	182 / 557 / 56	208 / 693 / 46							
	3	144 / 760 / 23	123 / 934 / 19	160 / 691 / 31	136 / 844 / 25	134 / 733 / 43	146 / 880 / 35	139 / 798 / 22	124 / 973 / 18	151 / 708 / 30	137 / 882 / 25	132 / 747 / 41	150 / 917 / 33							
	10	1	256 / 556 / 32	214 / 677 / 26	314 / 437 / 60	264 / 539 / 48	223 / 479 / 83	225 / 588 / 67	245 / 577 / 31	215 / 714 / 25	303 / 458 / 58	261 / 559 / 46	222 / 500 / 79	231 / 622 / 65						
	2	216 / 643 / 27	184 / 795 / 22	258 / 534 / 50	217 / 654 / 40	201 / 537 / 75	203 / 657 / 60	211 / 679 / 27	185 / 834 / 22	247 / 554 / 47	219 / 690 / 39	199 / 557 / 71	208 / 693 / 58							
	3	182 / 760 / 23	155 / 934 / 19	202 / 691 / 39	170 / 844 / 31	149 / 733 / 55	148 / 880 / 44	176 / 798 / 22	154 / 973 / 18	191 / 708 / 37	170 / 882 / 30	145 / 747 / 52	150 / 917 / 42							
10	1	166 / 595 / 30	164 / 727 / 24	210 / 478 / 43	208 / 591 / 35	206 / 519 / 50	234 / 638 / 41	174 / 577 / 31	164 / 714 / 25	218 / 458 / 45	200 / 559 / 36	203 / 500 / 52	231 / 622 / 43							
	2	142 / 694 / 25	139 / 841 / 20	170 / 572 / 35	168 / 705 / 28	184 / 575 / 45	210 / 707 / 36	150 / 679 / 27	140 / 834 / 22	178 / 554 / 36	168 / 690 / 30	182 / 557 / 47	208 / 693 / 38							
	3	122 / 834 / 22	119 / 1008 / 18	134 / 742 / 27	134 / 919 / 23	136 / 782 / 33	154 / 952 / 27	126 / 798 / 22	117 / 973 / 18	138 / 708 / 28	131 / 882 / 23	132 / 747 / 34	150 / 917 / 28							
	5	1	184 / 595 / 30	171 / 727 / 24	231 / 478 / 45	215 / 591 / 37	206 / 519 / 60	234 / 638 / 48	193 / 577 / 31	173 / 714 / 25	240 / 458 / 47	211 / 559 / 37	203 / 500 / 62	231 / 622 / 51						
	2	157 / 694 / 25	145 / 841 / 20	187 / 572 / 37	174 / 705 / 30	184 / 575 / 53	210 / 707 / 43	166 / 679 / 27	149 / 834 / 22	195 / 554 / 38	177 / 690 / 31	182 / 557 / 56	208 / 693 / 46							
	3	135 / 834 / 22	124 / 1008 / 18	147 / 742 / 29	138 / 919 / 24	136 / 782 / 40	154 / 952 / 32	139 / 798 / 22	124 / 973 / 18	151 / 708 / 30	137 / 882 / 25	132 / 747 / 41	150 / 917 / 33							
	10	1	233 / 595 / 30	210 / 727 / 24	292 / 478 / 56	264 / 591 / 45	222 / 519 / 76	234 / 638 / 62	245 / 577 / 31	215 / 714 / 25	303 / 458 / 58	261 / 559 / 46	222 / 500 / 79	231 / 622 / 65						
	2	199 / 694 / 25	178 / 841 / 20	236 / 572 / 45	214 / 705 / 37	198 / 575 / 68	210 / 707 / 55	211 / 679 / 27	185 / 834 / 22	247 / 554 / 47	219 / 690 / 39	199 / 557 / 71	208 / 693 / 58							
	3	171 / 834 / 22	153 / 1008 / 18	185 / 742 / 36	170 / 919 / 29	146 / 782 / 50	154 / 952 / 41	176 / 798 / 22	154 / 973 / 18	191 / 708 / 37	170 / 882 / 30	145 / 747 / 52	150 / 917 / 42							

Exposure Category : D

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft	92.5in x 45.9in	Load: Up / Down / Side , lbs																																
Exposure Category : D	Wind Speed [mph]	140						150						160																						
	Panel Angle	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
0	1	1	162 / 626 / 29	169 / 760 / 23	202 / 496 / 41	210 / 607 / 33	210 / 536 / 48	243 / 670 / 39	158 / 668 / 27	177 / 820 / 22	195 / 528 / 38	218 / 648 / 31	219 / 577 / 45	252 / 709 / 36	160 / 701 / 25	184 / 873 / 20	202 / 565 / 36	230 / 700 / 29	233 / 628 / 43	266 / 762 / 34																
		2	138 / 726 / 25	142 / 873 / 20	166 / 603 / 34	173 / 737 / 27	191 / 605 / 44	217 / 739 / 35	132 / 763 / 22	154 / 967 / 19	161 / 644 / 32	183 / 797 / 26	199 / 647 / 41	230 / 799 / 33	137 / 814 / 21	158 / 1018 / 18	169 / 697 / 30	191 / 851 / 24	204 / 680 / 37	241 / 853 / 31																
		3	114 / 839 / 20	121 / 1040 / 17	130 / 776 / 27	137 / 952 / 22	140 / 815 / 32	158 / 984 / 26	115 / 931 / 20	124 / 1092 / 15	127 / 837 / 25	141 / 1011 / 20	146 / 875 / 30	171 / 1084 / 25	118 / 982 / 18	132 / 1184 / 15	132 / 891 / 23	145 / 1056 / 18	152 / 926 / 28	175 / 1128 / 23																
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ASCE Group Zone																																				
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	ASCE Group Zone																																			
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2	156 / 996 / 18	178 / 1201 / 15	187 / 826 / 26	213 / 998 / 21	236																															

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]	95				100				105										
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30						
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	1	351 / 481 / 38	283 / 592 / 31	440 / 384 / 83	352 / 476 / 67	294 / 422 / 116	250 / 516 / 93	338 / 508 / 36	269 / 618 / 29	420 / 404 / 79	339 / 503 / 64	279 / 441 / 110	250 / 542 / 89	324 / 533 / 35	264 / 657 / 28	400 / 422 / 76	321 / 517 / 60	269 / 465 / 106	250 / 566 / 85
15	2	303 / 571 / 33	241 / 691 / 26	359 / 469 / 68	291 / 583 / 55	264 / 473 / 104	223 / 573 / 83	289 / 598 / 31	234 / 735 / 25	339 / 487 / 64	278 / 610 / 53	249 / 490 / 99	228 / 613 / 81	276 / 622 / 30	222 / 755 / 24	325 / 511 / 62	266 / 634 / 50	239 / 514 / 95	227 / 637 / 77
	3	255 / 676 / 28	207 / 831 / 22	278 / 605 / 53	224 / 739 / 42	189 / 630 / 75	165 / 779 / 61	241 / 701 / 26	193 / 849 / 21	264 / 631 / 50	217 / 785 / 41	184 / 672 / 73	167 / 825 / 59	227 / 721 / 25	188 / 893 / 20	251 / 653 / 48	205 / 803 / 39	174 / 694 / 69	163 / 840 / 55
	1	413 / 481 / 41	332 / 592 / 33	508 / 378 / 95	413 / 476 / 77	329 / 422 / 139	278 / 516 / 111	396 / 508 / 40	316 / 618 / 32	492 / 404 / 92	397 / 503 / 74	313 / 441 / 132	278 / 542 / 106	380 / 533 / 38	309 / 657 / 31	469 / 422 / 88	376 / 517 / 70	302 / 465 / 127	276 / 566 / 102
20	2	356 / 571 / 36	283 / 691 / 28	421 / 469 / 79	342 / 583 / 64	296 / 473 / 125	249 / 573 / 99	340 / 598 / 34	275 / 735 / 28	397 / 487 / 74	326 / 610 / 61	279 / 490 / 118	253 / 613 / 97	324 / 622 / 32	261 / 755 / 26	381 / 511 / 71	312 / 634 / 58	268 / 514 / 113	251 / 637 / 92
	3	299 / 676 / 30	243 / 831 / 24	326 / 605 / 61	262 / 739 / 49	212 / 630 / 90	184 / 779 / 73	283 / 701 / 28	227 / 849 / 23	310 / 631 / 58	254 / 785 / 48	207 / 672 / 87	185 / 825 / 71	267 / 721 / 27	220 / 893 / 22	294 / 653 / 55	240 / 803 / 45	196 / 694 / 83	180 / 840 / 66
	1	413 / 481 / 41	332 / 592 / 33	508 / 378 / 95	413 / 476 / 77	365 / 422 / 167	307 / 516 / 133	396 / 508 / 40	316 / 618 / 32	492 / 404 / 92	397 / 503 / 74	347 / 441 / 158	305 / 542 / 127	380 / 533 / 38	309 / 657 / 31	469 / 422 / 88	376 / 517 / 70	334 / 465 / 153	302 / 566 / 122
25	2	356 / 571 / 36	283 / 691 / 28	421 / 469 / 79	342 / 583 / 64	328 / 473 / 150	274 / 573 / 119	340 / 598 / 34	275 / 735 / 28	397 / 487 / 74	326 / 610 / 61	310 / 490 / 141	278 / 613 / 116	324 / 622 / 32	261 / 755 / 26	381 / 511 / 71	312 / 634 / 58	297 / 514 / 136	274 / 637 / 110
	3	299 / 676 / 30	243 / 831 / 24	326 / 605 / 61	262 / 739 / 49	235 / 630 / 108	203 / 779 / 88	283 / 701 / 28	227 / 849 / 23	310 / 631 / 58	254 / 785 / 48	229 / 672 / 105	203 / 825 / 85	267 / 721 / 27	220 / 893 / 22	294 / 653 / 55	240 / 803 / 45	217 / 694 / 99	197 / 840 / 79
	1	413 / 481 / 41	332 / 592 / 33	508 / 378 / 95	413 / 476 / 77	365 / 422 / 167	307 / 516 / 133	396 / 508 / 40	316 / 618 / 32	492 / 404 / 92	397 / 503 / 74	347 / 441 / 158	305 / 542 / 127	380 / 533 / 38	309 / 657 / 31	469 / 422 / 88	376 / 517 / 70	334 / 465 / 153	302 / 566 / 122
Wind Speed [mph]	110				115				120				130						
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
15	1	310 / 556 / 33	257 / 677 / 27	379 / 437 / 72	316 / 539 / 58	254 / 479 / 101	250 / 588 / 81	296 / 577 / 32	257 / 714 / 26	366 / 458 / 69	311 / 559 / 55	251 / 500 / 97	255 / 622 / 79	296 / 577 / 32	257 / 714 / 26	366 / 458 / 69	311 / 559 / 55	251 / 500 / 97	255 / 622 / 79
	2	262 / 643 / 28	222 / 795 / 23	312 / 534 / 59	260 / 654 / 48	229 / 537 / 91	225 / 657 / 73	255 / 679 / 28	221 / 834 / 22	298 / 554 / 56	261 / 690 / 46	226 / 557 / 87	229 / 693 / 71	255 / 679 / 28	221 / 834 / 22	298 / 554 / 56	261 / 690 / 46	226 / 557 / 87	229 / 693 / 71
	3	221 / 760 / 24	186 / 934 / 20	244 / 691 / 46	204 / 844 / 37	169 / 733 / 67	165 / 880 / 53	214 / 798 / 23	184 / 973 / 19	231 / 708 / 44	203 / 882 / 36	164 / 747 / 63	166 / 917 / 51	214 / 798 / 23	184 / 973 / 19	231 / 708 / 44	203 / 882 / 36	164 / 747 / 63	166 / 917 / 51
20	1	364 / 556 / 36	300 / 677 / 29	445 / 437 / 83	369 / 539 / 67	285 / 479 / 120	274 / 588 / 97	348 / 577 / 35	299 / 714 / 28	429 / 458 / 80	362 / 559 / 64	281 / 500 / 116	279 / 622 / 95	348 / 577 / 35	299 / 714 / 28	429 / 458 / 80	362 / 559 / 64	281 / 500 / 116	279 / 622 / 95
	2	308 / 643 / 31	259 / 795 / 25	365 / 534 / 69	303 / 654 / 55	257 / 537 / 109	248 / 657 / 87	299 / 679 / 30	257 / 834 / 24	350 / 554 / 66	303 / 690 / 54	253 / 557 / 104	251 / 693 / 85	299 / 679 / 30	257 / 834 / 24	350 / 554 / 66	303 / 690 / 54	253 / 557 / 104	251 / 693 / 85
	3	259 / 760 / 26	217 / 934 / 21	286 / 691 / 54	238 / 844 / 43	190 / 733 / 80	181 / 880 / 64	251 / 798 / 25	214 / 973 / 20	270 / 708 / 51	236 / 882 / 42	184 / 747 / 76	182 / 917 / 62	251 / 798 / 25	214 / 973 / 20	270 / 708 / 51	236 / 882 / 42	184 / 747 / 76	182 / 917 / 62
25	1	364 / 556 / 36	300 / 677 / 29	445 / 437 / 83	369 / 539 / 67	316 / 479 / 144	299 / 588 / 116	348 / 577 / 35	299 / 714 / 28	429 / 458 / 80	362 / 559 / 64	311 / 500 / 139	303 / 622 / 113	348 / 577 / 35	299 / 714 / 28	429 / 458 / 80	362 / 559 / 64	311 / 500 / 139	303 / 622 / 113
	2	308 / 643 / 31	259 / 795 / 25	365 / 534 / 69	303 / 654 / 55	285 / 537 / 130	270 / 657 / 105	299 / 679 / 30	257 / 834 / 24	350 / 554 / 66	303 / 690 / 54	279 / 557 / 125	273 / 693 / 102	299 / 679 / 30	257 / 834 / 24	350 / 554 / 66	303 / 690 / 54	279 / 557 / 125	273 / 693 / 102
	3	259 / 760 / 26	217 / 934 / 21	286 / 691 / 54	238 / 844 / 43	211 / 733 / 96	197 / 880 / 77	251 / 798 / 25	214 / 973 / 20	270 / 708 / 51	236 / 882 / 42	203 / 747 / 91	197 / 917 / 74	251 / 798 / 25	214 / 973 / 20	270 / 708 / 51	236 / 882 / 42	203 / 747 / 91	197 / 917 / 74

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																			
	140						150						160							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge																	
15	1	276 / 626 / 30	250 / 760 / 24	339 / 496 / 64	307 / 607 / 51	249 / 536 / 89	257 / 670 / 73	261 / 668 / 28	248 / 820 / 22	319 / 528 / 59	302 / 648 / 48	250 / 577 / 83	258 / 709 / 67	251 / 701 / 25	246 / 873 / 21	312 / 565 / 55	303 / 700 / 45	256 / 628 / 79	266 / 762 / 63	
	2	234 / 726 / 25	211 / 873 / 20	278 / 603 / 53	254 / 737 / 42	227 / 605 / 81	230 / 739 / 65	218 / 763 / 23	215 / 967 / 20	263 / 644 / 49	253 / 797 / 40	226 / 647 / 75	235 / 799 / 61	214 / 814 / 22	211 / 1018 / 18	262 / 697 / 46	252 / 851 / 37	224 / 680 / 69	241 / 853 / 57	
	3	193 / 839 / 21	180 / 1040 / 17	217 / 776 / 41	200 / 952 / 34	166 / 815 / 59	167 / 984 / 48	190 / 931 / 20	174 / 1092 / 16	208 / 837 / 39	196 / 1011 / 31	167 / 875 / 55	175 / 1084 / 46	185 / 982 / 19	176 / 1184 / 15	204 / 891 / 36	191 / 1056 / 28	167 / 926 / 51	175 / 1128 / 42	
	20	1	324 / 626 / 32	288 / 760 / 26	397 / 496 / 74	354 / 607 / 60	276 / 536 / 106	280 / 670 / 87	305 / 668 / 30	284 / 820 / 24	372 / 528 / 69	345 / 648 / 55	275 / 577 / 99	279 / 709 / 80	292 / 701 / 28	280 / 873 / 23	363 / 565 / 64	344 / 700 / 52	280 / 628 / 95	284 / 762 / 76
		2	275 / 726 / 28	243 / 873 / 22	326 / 603 / 61	292 / 737 / 49	252 / 605 / 97	250 / 739 / 78	256 / 763 / 25	246 / 967 / 21	308 / 644 / 57	289 / 797 / 46	249 / 647 / 90	254 / 799 / 73	249 / 814 / 24	240 / 1018 / 20	304 / 697 / 54	285 / 851 / 43	245 / 680 / 83	258 / 853 / 69
		3	227 / 839 / 23	207 / 1040 / 19	254 / 776 / 48	230 / 952 / 39	184 / 815 / 71	182 / 984 / 57	223 / 931 / 22	199 / 1092 / 17	243 / 837 / 45	224 / 1011 / 36	184 / 875 / 66	189 / 1084 / 55	215 / 982 / 20	200 / 1184 / 16	236 / 891 / 42	217 / 1056 / 33	182 / 926 / 62	187 / 1128 / 50
	25	1	324 / 626 / 32	288 / 760 / 26	397 / 496 / 74	354 / 607 / 60	303 / 536 / 127	302 / 670 / 105	305 / 668 / 30	284 / 820 / 24	372 / 528 / 69	345 / 648 / 55	301 / 577 / 119	300 / 709 / 96	292 / 701 / 28	280 / 873 / 23	363 / 565 / 64	344 / 700 / 52	305 / 628 / 113	304 / 762 / 91
		2	275 / 726 / 28	243 / 873 / 22	326 / 603 / 61	292 / 737 / 49	276 / 605 / 116	270 / 739 / 94	256 / 763 / 25	246 / 967 / 21	308 / 644 / 57	289 / 797 / 46	272 / 647 / 108	273 / 799 / 88	249 / 814 / 24	240 / 1018 / 20	304 / 697 / 54	285 / 851 / 43	267 / 680 / 99	275 / 853 / 82
		3	227 / 839 / 23	207 / 1040 / 19	254 / 776 / 48	230 / 952 / 39	202 / 815 / 85	196 / 984 / 68	223 / 931 / 22	199 / 1092 / 17	243 / 837 / 45	224 / 1011 / 36	201 / 875 / 79	203 / 1084 / 65	215 / 982 / 20	200 / 1184 / 16	236 / 891 / 42	217 / 1056 / 33	198 / 926 / 74	199 / 1128 / 60
15	Wind Speed [mph]																			
	170									180										
	1	248 / 747 / 24	243 / 918 / 20	313 / 611 / 53	304 / 747 / 42	255 / 658 / 73	279 / 808 / 59	244 / 787 / 22	248 / 991 / 19	304 / 638 / 49	303 / 789 / 40	259 / 700 / 69	289 / 847 / 55	ASCE Group Zone						
	20	2	217 / 890 / 21	205 / 1055 / 17	252 / 724 / 42	249 / 896 / 35	227 / 726 / 65	251 / 898 / 53	211 / 928 / 20	208 / 1130 / 16	248 / 765 / 40	245 / 932 / 32	229 / 767 / 61	258 / 934 / 50	Panal Angle		Mono Slope			
		3	178 / 1022 / 17	177 / 1272 / 14	199 / 936 / 34	194 / 1140 / 27	165 / 967 / 48	186 / 1214 / 40	179 / 1097 / 17	178 / 1352 / 14	192 / 970 / 31	196 / 1218 / 26	170 / 1040 / 46	196 / 1294 / 38	0 - 3	1 = 1' / 1				
		1	286 / 747 / 26	274 / 918 / 21	361 / 611 / 61	343 / 747 / 49	277 / 658 / 87	288 / 808 / 71	280 / 787 / 24	278 / 991 / 20	349 / 638 / 57	340 / 789 / 46	280 / 700 / 83	290 / 847 / 66		2 = 2				
	2	251 / 890 / 23	232 / 1055 / 18	290 / 724 / 49	280 / 896 / 40	247 / 726 / 78	259 / 898 / 64	243 / 928 / 21	233 / 1130 / 17	285 / 765 / 46	274 / 932 / 37	248 / 767 / 73	259 / 934 / 59	3 = 3						
	25	3	206 / 1022 / 19	200 / 1272 / 16	229 / 936 / 39	218 / 1140 / 32	180 / 967 / 57	192 / 1214 / 48	205 / 1097 / 18	200 / 1352 / 15	221 / 970 / 36	219 / 1218 / 30	184 / 1040 / 55	197 / 1294 / 45	3 - 10	1 = 1				
		1	286 / 747 / 26	274 / 918 / 21	361 / 611 / 61	343 / 747 / 49	300 / 658 / 105	306 / 808 / 85	280 / 787 / 24	278 / 991 / 20	349 / 638 / 57	340 / 789 / 46	301 / 700 / 99	307 / 847 / 79		2 = 2' / 2				
2		251 / 890 / 23	232 / 1055 / 18	290 / 724 / 49	280 / 896 / 40	267 / 726 / 94	276 / 898 / 77	243 / 928 / 21	233 / 1130 / 17	285 / 765 / 46	274 / 932 / 37	267 / 767 / 88	275 / 934 / 71	3 = 3' / 3						
10 - 30	3	206 / 1022 / 19	200 / 1272 / 16	229 / 936 / 39	218 / 1140 / 32	195 / 967 / 68	204 / 1214 / 57	205 / 1097 / 18	200 / 1352 / 15	221 / 970 / 36	219 / 1218 / 30	198 / 1040 / 65	209 / 1294 / 54	10 - 30	1 = 1					
	1	247 / 849 / 22	242 / 1017 / 17	303 / 675 / 46	302 / 824 / 37	262 / 737 / 65	308 / 912 / 53	242 / 878 / 20	245 / 1079 / 17	301 / 709 / 44	309 / 883 / 36	268 / 769 / 61	313 / 937 / 50		2 = 2					
	2	213 / 996 / 19	210 / 1201 / 15	253 / 826 / 39	250 / 998 / 31	238 / 828 / 59	273 / 1000 / 48	206 / 1017 / 17	212 / 1265 / 14	248 / 856 / 36	254 / 1061 / 30	242 / 858 / 55	288 / 1063 / 46		3 = 3					
15	3	179 / 1168 / 16	179 / 1424 / 13	194 / 1037 / 30	198 / 1291 / 25	175 / 1110 / 44	205 / 1366 / 36	179 / 1234 / 15	179 / 1486 / 12	195 / 1101 / 28	199 / 1356 / 23	181 / 1175 / 42	213 / 1431 / 34							
	1	282 / 849 / 24	269 / 1017 / 19	345 / 675 / 54	335 / 824 / 43	282 / 737 / 78	308 / 912 / 64	274 / 878 / 22	272 / 1079 / 18	340 / 709 / 51	342 / 883 / 42	283 / 769 / 73	313 / 937 / 59							
	2	243 / 996 / 20	234 / 1201 / 16	288 / 826 / 45	278 / 998 / 36	256 / 828 / 71	273 / 1000 / 57	234 / 1017 / 19	235 / 1265 / 16	280 / 856 / 42	281 / 1061 / 35	255 / 858 / 66	288 / 1063 / 55							
20	3	205 / 1168 / 17	199 / 1424 / 14	221 / 1037 / 35	220 / 1291 / 29	188 / 1110 / 52	205 / 1366 / 43	203 / 1234 / 16	198 / 1486 / 13	220 / 1101 / 33	220 / 1356 / 27	192 / 1175 / 50	213 / 1431 / 40							
	1	282 / 849 / 24	269 / 1017 / 19	345 / 675 / 54	335 / 824 / 43	302 / 737 / 94	318 / 912 / 77	274 / 878 / 22	272 / 1079 / 18	340 / 709 / 51	342 / 883 / 42	301 / 769 / 88	316 / 937 / 71							
	2	243 / 996 / 20	234 / 1201 / 16	288 / 826 / 45	278 / 998 / 36	275 / 828 / 85	283 / 1000 / 68	234 / 1017 / 19	235 / 1265 / 16	280 / 856 / 42	281 / 1061 / 35	272 / 858 / 79	291 / 1063 / 65							
25	3	205 / 1168 / 17	199 / 1424 / 14	221 / 1037 / 35	220 / 1291 / 29	202 / 1110 / 63	212 / 1366 / 51	203 / 1234 / 16	198 / 1486 / 13	220 / 1101 / 33	220 / 1356 / 27	204 / 1175 / 60	215 / 1431 / 48							

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft						92.5in x 45.9in						Load: Up / Down / Side , lbs																																																																																																																																																																																									
Wind Speed [mph]		95						100						105																																																																																																																																																																																									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																																																																																																																																																																					
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																																																																																																																																				
	30	1	415 / 481 / 41	333 / 592 / 33	511 / 378 / 96	415 / 476 / 78	401 / 422 / 194	335 / 516 / 155	398 / 508 / 40	317 / 618 / 32	495 / 404 / 93	399 / 503 / 75	381 / 441 / 184	332 / 542 / 148	382 / 533 / 38	311 / 657 / 31	471 / 422 / 88	378 / 517 / 70	367 / 465 / 178	329 / 566 / 142																																																																																																																																																																																			
2		358 / 571 / 36	285 / 691 / 28	423 / 469 / 79	343 / 583 / 64	360 / 473 / 175	300 / 573 / 138	341 / 598 / 34	277 / 735 / 28	399 / 487 / 75	327 / 610 / 61	340 / 490 / 165	303 / 613 / 135	325 / 622 / 32	262 / 755 / 26	383 / 511 / 72	313 / 634 / 58	326 / 514 / 158	298 / 637 / 129																																																																																																																																																																																				
3		301 / 676 / 30	244 / 831 / 24	327 / 605 / 61	264 / 739 / 50	258 / 630 / 125	221 / 779 / 102	285 / 701 / 28	228 / 849 / 23	311 / 631 / 58	256 / 785 / 48	252 / 672 / 122	222 / 825 / 99	268 / 721 / 27	221 / 893 / 22	295 / 653 / 55	241 / 803 / 45	238 / 694 / 115	214 / 840 / 92																																																																																																																																																																																				
1		456 / 481 / 43	366 / 592 / 35	543 / 367 / 101	456 / 476 / 85	437 / 422 / 222	364 / 516 / 177	438 / 508 / 42	349 / 618 / 33	543 / 404 / 101	438 / 503 / 82	415 / 441 / 211	360 / 542 / 169	420 / 533 / 40	342 / 657 / 32	517 / 422 / 96	414 / 517 / 77	400 / 465 / 203	355 / 566 / 162																																																																																																																																																																																				
2		393 / 571 / 37	313 / 691 / 30	465 / 469 / 87	377 / 583 / 70	392 / 473 / 199	325 / 573 / 158	375 / 598 / 36	304 / 735 / 29	438 / 487 / 82	360 / 610 / 67	370 / 490 / 188	328 / 613 / 154	357 / 622 / 34	288 / 755 / 27	421 / 511 / 78	344 / 634 / 64	356 / 514 / 181	322 / 637 / 147																																																																																																																																																																																				
3		331 / 676 / 32	268 / 831 / 26	360 / 605 / 67	289 / 739 / 54	282 / 630 / 143	240 / 779 / 117	313 / 701 / 30	250 / 849 / 24	342 / 631 / 64	281 / 785 / 52	274 / 672 / 139	240 / 825 / 113	295 / 721 / 28	243 / 893 / 23	324 / 653 / 61	265 / 803 / 49	259 / 694 / 132	231 / 840 / 106																																																																																																																																																																																				
40	1	497 / 481 / 46	400 / 592 / 37	573 / 355 / 106	497 / 476 / 92	473 / 422 / 249	392 / 516 / 199	477 / 508 / 44	380 / 618 / 35	573 / 391 / 106	478 / 503 / 89	449 / 441 / 237	387 / 542 / 190	458 / 533 / 42	372 / 657 / 34	563 / 422 / 104	451 / 517 / 83	433 / 465 / 228	381 / 566 / 182																																																																																																																																																																																				
	2	429 / 571 / 39	341 / 691 / 31	506 / 469 / 94	411 / 583 / 76	425 / 473 / 224	351 / 573 / 178	409 / 598 / 38	331 / 735 / 31	478 / 487 / 89	392 / 610 / 73	401 / 490 / 212	353 / 613 / 174	390 / 622 / 36	314 / 755 / 29	458 / 511 / 85	375 / 634 / 69	385 / 514 / 203	345 / 637 / 165																																																																																																																																																																																				
	3	361 / 676 / 33	292 / 831 / 27	392 / 605 / 73	315 / 739 / 59	305 / 630 / 161	259 / 779 / 131	341 / 701 / 31	273 / 849 / 25	373 / 631 / 69	306 / 785 / 57	297 / 672 / 157	258 / 825 / 127	322 / 721 / 30	265 / 893 / 24	354 / 653 / 66	288 / 803 / 53	281 / 694 / 148	248 / 840 / 119																																																																																																																																																																																				
Wind Speed [mph]		110						115																																																																																																																																																																																															
30	1	366 / 556 / 36	302 / 677 / 29	447 / 437 / 84	371 / 539 / 67	347 / 479 / 168	324 / 588 / 135	350 / 577 / 35	301 / 714 / 28	431 / 458 / 81	363 / 559 / 64	341 / 500 / 161	328 / 622 / 132	301 / 679 / 30	258 / 834 / 24	351 / 554 / 66	304 / 690 / 54	306 / 557 / 145	295 / 693 / 119																																																																																																																																																																																				
	2	309 / 643 / 31	260 / 795 / 25	367 / 534 / 69	305 / 654 / 55	313 / 537 / 152	293 / 657 / 122	301 / 679 / 30	258 / 834 / 24	351 / 554 / 66	304 / 690 / 54	306 / 557 / 145	295 / 693 / 119	252 / 798 / 25	215 / 973 / 20	272 / 708 / 51	237 / 882 / 42	223 / 747 / 106	213 / 917 / 86																																																																																																																																																																																				
	3	260 / 760 / 26	218 / 934 / 21	287 / 691 / 54	239 / 844 / 44	231 / 733 / 112	214 / 880 / 89	252 / 798 / 25	215 / 973 / 20	272 / 708 / 51	237 / 882 / 42	223 / 747 / 106	213 / 917 / 86	384 / 577 / 37	329 / 714 / 30	473 / 458 / 88	397 / 559 / 70	370 / 500 / 184	352 / 622 / 151																																																																																																																																																																																				
	1	402 / 556 / 38	331 / 677 / 31	491 / 437 / 91	406 / 539 / 74	378 / 479 / 192	349 / 588 / 154	384 / 577 / 37	329 / 714 / 30	473 / 458 / 88	397 / 559 / 70	370 / 500 / 184	352 / 622 / 151	331 / 679 / 32	282 / 834 / 26	386 / 554 / 72	332 / 690 / 59	333 / 557 / 166	317 / 693 / 136																																																																																																																																																																																				
	2	340 / 643 / 32	285 / 795 / 27	403 / 534 / 75	334 / 654 / 61	341 / 537 / 173	315 / 657 / 139	331 / 679 / 32	282 / 834 / 26	386 / 554 / 72	332 / 690 / 59	333 / 557 / 166	317 / 693 / 136	277 / 798 / 27	235 / 973 / 22	298 / 708 / 56	259 / 882 / 46	242 / 747 / 121	229 / 917 / 98																																																																																																																																																																																				
	3	286 / 760 / 27	239 / 934 / 22	316 / 691 / 59	262 / 844 / 48	252 / 733 / 128	230 / 880 / 102	277 / 798 / 27	235 / 973 / 22	298 / 708 / 56	259 / 882 / 46	242 / 747 / 121	229 / 917 / 98	419 / 577 / 38	357 / 714 / 31	516 / 458 / 96	431 / 559 / 76	400 / 500 / 207	376 / 622 / 169																																																																																																																																																																																				
40	1	438 / 556 / 40	360 / 677 / 32	535 / 437 / 99	441 / 539 / 80	409 / 479 / 216	374 / 588 / 174	419 / 577 / 38	357 / 714 / 31	516 / 458 / 96	431 / 559 / 76	400 / 500 / 207	376 / 622 / 169	361 / 679 / 33	306 / 834 / 27	420 / 554 / 78	361 / 690 / 64	359 / 557 / 186	339 / 693 / 152																																																																																																																																																																																				
	2	370 / 643 / 34	310 / 795 / 28	439 / 534 / 82	363 / 654 / 66	369 / 537 / 195	338 / 657 / 157	361 / 679 / 33	306 / 834 / 27	420 / 554 / 78	361 / 690 / 64	359 / 557 / 186	339 / 693 / 152	302 / 798 / 28	255 / 973 / 23	325 / 708 / 60	281 / 882 / 50	262 / 747 / 136	245 / 917 / 110																																																																																																																																																																																				
	3	312 / 760 / 29	260 / 934 / 23	344 / 691 / 64	285 / 844 / 52	273 / 733 / 144	246 / 880 / 114	302 / 798 / 28	255 / 973 / 23	325 / 708 / 60	281 / 882 / 50	262 / 747 / 136	245 / 917 / 110	Wind Speed [mph]		120						130												30	1	333 / 595 / 33	291 / 727 / 27	415 / 478 / 78	364 / 591 / 63	336 / 519 / 155	322 / 638 / 125	350 / 577 / 35	301 / 714 / 28	431 / 458 / 81	363 / 559 / 64	341 / 500 / 161	328 / 622 / 132	301 / 679 / 30	258 / 834 / 24	351 / 554 / 66	304 / 690 / 54	306 / 557 / 145	295 / 693 / 119	2	285 / 694 / 28	247 / 841 / 23	335 / 572 / 63	295 / 705 / 51	300 / 575 / 138	288 / 707 / 112	301 / 679 / 30	258 / 834 / 24	351 / 554 / 66	304 / 690 / 54	306 / 557 / 145	295 / 693 / 119	252 / 798 / 25	215 / 973 / 20	272 / 708 / 51	237 / 882 / 42	223 / 747 / 106	213 / 917 / 86	3	244 / 834 / 24	212 / 1008 / 20	264 / 742 / 50	234 / 919 / 41	222 / 782 / 102	212 / 952 / 83	252 / 798 / 25	215 / 973 / 20	272 / 708 / 51	237 / 882 / 42	223 / 747 / 106	213 / 917 / 86	384 / 577 / 37	329 / 714 / 30	473 / 458 / 88	397 / 559 / 70	370 / 500 / 184	352 / 622 / 151	1	366 / 595 / 35	317 / 727 / 28	456 / 478 / 85	397 / 591 / 69	364 / 519 / 177	345 / 638 / 143	384 / 577 / 37	329 / 714 / 30	473 / 458 / 88	397 / 559 / 70	370 / 500 / 184	352 / 622 / 151	331 / 679 / 32	282 / 834 / 26	386 / 554 / 72	332 / 690 / 59	333 / 557 / 166	317 / 693 / 136	2	313 / 694 / 30	269 / 841 / 24	368 / 572 / 69	321 / 705 / 56	326 / 575 / 158	309 / 707 / 128	331 / 679 / 32	282 / 834 / 26	386 / 554 / 72	332 / 690 / 59	333 / 557 / 166	317 / 693 / 136	277 / 798 / 27	235 / 973 / 22	298 / 708 / 56	259 / 882 / 46	242 / 747 / 121	229 / 917 / 98	3	268 / 834 / 26	231 / 1008 / 21	289 / 742 / 54	255 / 919 / 44	241 / 782 / 117	227 / 952 / 94	277 / 798 / 27	235 / 973 / 22	298 / 708 / 56	259 / 882 / 46	242 / 747 / 121	229 / 917 / 98	419 / 577 / 38	357 / 714 / 31	516 / 458 / 96	431 / 559 / 76	400 / 500 / 207	376 / 622 / 169	40	1	400 / 595 / 37	344 / 727 / 30	497 / 478 / 92	430 / 591 / 74	393 / 519 / 199	368 / 638 / 161	419 / 577 / 38	357 / 714 / 31	516 / 458 / 96	431 / 559 / 76	400 / 500 / 207	376 / 622 / 169	361 / 679 / 33	306 / 834 / 27	420 / 554 / 78	361 / 690 / 64	359 / 557 / 186	339 / 693 / 152	2	341 / 694 / 31	292 / 841 / 25	401 / 572 / 74	348 / 705 / 60	351 / 575 / 178	330 / 707 / 144	361 / 679 / 33	306 / 834 / 27	420 / 554 / 78	361 / 690 / 64	359 / 557 / 186	339 / 693 / 152	302 / 798 / 28	255 / 973 / 23	325 / 708 / 60	281 / 882 / 50	262 / 747 / 136	245 / 917 / 110	3	292 / 834 / 27	250 / 1008 / 22	315 / 742 / 59	276 / 919 / 48	259 / 782 / 131	243 / 952 / 106	302 / 798 / 28	255 / 973 / 23	325 / 708 / 60	281 / 882 / 50	262 / 747 / 136
Wind Speed [mph]		120						130																																																																																																																																																																																															
30	1	333 / 595 / 33	291 / 727 / 27	415 / 478 / 78	364 / 591 / 63	336 / 519 / 155	322 / 638 / 125	350 / 577 / 35	301 / 714 / 28	431 / 458 / 81	363 / 559 / 64	341 / 500 / 161	328 / 622 / 132	301 / 679 / 30	258 / 834 / 24	351 / 554 / 66	304 / 690 / 54	306 / 557 / 145	295 / 693 / 119																																																																																																																																																																																				
	2	285 / 694 / 28	247 / 841 / 23	335 / 572 / 63	295 / 705 / 51	300 / 575 / 138	288 / 707 / 112	301 / 679 / 30	258 / 834 / 24	351 / 554 / 66	304 / 690 / 54	306 / 557 / 145	295 / 693 / 119	252 / 798 / 25	215 / 973 / 20	272 / 708 / 51	237 / 882 / 42	223 / 747 / 106	213 / 917 / 86																																																																																																																																																																																				
	3	244 / 834 / 24	212 / 1008 / 20	264 / 742 / 50	234 / 919 / 41	222 / 782 / 102	212 / 952 / 83	252 / 798 / 25	215 / 973 / 20	272 / 708 / 51	237 / 882 / 42	223 / 747 / 106	213 / 917 / 86	384 / 577 / 37	329 / 714 / 30	473 / 458 / 88	397 / 559 / 70	370 / 500 / 184	352 / 622 / 151																																																																																																																																																																																				
	1	366 / 595 / 35	317 / 727 / 28	456 / 478 / 85	397 / 591 / 69	364 / 519 / 177	345 / 638 / 143	384 / 577 / 37	329 / 714 / 30	473 / 458 / 88	397 / 559 / 70	370 / 500 / 184	352 / 622 / 151	331 / 679 / 32	282 / 834 / 26	386 / 554 / 72	332 / 690 / 59	333 / 557 / 166	317 / 693 / 136																																																																																																																																																																																				
	2	313 / 694 / 30	269 / 841 / 24	368 / 572 / 69	321 / 705 / 56	326 / 575 / 158	309 / 707 / 128	331 / 679 / 32	282 / 834 / 26	386 / 554 / 72	332 / 690 / 59	333 / 557 / 166	317 / 693 / 136	277 / 798 / 27	235 / 973 / 22	298 / 708 / 56	259 / 882 / 46	242 / 747 / 121	229 / 917 / 98																																																																																																																																																																																				
	3	268 / 834 / 26	231 / 1008 / 21	289 / 742 / 54	255 / 919 / 44	241 / 782 / 117	227 / 952 / 94	277 / 798 / 27	235 / 973 / 22	298 / 708 / 56	259 / 882 / 46	242 / 747 / 121	229 / 917 / 98	419 / 577 / 38	357 / 714 / 31	516 / 458 / 96	431 / 559 / 76	400 / 500 / 207	376 / 622 / 169																																																																																																																																																																																				
40	1	400 / 595 / 37	344 / 727 / 30	497 / 478 / 92	430 / 591 / 74	393 / 519 / 199	368 / 638 / 161	419 / 577 / 38	357 / 714 / 31	516 / 458 / 96	431 / 559 / 76	400 / 500 / 207	376 / 622 / 169	361 / 679 / 33	306 / 834 / 27	420 / 554 / 78	361 / 690 / 64	359 / 557 / 186	339 / 693 / 152																																																																																																																																																																																				
	2	341 / 694 / 31	292 / 841 / 25	401 / 572 / 74	348 / 705 / 60	351 / 575 / 178	330 / 707 / 144	361 / 679 / 33	306 / 834 / 27	420 / 554 / 78	361 / 690 / 64	359 / 557 / 186	339 / 693 / 152	302 / 798 / 28	255 / 973 / 23	325 / 708 / 60	281 / 882 / 50	262 / 747 / 136	245 / 917 / 110																																																																																																																																																																																				
	3	292 / 834 / 27	250 / 1008 / 22	315 / 742 / 59	276 / 919 / 48	259 / 782 / 131	243 / 952 / 106	302 / 798 / 28	255 / 973 / 23	325 / 708 / 60	281 / 882 / 50	262 / 747 / 136	245 / 917 / 110																																																																																																																																																																																										

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																																																																																																																																																																																																																																																														
Wind Speed [mph]		140						150						160																																																																																																																																																																																																																																																						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																																																																																																																																																																																																																																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																																																																																																																																																																																																	
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>30</td><td>1</td><td>325 / 626 / 32</td><td>289 / 760 / 26</td><td style="background-color: yellow;">399 / 496 / 75</td><td>356 / 607 / 60</td><td>331 / 536 / 148</td><td>325 / 670 / 122</td><td>306 / 668 / 30</td><td>285 / 820 / 24</td><td>374 / 528 / 69</td><td>347 / 648 / 55</td><td>326 / 577 / 138</td><td>320 / 709 / 112</td><td>293 / 701 / 28</td><td>281 / 873 / 23</td><td>364 / 565 / 64</td><td>346 / 700 / 52</td><td>329 / 628 / 132</td><td>323 / 762 / 106</td></tr> <tr><td>30</td><td>2</td><td>277 / 726 / 28</td><td>244 / 873 / 22</td><td>327 / 603 / 61</td><td>293 / 737 / 50</td><td>301 / 605 / 135</td><td>290 / 739 / 109</td><td>257 / 763 / 25</td><td>247 / 967 / 21</td><td>309 / 644 / 57</td><td>290 / 797 / 47</td><td>295 / 647 / 125</td><td>292 / 799 / 102</td><td>250 / 814 / 24</td><td>241 / 1018 / 20</td><td>305 / 697 / 54</td><td>286 / 851 / 44</td><td>288 / 680 / 115</td><td>293 / 853 / 96</td></tr> <tr><td>30</td><td>3</td><td>228 / 839 / 23</td><td>208 / 1040 / 19</td><td>256 / 776 / 48</td><td>231 / 952 / 39</td><td>221 / 815 / 99</td><td>211 / 984 / 79</td><td>224 / 931 / 22</td><td>200 / 1092 / 17</td><td>244 / 837 / 45</td><td>225 / 1011 / 36</td><td>218 / 875 / 92</td><td>217 / 1084 / 76</td><td>216 / 982 / 20</td><td>201 / 1184 / 16</td><td>237 / 891 / 42</td><td>217 / 1056 / 33</td><td>214 / 926 / 86</td><td>212 / 1128 / 69</td></tr> <tr><td>35</td><td>1</td><td>357 / 626 / 34</td><td>315 / 760 / 27</td><td style="background-color: yellow;">438 / 496 / 82</td><td>387 / 607 / 65</td><td>358 / 536 / 169</td><td>347 / 670 / 139</td><td>336 / 668 / 32</td><td>310 / 820 / 26</td><td>410 / 528 / 75</td><td>376 / 648 / 61</td><td>352 / 577 / 158</td><td>341 / 709 / 128</td><td>321 / 701 / 29</td><td>303 / 873 / 24</td><td>398 / 565 / 70</td><td>373 / 700 / 57</td><td>353 / 628 / 151</td><td>342 / 762 / 121</td></tr> <tr><td>35</td><td>2</td><td>304 / 726 / 29</td><td>266 / 873 / 23</td><td>360 / 603 / 67</td><td>319 / 737 / 54</td><td>326 / 605 / 154</td><td>310 / 739 / 124</td><td>282 / 763 / 27</td><td>268 / 967 / 22</td><td>339 / 644 / 62</td><td>315 / 797 / 51</td><td>318 / 647 / 143</td><td>311 / 799 / 117</td><td>274 / 814 / 25</td><td>260 / 1018 / 21</td><td>333 / 697 / 59</td><td>309 / 851 / 48</td><td>309 / 680 / 132</td><td>310 / 853 / 109</td></tr> <tr><td>35</td><td>3</td><td>250 / 839 / 24</td><td>227 / 1040 / 20</td><td>281 / 776 / 52</td><td>252 / 952 / 43</td><td>239 / 815 / 113</td><td>225 / 984 / 91</td><td>246 / 931 / 23</td><td>217 / 1092 / 18</td><td>268 / 837 / 49</td><td>244 / 1011 / 39</td><td>235 / 875 / 106</td><td>231 / 1084 / 87</td><td>236 / 982 / 22</td><td>217 / 1184 / 17</td><td>259 / 891 / 46</td><td>235 / 1056 / 36</td><td>230 / 926 / 98</td><td>225 / 1128 / 79</td></tr> <tr><td>40</td><td>1</td><td>390 / 626 / 36</td><td>341 / 760 / 29</td><td style="background-color: yellow;">478 / 496 / 89</td><td>418 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1092 / 19</td><td>291 / 837 / 53</td><td>263 / 1011 / 43</td><td>252 / 875 / 119</td><td>245 / 1084 / 98</td><td>256 / 982 / 23</td><td>233 / 1184 / 18</td><td>281 / 891 / 50</td><td>252 / 1056 / 39</td><td>246 / 926 / 110</td><td>238 / 1128 / 89</td></tr> </table>																				30	1	325 / 626 / 32	289 / 760 / 26	399 / 496 / 75	356 / 607 / 60	331 / 536 / 148	325 / 670 / 122	306 / 668 / 30	285 / 820 / 24	374 / 528 / 69	347 / 648 / 55	326 / 577 / 138	320 / 709 / 112	293 / 701 / 28	281 / 873 / 23	364 / 565 / 64	346 / 700 / 52	329 / 628 / 132	323 / 762 / 106	30	2	277 / 726 / 28	244 / 873 / 22	327 / 603 / 61	293 / 737 / 50	301 / 605 / 135	290 / 739 / 109	257 / 763 / 25	247 / 967 / 21	309 / 644 / 57	290 / 797 / 47	295 / 647 / 125	292 / 799 / 102	250 / 814 / 24	241 / 1018 / 20	305 / 697 / 54	286 / 851 / 44	288 / 680 / 115	293 / 853 / 96	30	3	228 / 839 / 23	208 / 1040 / 19	256 / 776 / 48	231 / 952 / 39	221 / 815 / 99	211 / 984 / 79	224 / 931 / 22	200 / 1092 / 17	244 / 837 / 45	225 / 1011 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30	3	205 / 1168 / 17	200 / 1424 / 14	222 / 1037 / 35	221 / 1291 / 29	215 / 1110 / 73	223 / 1366 / 60	253 / 1017 / 20	251 / 1265 / 16	304 / 856 / 46	300 / 1061 / 38	306 / 858 / 106	319 / 1063 / 87	222 / 1168 / 18	214 / 1424 / 15	240 / 1037 / 38	236 / 1291 / 31	228 / 1110 / 83	234 / 1366 / 68																																																																																																																																																																																																																																																	
35	1	307 / 849 / 25	289 / 1017 / 20	375 / 675 / 59	359 / 824 / 48	342 / 737 / 124	351 / 912 / 102	297 / 878 / 23	290 / 1079 / 19	368 / 709 / 56	365 / 883 / 46	339 / 769 / 117	346 / 937 / 94	265 / 996 / 22	251 / 1201 / 17	312 / 826 / 49	297 / 998 / 39	311 / 828 / 113	312 / 1000 / 91																																																																																																																																																																																																																																																	
35	2	265 / 996 / 22	251 / 1201 / 17	312 / 826 / 49	297 / 998 / 39	311 / 828 / 113	312 / 1000 / 91	220 / 1234 / 17	211 / 1486 / 14	239 / 1101 / 36	235 / 1356 / 30	230 / 1175 / 79	236 / 1431 / 64	330 / 849 / 26	307 / 1017 / 21	403 / 675 / 64	382 / 824 / 52	362 / 737 / 140	368 / 912 / 114																																																																																																																																																																																																																																																	
35	3	222 / 1168 / 18	214 / 1424 / 15	240 / 1037 / 38	236 / 1291 / 31	228 / 1110 / 83	234 / 1366 / 68	272 / 1017 / 21	266 / 1265 / 17	325 / 856 / 50	318 / 1061 / 41	323 / 858 / 119	333 / 1063 / 98	285 / 996 / 23	267 / 1201 / 18	336 / 826 / 53	316 / 998 / 43	329 / 828 / 127	327 / 1000 / 102																																																																																																																																																																																																																																																	
40	1	330 / 849 / 26	307 / 1017 / 21	403 / 675 / 6																																																																																																																																																																																																																																																																

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	544 / 481 / 104	437 / 592 / 84	602 / 343 / 167	540 / 476 / 150	509 / 422 / 284	421 / 516 / 227	522 / 508 / 100	416 / 618 / 80	602 / 378 / 167	519 / 503 / 144	483 / 441 / 270	414 / 542 / 217	501 / 533 / 96	405 / 657 / 78	602 / 414 / 167	488 / 517 / 135	465 / 465 / 260	407 / 566 / 207
Wind Speed [mph]		110				115													
Exposure Category : D	45	1	480 / 556 / 92	389 / 677 / 74	581 / 437 / 161	477 / 539 / 130	440 / 479 / 246	399 / 588 / 198	458 / 577 / 88	386 / 714 / 72	560 / 458 / 155	464 / 559 / 124	430 / 500 / 236	400 / 622 / 193					
	2	405 / 643 / 78	335 / 795 / 64	477 / 534 / 132	392 / 654 / 107	397 / 537 / 222	360 / 657 / 179	394 / 679 / 76	331 / 834 / 62	457 / 554 / 127	389 / 690 / 104	386 / 557 / 212	360 / 693 / 174						
ASCE Group Zone			Panal Angle		Mono Slope														
			0 - 3		1 = 1' / 1														
				2 = 2															
				3 = 3															
		3 - 10		1 = 1															
				2 = 2' / 2															
				3 = 3' / 3															
		10 - 30		1 = 1															
				2 = 2															
				3 = 3															
Wind Speed [mph]		120				130													
Exposure Category : D	45	1	437 / 595 / 84	371 / 727 / 68	540 / 478 / 150	463 / 591 / 121	421 / 519 / 227	391 / 638 / 183	458 / 577 / 88	386 / 714 / 72	560 / 458 / 155	464 / 559 / 124	430 / 500 / 236	400 / 622 / 193					
	2	373 / 694 / 72	315 / 841 / 57	436 / 572 / 121	375 / 705 / 98	377 / 575 / 203	350 / 707 / 164	394 / 679 / 76	331 / 834 / 62	457 / 554 / 127	389 / 690 / 104	386 / 557 / 212	360 / 693 / 174						
ASCE Group Zone			Panal Angle		Mono Slope														
			0 - 3		1 = 1' / 1														
				2 = 2															
				3 = 3															
		3 - 10		1 = 1															
				2 = 2' / 2															
				3 = 3' / 3															
		10 - 30		1 = 1															
				2 = 2															
				3 = 3															
Wind Speed [mph]		130				140													
Exposure Category : D	45	1	437 / 595 / 84	371 / 727 / 68	540 / 478 / 150	463 / 591 / 121	421 / 519 / 227	391 / 638 / 183	458 / 577 / 88	386 / 714 / 72	560 / 458 / 155	464 / 559 / 124	430 / 500 / 236	400 / 622 / 193					
	2	373 / 694 / 72	315 / 841 / 57	436 / 572 / 121	375 / 705 / 98	377 / 575 / 203	350 / 707 / 164	394 / 679 / 76	331 / 834 / 62	457 / 554 / 127	389 / 690 / 104	386 / 557 / 212	360 / 693 / 174						
ASCE Group Zone			Panal Angle		Mono Slope														
			0 - 3		1 = 1' / 1														
				2 = 2															
				3 = 3															
		3 - 10		1 = 1															
				2 = 2' / 2															
				3 = 3' / 3															
		10 - 30		1 = 1															
				2 = 2															
				3 = 3															

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph] 140								150								160							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30					
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge			
45	1	426 / 626 / 82	367 / 760 / 66	519 / 496 / 144	450 / 607 / 115	413 / 536 / 217	392 / 670 / 179	396 / 668 / 76	358 / 820 / 62	482 / 528 / 132	434 / 648 / 107	403 / 577 / 203	382 / 709 / 164	375 / 701 / 70	349 / 873 / 57	466 / 565 / 124	428 / 700 / 101	402 / 628 / 193	381 / 762 / 154					
	2	363 / 726 / 70	309 / 873 / 55	426 / 603 / 118	371 / 737 / 95	376 / 605 / 198	350 / 739 / 159	332 / 763 / 64	310 / 967 / 53	399 / 644 / 109	363 / 797 / 89	365 / 647 / 183	348 / 799 / 150	320 / 814 / 60	299 / 1018 / 49	390 / 697 / 104	355 / 851 / 84	352 / 680 / 169	346 / 853 / 140					
	3	299 / 839 / 57	264 / 1040 / 47	332 / 776 / 92	293 / 952 / 75	275 / 815 / 145	255 / 984 / 116	289 / 931 / 55	251 / 1092 / 43	315 / 837 / 87	281 / 1011 / 69	269 / 875 / 135	259 / 1084 / 111	276 / 982 / 51	249 / 1184 / 41	303 / 891 / 81	269 / 1056 / 64	261 / 926 / 126	250 / 1128 / 102					
50	1	469 / 626 / 88	393 / 760 / 70	571 / 496 / 156	481 / 607 / 125	440 / 536 / 237	415 / 670 / 195	434 / 668 / 81	382 / 820 / 66	526 / 528 / 144	463 / 648 / 116	428 / 577 / 221	403 / 709 / 179	403 / 701 / 75	371 / 873 / 62	499 / 565 / 134	456 / 700 / 109	426 / 628 / 210	401 / 762 / 168					
	2	399 / 726 / 75	331 / 873 / 59	469 / 603 / 128	397 / 737 / 103	401 / 605 / 216	370 / 739 / 174	364 / 763 / 68	331 / 967 / 57	434 / 644 / 119	388 / 797 / 97	388 / 647 / 200	367 / 799 / 163	344 / 814 / 64	318 / 1018 / 53	418 / 697 / 113	378 / 851 / 91	373 / 680 / 184	363 / 853 / 153					
	3	329 / 839 / 62	282 / 1040 / 51	366 / 776 / 100	313 / 952 / 81	293 / 815 / 158	269 / 984 / 126	317 / 931 / 59	268 / 1092 / 46	343 / 837 / 94	300 / 1011 / 75	286 / 875 / 147	273 / 1084 / 121	296 / 982 / 55	265 / 1184 / 44	325 / 891 / 88	287 / 1056 / 69	277 / 926 / 137	263 / 1128 / 111					
60	1	556 / 626 / 100	445 / 760 / 80	676 / 496 / 181	544 / 607 / 145	495 / 536 / 276	460 / 670 / 227	514 / 668 / 92	431 / 820 / 75	622 / 528 / 166	521 / 648 / 134	479 / 577 / 257	444 / 709 / 208	472 / 701 / 85	416 / 873 / 70	581 / 565 / 156	510 / 700 / 127	475 / 628 / 245	440 / 762 / 196					
	2	472 / 726 / 85	375 / 873 / 67	554 / 603 / 148	449 / 737 / 119	451 / 605 / 251	410 / 739 / 202	431 / 763 / 77	373 / 967 / 65	514 / 644 / 137	436 / 797 / 112	434 / 647 / 233	405 / 799 / 190	403 / 814 / 72	357 / 1018 / 60	487 / 697 / 130	423 / 851 / 105	415 / 680 / 214	398 / 853 / 178					
	3	389 / 839 / 70	320 / 1040 / 57	433 / 776 / 116	354 / 952 / 94	330 / 815 / 184	298 / 984 / 147	375 / 931 / 67	302 / 1092 / 53	406 / 837 / 109	338 / 1011 / 87	320 / 875 / 172	301 / 1084 / 141	347 / 982 / 62	298 / 1184 / 50	379 / 891 / 101	321 / 1056 / 80	309 / 926 / 159	289 / 1128 / 129					
45	Wind Speed [mph] 170								180															
	1	365 / 747 / 66	338 / 918 / 53	459 / 611 / 118	422 / 747 / 95	390 / 658 / 179	379 / 808 / 145	354 / 787 / 62	339 / 991 / 51	440 / 638 / 109	414 / 789 / 89	386 / 700 / 169	375 / 847 / 135											
	2	319 / 890 / 57	286 / 1055 / 45	369 / 724 / 95	345 / 896 / 78	347 / 726 / 159	341 / 898 / 130	307 / 928 / 53	285 / 1130 / 43	359 / 765 / 89	334 / 932 / 72	342 / 767 / 150	335 / 934 / 121											
50	3	262 / 1022 / 47	247 / 1272 / 39	291 / 936 / 75	268 / 1140 / 61	253 / 967 / 116	253 / 1214 / 97	259 / 1097 / 45	244 / 1352 / 37	278 / 970 / 69	267 / 1218 / 58	254 / 1040 / 111	255 / 1294 / 92											
	1	391 / 747 / 70	359 / 918 / 57	491 / 611 / 128	447 / 747 / 103	412 / 658 / 195	397 / 808 / 158	378 / 787 / 66	359 / 991 / 55	470 / 638 / 119	438 / 789 / 97	408 / 700 / 184	392 / 847 / 147											
	2	342 / 890 / 62	304 / 1055 / 49	395 / 724 / 103	366 / 896 / 85	368 / 726 / 174	358 / 898 / 142	328 / 928 / 57	302 / 1130 / 46	383 / 765 / 97	353 / 932 / 78	361 / 767 / 163	350 / 934 / 132											
60	3	281 / 1022 / 51	262 / 1272 / 42	312 / 936 / 81	285 / 1140 / 66	267 / 967 / 126	265 / 1214 / 105	277 / 1097 / 49	259 / 1352 / 40	297 / 970 / 75	283 / 1218 / 63	268 / 1040 / 121	266 / 1294 / 100											
	1	445 / 747 / 80	401 / 918 / 65	555 / 611 / 148	499 / 747 / 119	457 / 658 / 227	434 / 808 / 184	426 / 787 / 75	400 / 991 / 62	529 / 638 / 137	487 / 789 / 112	450 / 700 / 214	426 / 847 / 172											
	2	389 / 890 / 70	339 / 1055 / 55	447 / 724 / 119	409 / 896 / 98	408 / 726 / 202	391 / 898 / 166	370 / 928 / 65	336 / 1130 / 53	432 / 765 / 112	393 / 932 / 91	399 / 767 / 190	381 / 934 / 153											
45	Wind Speed [mph] 190								200															
	1	354 / 849 / 60	326 / 1017 / 47	431 / 675 / 104	405 / 824 / 84	382 / 737 / 159	384 / 912 / 130	341 / 878 / 55	326 / 1079 / 45	422 / 709 / 98	409 / 883 / 81	377 / 769 / 150	377 / 937 / 121											
	2	305 / 996 / 51	284 / 1201 / 41	359 / 826 / 87	335 / 998 / 69	347 / 828 / 145	341 / 1000 / 116	290 / 1017 / 47	282 / 1265 / 39	347 / 856 / 81	336 / 1061 / 66	340 / 858 / 135	347 / 1063 / 111											
50	3	256 / 1168 / 43	241 / 1424 / 35	276 / 1037 / 66	265 / 1291 / 55	255 / 1110 / 106	256 / 1366 / 87	253 / 1234 / 41	237 / 1486 / 33	273 / 1101 / 64	263 / 1356 / 52	255 / 1175 / 102	256 / 1431 / 82											
	1	377 / 849 / 64	345 / 1017 / 51	459 / 675 / 113	428 / 824 / 91	402 / 737 / 174	400 / 912 / 142	363 / 878 / 59	344 / 1079 / 49	448 / 709 / 106	431 / 883 / 88	395 / 769 / 163	392 / 937 / 132											
	2	325 / 996 / 55	300 / 1201 / 44	383 / 826 / 94	354 / 998 / 75	366 / 828 / 158	356 / 1000 / 126	309 / 1017 / 51	297 / 1265 / 42	369 / 856 / 88	354 / 1061 / 72	357 / 858 / 147	361 / 1063 / 121											
60	3	273 / 1168 / 46	255 / 1424 / 38	294 / 1037 / 72	280 / 1291 / 60	268 / 1110 / 116	267 / 1366 / 95	269 / 1234 / 44	250 / 1486 / 35	290 / 1101 / 69	277 / 1356 / 57	268 / 1175 / 111	267 / 1431 / 90											
	1	424 / 849 / 72	382 / 1017 / 57	516 / 675 / 130	473 / 824 / 105	442 / 737 / 202	433 / 912 / 166	406 / 878 / 67	379 / 1079 / 55	502 / 709 / 123	475 / 883 / 101	433 / 769 / 190	422 / 937 / 153											
	2	365 / 996 / 62	332 / 1201 / 50	430 / 826 / 109	392 / 998 / 87	402 / 828 / 184	385 / 1000 / 147	346 / 1017 / 57	328 / 1265 / 48	413 / 856 / 101	390 / 1061 / 83	391 / 858 / 172	389 / 1063 / 141											
45	Wind Speed [mph] 210								220															
	1	307 / 1168 / 53	282 / 1424 / 43	330 / 1037 / 83	310 / 1291 / 69	295 / 1110 / 135	289 / 1366 / 111	301 / 1234 / 50	276 / 1486 / 40	325 / 1101 / 80	305 / 1356 / 65	294 / 1175 / 129	287 / 1431 / 104											
	2	307 / 1168 / 53	282 / 1424 / 43	330 / 1037 / 83	310 / 1291 / 69	295 / 1110 / 135	289 / 1366 / 111	301 / 1234 / 50	276 / 1486 / 40	325 / 1101 / 80	305 / 1356 / 65	294 / 1175 / 129	287 / 1431 / 104											

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edge shall not include any overhang distances.
B = Horizontal dimension of building measured normal to wind direction, in ft (m).
h = Mean roof height, in ft (m).
θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		95				100				105										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	1	786 / 232 / 136	658 / 592 / 114	781 / 296 / 205	781 / 458 / 205	670 / 394 / 387	572 / 516 / 331	786 / 256 / 136	626 / 618 / 109	781 / 326 / 205	781 / 503 / 205	670 / 433 / 387	551 / 542 / 317	754 / 533 / 131	610 / 657 / 106	781 / 357 / 205	734 / 517 / 193	657 / 465 / 380	537 / 566 / 303	
70	2	706 / 571 / 122	562 / 691 / 97	781 / 443 / 205	671 / 583 / 177	645 / 473 / 373	511 / 573 / 296	674 / 598 / 117	545 / 735 / 95	781 / 487 / 205	640 / 610 / 168	609 / 490 / 352	502 / 613 / 288	642 / 622 / 111	513 / 755 / 89	749 / 511 / 197	609 / 634 / 160	584 / 514 / 338	487 / 637 / 274	
	3	594 / 676 / 103	481 / 831 / 84	640 / 605 / 168	515 / 739 / 136	463 / 630 / 267	378 / 779 / 218	562 / 701 / 97	449 / 849 / 78	609 / 631 / 160	500 / 785 / 132	451 / 672 / 260	367 / 825 / 211	529 / 721 / 92	433 / 893 / 75	578 / 653 / 152	469 / 803 / 123	426 / 694 / 246	350 / 840 / 197	
	1	837 / 218 / 142	746 / 592 / 126	832 / 278 / 216	832 / 430 / 216	731 / 379 / 422	648 / 516 / 375	837 / 240 / 142	710 / 618 / 120	832 / 306 / 216	832 / 473 / 216	731 / 417 / 422	621 / 542 / 359	837 / 264 / 142	691 / 657 / 117	832 / 336 / 216	832 / 517 / 216	731 / 457 / 422	593 / 566 / 343	
80	2	800 / 571 / 135	637 / 691 / 108	832 / 416 / 216	761 / 583 / 198	731 / 473 / 422	579 / 573 / 335	764 / 598 / 129	619 / 735 / 105	832 / 458 / 216	726 / 610 / 189	690 / 490 / 398	566 / 613 / 327	728 / 622 / 123	582 / 755 / 99	832 / 500 / 216	691 / 634 / 179	662 / 514 / 383	538 / 637 / 311	
	3	673 / 676 / 114	546 / 831 / 92	726 / 605 / 189	584 / 739 / 152	524 / 630 / 303	428 / 779 / 247	637 / 701 / 108	510 / 849 / 86	691 / 631 / 179	567 / 785 / 147	511 / 672 / 295	414 / 825 / 239	600 / 721 / 102	491 / 893 / 83	655 / 653 / 170	531 / 803 / 138	483 / 694 / 279	386 / 840 / 223	
	1	895 / 208 / 148	834 / 592 / 138	871 / 260 / 224	871 / 403 / 224	771 / 358 / 445	724 / 516 / 418	895 / 230 / 148	794 / 618 / 132	871 / 287 / 224	871 / 442 / 224	771 / 394 / 445	694 / 542 / 401	895 / 252 / 148	773 / 657 / 128	871 / 314 / 224	871 / 484 / 224	771 / 431 / 445	663 / 566 / 383	
90	2	895 / 571 / 148	712 / 691 / 118	871 / 390 / 224	851 / 583 / 219	771 / 446 / 445	647 / 573 / 374	855 / 598 / 142	692 / 735 / 115	871 / 428 / 224	812 / 610 / 209	771 / 490 / 445	632 / 613 / 365	814 / 622 / 135	651 / 755 / 108	871 / 469 / 224	772 / 634 / 199	740 / 514 / 427	601 / 637 / 347	
	3	753 / 676 / 125	611 / 831 / 101	812 / 605 / 209	654 / 739 / 168	586 / 630 / 338	478 / 779 / 276	712 / 701 / 118	570 / 849 / 95	772 / 631 / 199	634 / 785 / 163	570 / 672 / 330	463 / 825 / 267	672 / 721 / 111	550 / 893 / 91	733 / 653 / 188	594 / 803 / 153	540 / 694 / 312	432 / 840 / 250	
	1	722 / 556 / 125	578 / 677 / 100	781 / 390 / 205	703 / 539 / 185	621 / 479 / 359	523 / 588 / 288	690 / 577 / 120	562 / 714 / 97	781 / 424 / 205	671 / 559 / 177	597 / 500 / 345	522 / 622 / 281							
70	2	610 / 643 / 106	497 / 795 / 86	718 / 534 / 189	578 / 654 / 152	560 / 537 / 324	472 / 657 / 260	594 / 679 / 103	481 / 834 / 84	687 / 554 / 181	562 / 690 / 148	536 / 557 / 310	470 / 693 / 253							
	3	513 / 760 / 89	417 / 934 / 73	562 / 691 / 148	453 / 844 / 119	414 / 733 / 239	345 / 880 / 190	497 / 798 / 86	401 / 973 / 70	531 / 708 / 140	437 / 882 / 115	390 / 747 / 225	339 / 917 / 183							
	1	819 / 556 / 138	655 / 677 / 111	832 / 367 / 216	797 / 539 / 207	704 / 479 / 406	573 / 588 / 327	782 / 577 / 132	637 / 714 / 108	832 / 399 / 216	761 / 559 / 198	676 / 500 / 390	570 / 622 / 319							
80	2	691 / 643 / 117	564 / 795 / 96	814 / 534 / 212	655 / 654 / 170	635 / 537 / 367	517 / 657 / 295	673 / 679 / 114	546 / 834 / 92	779 / 554 / 202	638 / 690 / 166	607 / 557 / 351	513 / 693 / 287							
	3	582 / 760 / 99	473 / 934 / 80	638 / 691 / 166	514 / 844 / 134	469 / 733 / 271	378 / 880 / 215	564 / 798 / 96	455 / 973 / 77	602 / 708 / 156	496 / 882 / 129	442 / 747 / 255	371 / 917 / 207							
	1	895 / 276 / 148	733 / 677 / 121	871 / 343 / 224	871 / 527 / 224	771 / 469 / 445	632 / 588 / 365	875 / 577 / 145	712 / 714 / 118	871 / 373 / 224	851 / 559 / 219	755 / 500 / 436	619 / 622 / 356							
90	2	773 / 643 / 128	631 / 795 / 105	871 / 511 / 224	733 / 654 / 188	709 / 537 / 410	570 / 657 / 330	753 / 679 / 125	611 / 834 / 101	871 / 554 / 224	713 / 690 / 183	678 / 557 / 392	557 / 693 / 321							
	3	651 / 760 / 108	529 / 934 / 88	713 / 691 / 183	574 / 844 / 148	524 / 733 / 303	416 / 880 / 241	631 / 798 / 105	509 / 973 / 85	673 / 708 / 173	555 / 882 / 143	493 / 747 / 285	402 / 917 / 232							
	1	658 / 595 / 114	529 / 727 / 92	781 / 460 / 205	656 / 591 / 173	572 / 519 / 331	507 / 638 / 267	690 / 577 / 120	562 / 714 / 97	781 / 424 / 205	671 / 559 / 177	597 / 500 / 345	522 / 622 / 281							
70	2	562 / 694 / 97	449 / 841 / 78	656 / 572 / 173	531 / 705 / 140	511 / 575 / 296	453 / 707 / 239	594 / 679 / 103	481 / 834 / 84	687 / 554 / 181	562 / 690 / 148	536 / 557 / 310	470 / 693 / 253							
	3	481 / 834 / 84	385 / 1008 / 67	515 / 742 / 136	422 / 919 / 111	378 / 782 / 218	334 / 952 / 176	497 / 798 / 86	401 / 973 / 70	531 / 708 / 140	437 / 882 / 115	390 / 747 / 225	339 / 917 / 183							
	1	746 / 595 / 126	600 / 727 / 102	832 / 432 / 216	744 / 591 / 193	648 / 519 / 375	553 / 638 / 303	782 / 577 / 132	637 / 714 / 108	832 / 399 / 216	761 / 559 / 198	676 / 500 / 390	570 / 622 / 319							
80	2	637 / 694 / 108	510 / 841 / 86	744 / 572 / 193	602 / 705 / 156	579 / 575 / 335	495 / 707 / 271	673 / 679 / 114	546 / 834 / 92	779 / 554 / 202	638 / 690 / 166	607 / 557 / 351	513 / 693 / 287							
	3	546 / 834 / 92	437 / 1008 / 74	584 / 742 / 152	478 / 919 / 124	428 / 782 / 247	364 / 952 / 199	564 / 798 / 96	455 / 973 / 77	602 / 708 / 156	496 / 882 / 129	442 / 747 / 255	371 / 917 / 207							
	1	834 / 595 / 138	672 / 727 / 111	871 / 405 / 224	832 / 591 / 214	724 / 519 / 418	599 / 638 / 338	875 / 577 / 145	712 / 714 / 118	871 / 373 / 224	851 / 559 / 219	755 / 500 / 436	619 / 622 / 356							
90	2	712 / 694 / 118	570 / 841 / 95	832 / 572 / 214	673 / 705 / 173	647 / 575 / 374	536 / 707 / 303	753 / 679 / 125	611 / 834 / 101	871 / 554 / 224	713 / 690 / 183	678 / 557 / 392	557 / 693 / 321							
	3	611 / 834 / 101	489 / 1008 / 81	654 / 742 / 168	535 / 919 / 138	478 / 782 / 276	394 / 952 / 223	631 / 798 / 105	509 / 973 / 85	673 / 708 / 173	555 / 882 / 143	493 / 747 / 285	402 / 917 / 232							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs														
Wind Speed [mph]		140				150				160										
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	1	642 / 626 / 111	513 / 760 / 89	781 / 496 / 205	625 / 607 / 164	549 / 536 / 317	505 / 670 / 260	594 / 668 / 103	481 / 820 / 84	718 / 528 / 189	579 / 648 / 152	530 / 577 / 296	485 / 709 / 239	545 / 701 / 95	462 / 873 / 78	671 / 565 / 177	565 / 700 / 144	523 / 628 / 281	478 / 762 / 225	
70	2	545 / 726 / 95	433 / 873 / 75	640 / 603 / 168	515 / 737 / 136	500 / 605 / 288	450 / 739 / 232	497 / 763 / 86	417 / 967 / 73	593 / 644 / 156	485 / 797 / 127	480 / 647 / 267	442 / 799 / 218	465 / 814 / 81	396 / 1018 / 67	562 / 697 / 148	469 / 851 / 119	458 / 680 / 246	434 / 853 / 204	
	3	449 / 839 / 78	369 / 1040 / 64	500 / 776 / 132	406 / 952 / 107	366 / 815 / 211	327 / 984 / 169	433 / 931 / 75	337 / 1092 / 59	469 / 837 / 123	376 / 1011 / 99	354 / 875 / 197	328 / 1084 / 162	401 / 982 / 70	330 / 1184 / 56	437 / 891 / 115	356 / 1056 / 91	340 / 926 / 183	314 / 1128 / 148	
	1	728 / 626 / 123	582 / 760 / 99	832 / 467 / 216	708 / 607 / 184	621 / 536 / 359	549 / 670 / 295	673 / 668 / 114	546 / 820 / 92	814 / 528 / 212	655 / 648 / 170	581 / 577 / 335	527 / 709 / 271	619 / 701 / 105	510 / 873 / 86	761 / 565 / 198	620 / 700 / 161	572 / 628 / 319	517 / 762 / 255	
80	2	619 / 726 / 105	491 / 873 / 83	726 / 603 / 189	584 / 737 / 152	566 / 605 / 327	490 / 739 / 263	564 / 763 / 96	473 / 967 / 80	673 / 644 / 175	549 / 797 / 143	526 / 647 / 303	480 / 799 / 247	528 / 814 / 89	437 / 1018 / 74	638 / 697 / 166	514 / 851 / 134	500 / 680 / 279	469 / 853 / 231	
	3	510 / 839 / 86	419 / 1040 / 71	567 / 776 / 147	461 / 952 / 120	414 / 815 / 239	357 / 984 / 192	491 / 931 / 83	382 / 1092 / 65	531 / 837 / 138	425 / 1011 / 111	388 / 875 / 223	356 / 1084 / 184	455 / 982 / 77	364 / 1184 / 62	496 / 891 / 129	390 / 1056 / 101	372 / 926 / 207	340 / 1128 / 168	
	1	814 / 626 / 135	651 / 760 / 108	871 / 437 / 224	792 / 607 / 204	694 / 536 / 401	594 / 670 / 330	753 / 668 / 125	611 / 820 / 101	871 / 505 / 224	733 / 648 / 188	647 / 577 / 374	568 / 709 / 303	692 / 701 / 115	570 / 873 / 95	851 / 565 / 219	693 / 700 / 178	620 / 628 / 356	556 / 762 / 285	
90	2	692 / 726 / 115	550 / 873 / 91	812 / 603 / 209	654 / 737 / 168	632 / 605 / 365	530 / 739 / 294	631 / 763 / 105	529 / 967 / 88	752 / 644 / 194	614 / 797 / 158	586 / 647 / 338	518 / 799 / 276	590 / 814 / 98	489 / 1018 / 81	713 / 697 / 183	574 / 851 / 148	543 / 680 / 312	504 / 853 / 258	
	3	570 / 839 / 95	468 / 1040 / 78	634 / 776 / 163	515 / 952 / 133	463 / 815 / 267	386 / 984 / 214	550 / 931 / 91	428 / 1092 / 71	594 / 837 / 153	475 / 1011 / 122	432 / 875 / 250	384 / 1084 / 205	509 / 982 / 85	407 / 1184 / 68	555 / 891 / 143	436 / 1056 / 112	403 / 926 / 232	365 / 1128 / 187	
	1	513 / 747 / 89	443 / 918 / 73	640 / 611 / 168	551 / 747 / 136	502 / 658 / 260	470 / 808 / 211	481 / 787 / 84	440 / 991 / 70	593 / 638 / 156	535 / 789 / 127	493 / 700 / 246	460 / 847 / 197							
70	2	449 / 890 / 78	375 / 1055 / 61	515 / 724 / 136	451 / 896 / 111	448 / 726 / 232	423 / 898 / 190	417 / 928 / 73	370 / 1130 / 59	484 / 765 / 127	432 / 932 / 103	436 / 767 / 218	411 / 934 / 176							
	3	369 / 1022 / 64	324 / 1272 / 53	406 / 936 / 107	351 / 1140 / 87	326 / 967 / 169	314 / 1214 / 141	353 / 1097 / 61	317 / 1352 / 50	375 / 970 / 99	346 / 1218 / 82	324 / 1040 / 162	313 / 1294 / 134							
	1	582 / 747 / 99	485 / 918 / 80	726 / 611 / 189	603 / 747 / 152	547 / 658 / 295	507 / 808 / 239	546 / 787 / 92	480 / 991 / 77	673 / 638 / 175	584 / 789 / 143	535 / 700 / 279	494 / 847 / 223							
80	2	510 / 890 / 86	410 / 1055 / 68	584 / 724 / 152	493 / 896 / 124	488 / 726 / 263	456 / 898 / 215	473 / 928 / 80	404 / 1130 / 65	549 / 765 / 143	471 / 932 / 115	474 / 767 / 247	441 / 934 / 199							
	3	419 / 1022 / 71	354 / 1272 / 59	461 / 936 / 120	384 / 1140 / 97	355 / 967 / 192	338 / 1214 / 160	400 / 1097 / 68	346 / 1352 / 56	425 / 970 / 111	377 / 1218 / 92	352 / 1040 / 184	336 / 1294 / 152							
	1	651 / 747 / 108	529 / 918 / 88	812 / 611 / 209	655 / 747 / 168	592 / 658 / 330	543 / 808 / 267	611 / 787 / 101	521 / 991 / 85	752 / 638 / 194	633 / 789 / 158	578 / 700 / 312	528 / 847 / 250							
90	2	570 / 890 / 95	448 / 1055 / 74	654 / 724 / 168	536 / 896 / 138	528 / 726 / 294	489 / 898 / 241	529 / 928 / 88	438 / 1130 / 71	614 / 765 / 158	510 / 932 / 127	512 / 767 / 276	472 / 934 / 223							
	3	468 / 1022 / 78	387 / 1272 / 64	515 / 936 / 133	417 / 1140 / 107	384 / 967 / 214	362 / 1214 / 178	448 / 1097 / 74	375 / 1352 / 61	475 / 970 / 122	408 / 1218 / 102	380 / 1040 / 205	359 / 1294 / 169							
	1	471 / 849 / 81	419 / 1017 / 64	573 / 675 / 148	519 / 824 / 119	482 / 737 / 232	466 / 912 / 190	450 / 878 / 75	415 / 1079 / 61	555 / 709 / 140	519 / 883 / 115	471 / 769 / 218	453 / 937 / 176							
70	2	406 / 996 / 70	364 / 1201 / 56	477 / 826 / 123	429 / 998 / 99	439 / 828 / 211	414 / 1000 / 169	383 / 1017 / 64	358 / 1265 / 53	457 / 856 / 115	426 / 1061 / 95	425 / 858 / 197	417 / 1063 / 162							
	3	341 / 1168 / 59	310 / 1424 / 48	366 / 1037 / 95	340 / 1291 / 78	322 / 1110 / 155	311 / 1366 / 127	333 / 1234 / 56	302 / 1486 / 45	359 / 1101 / 91	334 / 1356 / 74	319 / 1175 / 148	308 / 1431 / 120							
	1	528 / 849 / 89	456 / 1017 / 71	638 / 675 / 166	564 / 824 / 134	522 / 737 / 263	499 / 912 / 215	493 / 878 / 83	450 / 1079 / 68	609 / 709 / 156	563 / 883 / 129	508 / 769 / 247	483 / 937 / 199							
80	2	455 / 996 / 77	397 / 1201 / 62	531 / 826 / 138	467 / 998 / 111	475 / 828 / 239	443 / 1000 / 192	420 / 1017 / 71	389 / 1265 / 59	501 / 856 / 129	462 / 1061 / 106	459 / 858 / 223	444 / 1063 / 184							
	3	382 / 1168 / 65	337 / 1424 / 53	407 / 1037 / 106	370 / 1291 / 88	348 / 1110 / 176	333 / 1366 / 144	366 / 1234 / 62	328 / 1486 / 50	394 / 1101 / 101	362 / 1356 / 83	345 / 1175 / 168	329 / 1431 / 136							
	1	590 / 849 / 98	493 / 1017 / 78	713 / 675 / 183	610 / 824 / 148	562 / 737 / 294	531 / 912 / 241	550 / 878 / 91	486 / 1079 / 74	673 / 709 / 173	607 / 883 / 143	546 / 769 / 276	513 / 937 / 223							
90	2	509 / 996 / 85	429 / 1201 / 68	594 / 826 / 153	505 / 998 / 122	511 / 828 / 267	472 / 1000 / 214	468 / 1017 / 78	420 / 1265 / 64	555 / 856 / 143	498 / 1061 / 117	493 / 858 / 250	472 / 1063 / 205							
	3	428 / 1168 / 71	365 / 1424 / 58	456 / 1037 / 117	400 / 1291 / 97	375 / 1110 / 196	354 / 1366 / 161	407 / 1234 / 68	353 / 1486 / 54	436 / 1101 / 112	390 / 1356 / 92	370 / 1175 / 187	349 / 1431 / 152							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side, lbs

Ground Snow	95				100				105										
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
	Group	Array Interior	Array Edge																
100	1	922 / 194 / 150	922 / 303 / 150	920 / 249 / 235	920 / 384 / 235	818 / 344 / 472	801 / 516 / 462	922 / 214 / 150	877 / 618 / 143	920 / 274 / 235	920 / 422 / 235	818 / 378 / 472	766 / 542 / 443	922 / 235 / 150	855 / 657 / 139	920 / 300 / 235	920 / 462 / 235	818 / 414 / 472	732 / 566 / 423
	2	922 / 532 / 150	788 / 691 / 128	920 / 372 / 235	920 / 570 / 235	818 / 428 / 472	715 / 573 / 413	922 / 583 / 150	765 / 735 / 125	920 / 409 / 235	898 / 610 / 229	818 / 471 / 472	698 / 613 / 403	900 / 622 / 147	720 / 755 / 117	920 / 447 / 235	854 / 634 / 218	818 / 514 / 472	664 / 637 / 384
	3	832 / 676 / 136	675 / 831 / 110	898 / 605 / 229	723 / 739 / 184	647 / 630 / 374	528 / 779 / 305	788 / 701 / 128	630 / 849 / 103	854 / 631 / 218	701 / 785 / 179	630 / 672 / 364	511 / 825 / 295	743 / 721 / 121	608 / 893 / 99	810 / 653 / 207	657 / 803 / 168	596 / 694 / 344	477 / 840 / 276

Ground Snow	110				115								
	Group	Array Interior	Array Edge										
	100	1	922 / 257 / 150	810 / 677 / 132	920 / 328 / 235	920 / 503 / 235	818 / 451 / 472	698 / 588 / 403	922 / 280 / 150	788 / 714 / 128	920 / 356 / 235	920 / 546 / 235	818 / 489 / 472
	2	855 / 643 / 139	698 / 795 / 114	920 / 487 / 235	810 / 654 / 207	784 / 537 / 453	630 / 657 / 364	832 / 679 / 136	675 / 834 / 110	920 / 529 / 235	788 / 690 / 201	749 / 557 / 433	613 / 693 / 354
	3	720 / 760 / 117	585 / 934 / 96	788 / 691 / 201	635 / 844 / 162	579 / 733 / 335	460 / 880 / 266	698 / 798 / 114	563 / 973 / 92	744 / 708 / 190	613 / 882 / 157	545 / 747 / 315	443 / 917 / 256

Ground Snow	120				130								
	Group	Array Interior	Array Edge										
	100	1	922 / 304 / 150	743 / 727 / 121	920 / 386 / 235	920 / 591 / 235	801 / 519 / 462	647 / 638 / 374	922 / 280 / 150	788 / 714 / 128	920 / 356 / 235	920 / 546 / 235	818 / 489 / 472
	2	788 / 694 / 128	630 / 841 / 103	920 / 572 / 235	744 / 705 / 190	715 / 575 / 413	579 / 707 / 335	832 / 679 / 136	675 / 834 / 110	920 / 529 / 235	788 / 690 / 201	749 / 557 / 433	613 / 693 / 354
	3	675 / 834 / 110	540 / 1008 / 88	723 / 742 / 184	591 / 919 / 151	528 / 782 / 305	426 / 952 / 246	698 / 798 / 114	563 / 973 / 92	744 / 708 / 190	613 / 882 / 157	545 / 747 / 315	443 / 917 / 256

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 Θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		140						150						160					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	900 / 626 / 147	720 / 760 / 117	920 / 417 / 235	876 / 607 / 223	766 / 536 / 443	639 / 670 / 364	832 / 668 / 136	675 / 820 / 110	920 / 482 / 235	810 / 648 / 207	715 / 577 / 413	609 / 709 / 335	765 / 701 / 125	630 / 873 / 103	920 / 552 / 235	766 / 700 / 196	681 / 628 / 394	595 / 762 / 315	
	2	765 / 726 / 125	608 / 873 / 99	898 / 603 / 229	723 / 737 / 184	698 / 605 / 403	570 / 739 / 325	698 / 763 / 114	585 / 967 / 96	832 / 644 / 212	679 / 797 / 173	647 / 647 / 374	555 / 799 / 305	653 / 814 / 107	540 / 1018 / 88	788 / 697 / 201	635 / 851 / 162	596 / 680 / 344	539 / 853 / 286	
	3	630 / 839 / 103	518 / 1040 / 85	701 / 776 / 179	569 / 952 / 145	511 / 815 / 295	415 / 984 / 236	608 / 931 / 99	473 / 1092 / 77	657 / 837 / 168	526 / 1011 / 134	477 / 875 / 276	412 / 1084 / 227	563 / 982 / 92	450 / 1184 / 74	613 / 891 / 157	482 / 1056 / 123	443 / 926 / 256	391 / 1128 / 207	
100	1	720 / 747 / 117	585 / 918 / 96	898 / 611 / 229	723 / 747 / 184	637 / 658 / 364	580 / 808 / 295	675 / 787 / 110	563 / 991 / 92	832 / 638 / 212	681 / 789 / 173	620 / 700 / 344	562 / 847 / 276							
	2	630 / 890 / 103	495 / 1055 / 81	723 / 724 / 184	591 / 896 / 151	568 / 726 / 325	522 / 898 / 266	585 / 928 / 96	473 / 1130 / 77	679 / 765 / 173	550 / 932 / 140	549 / 767 / 305	502 / 934 / 246							
	3	518 / 1022 / 85	428 / 1272 / 70	569 / 936 / 145	460 / 1140 / 118	413 / 967 / 236	387 / 1214 / 197	495 / 1097 / 81	405 / 1352 / 66	526 / 970 / 134	440 / 1218 / 112	408 / 1040 / 227	382 / 1294 / 187							
100	1	653 / 849 / 107	530 / 1017 / 85	788 / 675 / 201	655 / 824 / 162	603 / 737 / 325	564 / 912 / 266	608 / 878 / 99	521 / 1079 / 81	744 / 709 / 190	651 / 883 / 157	584 / 769 / 305	544 / 937 / 246							
	2	563 / 996 / 92	461 / 1201 / 74	657 / 826 / 168	542 / 998 / 134	548 / 828 / 295	502 / 1000 / 236	518 / 1017 / 85	450 / 1265 / 70	613 / 856 / 157	534 / 1061 / 129	527 / 858 / 276	500 / 1063 / 227							
	3	473 / 1168 / 77	392 / 1424 / 63	504 / 1037 / 129	429 / 1291 / 106	402 / 1110 / 217	376 / 1366 / 177	450 / 1234 / 74	379 / 1486 / 59	482 / 1101 / 123	418 / 1356 / 101	396 / 1175 / 207	370 / 1431 / 168							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																																																																																																																																																																																			
	95						100						105																																																																																																																																																																							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																																																																																																																																																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																																																																																																																	
0	1	247 / 413 / 43	199 / 511 / 35	299 / 309 / 61	246 / 400 / 50	275 / 358 / 74	220 / 443 / 59	235 / 432 / 41	187 / 527 / 33	291 / 333 / 59	238 / 426 / 48	259 / 372 / 70	208 / 461 / 56	223 / 449 / 39	179 / 551 / 31	283 / 356 / 57	226 / 443 / 46	247 / 389 / 67	200 / 485 / 54																																																																																																																																																																	
	2	207 / 477 / 36	166 / 587 / 29	255 / 399 / 52	202 / 490 / 41	243 / 397 / 65	196 / 493 / 53	199 / 503 / 35	162 / 628 / 29	242 / 419 / 49	194 / 516 / 39	232 / 416 / 62	189 / 520 / 51	191 / 528 / 34	154 / 651 / 27	230 / 436 / 47	186 / 541 / 38	224 / 440 / 60	181 / 544 / 49																																																																																																																																																																	
	3	174 / 569 / 31	142 / 705 / 25	194 / 511 / 39	158 / 634 / 32	177 / 541 / 48	145 / 676 / 39	166 / 595 / 29	134 / 728 / 24	186 / 538 / 38	150 / 660 / 31	169 / 567 / 46	138 / 701 / 37	158 / 619 / 28	130 / 770 / 23	178 / 563 / 36	142 / 681 / 29	161 / 590 / 43	130 / 721 / 35																																																																																																																																																																	
5	1	274 / 413 / 43	220 / 511 / 35	328 / 309 / 64	271 / 400 / 53	275 / 358 / 92	220 / 443 / 73	260 / 432 / 41	206 / 527 / 33	319 / 333 / 62	262 / 426 / 51	259 / 372 / 86	208 / 461 / 69	247 / 449 / 39	197 / 551 / 31	311 / 356 / 60	249 / 443 / 48	247 / 389 / 82	200 / 485 / 67																																																																																																																																																																	
	2	229 / 477 / 36	184 / 587 / 29	280 / 399 / 54	222 / 490 / 43	243 / 397 / 81	196 / 493 / 66	220 / 503 / 35	180 / 628 / 29	266 / 419 / 52	213 / 516 / 42	232 / 416 / 77	189 / 520 / 63	211 / 528 / 34	171 / 651 / 27	253 / 436 / 49	204 / 541 / 40	224 / 440 / 75	181 / 544 / 60																																																																																																																																																																	
	3	193 / 569 / 31	157 / 705 / 25	213 / 511 / 42	173 / 634 / 34	177 / 541 / 59	145 / 676 / 49	184 / 595 / 29	148 / 728 / 24	204 / 538 / 40	164 / 660 / 32	169 / 567 / 56	138 / 701 / 46	175 / 619 / 28	144 / 770 / 23	195 / 563 / 38	156 / 681 / 30	161 / 590 / 54	130 / 721 / 43																																																																																																																																																																	
10	1	347 / 413 / 43	279 / 511 / 35	398 / 297 / 76	342 / 400 / 65	316 / 358 / 119	253 / 443 / 95	330 / 432 / 41	262 / 527 / 33	398 / 328 / 76	331 / 426 / 63	298 / 372 / 112	240 / 461 / 90	313 / 449 / 39	250 / 551 / 31	392 / 356 / 75	314 / 443 / 60	285 / 389 / 107	231 / 485 / 87																																																																																																																																																																	
	2	290 / 477 / 36	233 / 587 / 29	353 / 399 / 67	280 / 490 / 54	280 / 397 / 106	226 / 493 / 85	279 / 503 / 35	228 / 628 / 29	336 / 419 / 64	269 / 516 / 51	267 / 416 / 100	217 / 520 / 82	267 / 528 / 34	216 / 651 / 27	320 / 436 / 61	258 / 541 / 49	258 / 440 / 97	208 / 544 / 78																																																																																																																																																																	
	3	245 / 569 / 31	199 / 705 / 25	269 / 511 / 51	219 / 634 / 42	204 / 541 / 77	167 / 676 / 63	233 / 595 / 29	188 / 728 / 24	258 / 538 / 49	208 / 660 / 40	195 / 567 / 73	158 / 701 / 60	222 / 619 / 28	182 / 770 / 23	247 / 563 / 47	196 / 681 / 38	186 / 590 / 70	149 / 721 / 56																																																																																																																																																																	
0	1	215 / 472 / 38	170 / 573 / 30	271 / 373 / 55	218 / 466 / 44	239 / 412 / 64	205 / 508 / 52	207 / 493 / 36	166 / 607 / 29	259 / 388 / 52	206 / 478 / 42	228 / 426 / 61	210 / 529 / 50	174 / 571 / 31	142 / 708 / 25	210 / 472 / 43	170 / 584 / 35	204 / 476 / 55	187 / 587 / 45																																																																																																																																																																	
	2	183 / 551 / 32	146 / 671 / 26	218 / 451 / 44	178 / 564 / 36	212 / 455 / 57	184 / 567 / 47	174 / 571 / 31	142 / 708 / 25	210 / 472 / 43	170 / 584 / 35	204 / 476 / 55	187 / 587 / 45	146 / 674 / 26	118 / 822 / 21	162 / 604 / 33	134 / 757 / 27	149 / 645 / 40	138 / 797 / 33																																																																																																																																																																	
	3	154 / 656 / 27	126 / 811 / 22	170 / 585 / 35	138 / 720 / 28	157 / 627 / 42	134 / 760 / 34	146 / 674 / 26	118 / 822 / 21	162 / 604 / 33	134 / 757 / 27	149 / 645 / 40	138 / 797 / 33	229 / 493 / 36	184 / 607 / 29	284 / 388 / 55	226 / 478 / 44	228 / 426 / 76	210 / 529 / 62																																																																																																																																																																	
5	1	238 / 472 / 38	188 / 573 / 30	297 / 373 / 58	240 / 466 / 47	239 / 412 / 80	205 / 508 / 64	229 / 493 / 36	184 / 607 / 29	284 / 388 / 55	226 / 478 / 44	228 / 426 / 76	210 / 529 / 62	193 / 571 / 31	157 / 708 / 25	231 / 472 / 45	187 / 584 / 36	204 / 476 / 68	187 / 587 / 55																																																																																																																																																																	
	2	202 / 551 / 32	162 / 671 / 26	240 / 451 / 47	195 / 564 / 38	212 / 455 / 71	184 / 567 / 58	193 / 571 / 31	157 / 708 / 25	231 / 472 / 45	187 / 584 / 36	204 / 476 / 68	187 / 587 / 55	162 / 674 / 26	130 / 822 / 21	178 / 604 / 35	147 / 757 / 29	149 / 645 / 50	138 / 797 / 41																																																																																																																																																																	
	3	171 / 656 / 27	139 / 811 / 22	187 / 585 / 36	151 / 720 / 30	157 / 627 / 53	134 / 760 / 42	162 / 674 / 26	130 / 822 / 21	178 / 604 / 35	147 / 757 / 29	149 / 645 / 50	138 / 797 / 41	290 / 493 / 36	233 / 607 / 29	359 / 388 / 68	286 / 478 / 55	262 / 426 / 99	231 / 529 / 80																																																																																																																																																																	
10	1	301 / 472 / 38	239 / 573 / 30	376 / 373 / 72	303 / 466 / 58	276 / 412 / 104	231 / 508 / 84	290 / 493 / 36	233 / 607 / 29	359 / 388 / 68	286 / 478 / 55	262 / 426 / 99	231 / 529 / 80	245 / 571 / 31	199 / 708 / 25	292 / 472 / 56	236 / 584 / 45	235 / 476 / 89	207 / 587 / 72																																																																																																																																																																	
	2	256 / 551 / 32	205 / 671 / 26	303 / 451 / 58	247 / 564 / 47	244 / 455 / 92	208 / 567 / 75	245 / 571 / 31	199 / 708 / 25	292 / 472 / 56	236 / 584 / 45	235 / 476 / 89	207 / 587 / 72	205 / 674 / 26	165 / 822 / 21	224 / 604 / 43	185 / 757 / 36	172 / 645 / 65	153 / 797 / 53																																																																																																																																																																	
	3	216 / 656 / 27	176 / 811 / 22	236 / 585 / 45	191 / 720 / 37	181 / 627 / 68	151 / 760 / 55	205 / 674 / 26	165 / 822 / 21	224 / 604 / 43	185 / 757 / 36	172 / 645 / 65	153 / 797 / 53	0	1	199 / 513 / 35	158 / 624 / 28	246 / 402 / 50	198 / 498 / 40	220 / 445 / 59	213 / 548 / 48	207 / 493 / 36	166 / 607 / 29	259 / 388 / 52	206 / 478 / 42	228 / 426 / 61	210 / 529 / 50	174 / 571 / 31	142 / 708 / 25	210 / 472 / 43	170 / 584 / 35	204 / 476 / 55	187 / 587 / 45	2	166 / 589 / 29	134 / 721 / 24	202 / 492 / 41	162 / 601 / 33	196 / 495 / 53	190 / 604 / 42	174 / 571 / 31	142 / 708 / 25	210 / 472 / 43	170 / 584 / 35	204 / 476 / 55	187 / 587 / 45	142 / 708 / 25	114 / 857 / 20	158 / 637 / 32	125 / 768 / 26	145 / 679 / 39	142 / 833 / 32	3	142 / 708 / 25	114 / 857 / 20	158 / 637 / 32	125 / 768 / 26	145 / 679 / 39	142 / 833 / 32	146 / 674 / 26	118 / 822 / 21	162 / 604 / 33	134 / 757 / 27	149 / 645 / 40	138 / 797 / 33	229 / 493 / 36	184 / 607 / 29	284 / 388 / 55	226 / 478 / 44	228 / 426 / 76	210 / 529 / 62	5	1	220 / 513 / 35	175 / 624 / 28	271 / 402 / 53	218 / 498 / 42	220 / 445 / 73	213 / 548 / 59	229 / 493 / 36	184 / 607 / 29	284 / 388 / 55	226 / 478 / 44	228 / 426 / 76	210 / 529 / 62	193 / 571 / 31	157 / 708 / 25	231 / 472 / 45	187 / 584 / 36	204 / 476 / 68	187 / 587 / 55	2	184 / 589 / 29	148 / 721 / 24	222 / 492 / 43	178 / 601 / 35	196 / 495 / 66	190 / 604 / 53	193 / 571 / 31	157 / 708 / 25	231 / 472 / 45	187 / 584 / 36	204 / 476 / 68	187 / 587 / 55	157 / 708 / 25	126 / 857 / 20	173 / 637 / 34	138 / 768 / 27	145 / 679 / 49	142 / 833 / 40	3	157 / 708 / 25	126 / 857 / 20	173 / 637 / 34	138 / 768 / 27	145 / 679 / 49	142 / 833 / 40	162 / 674 / 26	130 / 822 / 21	178 / 604 / 35	147 / 757 / 29	149 / 645 / 50	138 / 797 / 41	290 / 493 / 36	233 / 607 / 29	359 / 388 / 68	286 / 478 / 55	262 / 426 / 99	231 / 529 / 80	10	1	279 / 513 / 35	222 / 624 / 28	342 / 402 / 65	275 / 498 / 53	253 / 445 / 95	231 / 548 / 77	290 / 493 / 36	233 / 607 / 29	359 / 388 / 68	286 / 478 / 55	262 / 426 / 99	231 / 529 / 80	245 / 571 / 31	199 / 708 / 25	292 / 472 / 56	236 / 584 / 45	235 / 476 / 89	207 / 587 / 72	2	233 / 589 / 29	188 / 721 / 24	280 / 492 / 54	224 / 601 / 43	226 / 495 / 85	205 / 604 / 68	245 / 571 / 31	199 / 708 / 25	292 / 472 / 56	236 / 584 / 45	235 / 476 / 89	207 / 587 / 72	205 / 674 / 26	165 / 822 / 21	224 / 604 / 43	185 / 757 / 36	172 / 645 / 65	153 / 797 / 53	3	199 / 708 / 25	159 / 857 / 20	219 / 637 / 42	174 / 768 / 33	167 / 679 / 63	154 / 833 / 51	205 / 674 / 26	165 / 822 / 21	224 / 604 / 43	185 / 757 / 36	172 / 645 / 65
0	1	199 / 513 / 35	158 / 624 / 28	246 / 402 / 50	198 / 498 / 40	220 / 445 / 59	213 / 548 / 48	207 / 493 / 36	166 / 607 / 29	259 / 388 / 52	206 / 478 / 42	228 / 426 / 61	210 / 529 / 50		174 / 571 / 31	142 / 708 / 25	210 / 472 / 43	170 / 584 / 35	204 / 476 / 55	187 / 587 / 45																																																																																																																																																																
	2	166 / 589 / 29	134 / 721 / 24	202 / 492 / 41	162 / 601 / 33	196 / 495 / 53	190 / 604 / 42	174 / 571 / 31	142 / 708 / 25	210 / 472 / 43	170 / 584 / 35	204 / 476 / 55	187 / 587 / 45		142 / 708 / 25	114 / 857 / 20	158 / 637 / 32	125 / 768 / 26	145 / 679 / 39	142 / 833 / 32																																																																																																																																																																
	3	142 / 708 / 25	114 / 857 / 20	158 / 637 / 32	125 / 768 / 26	145 / 679 / 39	142 / 833 / 32	146 / 674 / 26	118 / 822 / 21	162 / 604 / 33	134 / 757 / 27	149 / 645 / 40	138 / 797 / 33	229 / 493 / 36	184 / 607 / 29	284 / 388 / 55	226 / 478 / 44	228 / 426 / 76	210 / 529 / 62																																																																																																																																																																	
5	1	220 / 513 / 35	175 / 624 / 28	271 / 402 / 53	218 / 498 / 42	220 / 445 / 73	213 / 548 / 59	229 / 493 / 36	184 / 607 / 29	284 / 388 / 55	226 / 478 / 44	228 / 426 / 76	210 / 529 / 62	193 / 571 / 31	157 / 708 / 25	231 / 472 / 45	187 / 584 / 36	204 / 476 / 68	187 / 587 / 55																																																																																																																																																																	
	2	184 / 589 / 29	148 / 721 / 24	222 / 492 / 43	178 / 601 / 35	196 / 495 / 66	190 / 604 / 53	193 / 571 / 31	157 / 708 / 25	231 / 472 / 45	187 / 584 / 36	204 / 476 / 68	187 / 587 / 55	157 / 708 / 25	126 / 857 / 20	173 / 637 / 34	138 / 768 / 27	145 / 679 / 49	142 / 833 / 40																																																																																																																																																																	
	3	157 / 708 / 25	126 / 857 / 20	173 / 637 / 34	138 / 768 / 27	145 / 679 / 49	142 / 833 / 40	162 / 674 / 26	130 / 822 / 21	178 / 604 / 35	147 / 757 / 29	149 / 645 / 50	138 / 797 / 41	290 / 493 / 36	233 / 607 / 29	359 / 388 / 68	286 / 478 / 55	262 / 426 / 99	231 / 529 / 80																																																																																																																																																																	
10	1	279 / 513 / 35	222 / 624 / 28	342 / 402 / 65	275 / 498 / 53	253 / 445 / 95	231 / 548 / 77	290 / 493 / 36	233 / 607 / 29	359 / 388 / 68	286 / 478 / 55	262 / 426 / 99	231 / 529 / 80	245 / 571 / 31	199 / 708 / 25	292 / 472 / 56	236 / 584 / 45	235 / 476 / 89	207 / 587 / 72																																																																																																																																																																	
	2	233 / 589 / 29	188 / 721 / 24	280 / 492 / 54	224 / 601 / 43	226 / 495 / 85	205 / 604 / 68	245 / 571 / 31	199 / 708 / 25	292 / 472 / 56	236 / 584 / 45	235 / 476 / 89	207 / 587 / 72	205 / 674 / 26	165 / 822 / 21	224 / 604 / 43	185 / 757 / 36	172 / 645 / 65	153 / 797 / 53																																																																																																																																																																	
	3	199 / 708 / 25	159 / 857 / 20	219 / 637 / 42	174 / 768 / 33	167 / 679 / 63	154 / 833 / 51	205 / 674 / 26	165 / 822 / 21	224 / 604 / 43	185 / 757 / 36	172 / 645 / 65	153 / 797 / 53																																																																																																																																																																							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	191 / 532 / 34	157 / 656 / 27	238 / 420 / 48	193 / 516 / 39	212 / 464 / 57	217 / 565 / 46	174 / 562 / 31	160 / 696 / 25	222 / 454 / 45	201 / 558 / 36	203 / 497 / 53	226 / 606 / 42	166 / 613 / 29	168 / 749 / 24	206 / 483 / 42	208 / 594 / 34	211 / 534 / 50	240 / 658 / 40	
	2	162 / 620 / 29	132 / 753 / 23	194 / 510 / 39	160 / 632 / 32	189 / 513 / 51	197 / 635 / 41	150 / 662 / 27	138 / 813 / 22	182 / 552 / 37	165 / 673 / 30	182 / 555 / 48	204 / 675 / 38	142 / 715 / 25	142 / 866 / 20	170 / 590 / 35	172 / 726 / 28	189 / 593 / 45	215 / 728 / 36	
	3	134 / 719 / 24	111 / 890 / 19	150 / 651 / 31	123 / 801 / 25	138 / 692 / 37	146 / 867 / 31	126 / 778 / 22	115 / 948 / 18	142 / 710 / 29	128 / 860 / 23	134 / 751 / 35	153 / 929 / 29	118 / 831 / 21	122 / 1038 / 17	130 / 741 / 26	132 / 911 / 22	140 / 805 / 33	158 / 980 / 27	
	5	1	211 / 532 / 34	172 / 656 / 27	262 / 420 / 51	211 / 516 / 41	212 / 464 / 71	217 / 565 / 56	193 / 562 / 31	171 / 696 / 25	244 / 454 / 48	213 / 558 / 38	203 / 497 / 66	226 / 606 / 53	184 / 613 / 29	174 / 749 / 24	226 / 483 / 44	214 / 594 / 36	211 / 534 / 62	240 / 658 / 50
		2	180 / 620 / 29	145 / 753 / 23	213 / 510 / 42	175 / 632 / 34	189 / 513 / 63	197 / 635 / 51	166 / 662 / 27	147 / 813 / 22	200 / 552 / 39	174 / 673 / 31	182 / 555 / 59	204 / 675 / 47	157 / 715 / 25	147 / 866 / 20	187 / 590 / 36	177 / 726 / 30	189 / 593 / 55	215 / 728 / 45
		3	148 / 719 / 24	123 / 890 / 19	164 / 651 / 32	135 / 801 / 26	138 / 692 / 46	146 / 867 / 38	139 / 778 / 22	122 / 948 / 18	156 / 710 / 30	136 / 860 / 24	134 / 751 / 43	153 / 929 / 36	130 / 831 / 21	126 / 1038 / 17	142 / 741 / 28	136 / 911 / 23	140 / 805 / 41	158 / 980 / 33
	10	1	267 / 532 / 34	218 / 656 / 27	331 / 420 / 63	266 / 516 / 50	244 / 464 / 92	230 / 565 / 73	245 / 562 / 31	213 / 696 / 25	308 / 454 / 59	264 / 558 / 47	231 / 497 / 85	233 / 606 / 68	233 / 613 / 29	213 / 749 / 24	286 / 483 / 55	261 / 594 / 44	233 / 534 / 80	240 / 658 / 65
		2	228 / 620 / 29	184 / 753 / 23	269 / 510 / 51	221 / 632 / 42	217 / 513 / 82	209 / 635 / 67	211 / 662 / 27	183 / 813 / 22	252 / 552 / 48	216 / 673 / 39	208 / 555 / 77	210 / 675 / 62	199 / 715 / 25	181 / 866 / 20	236 / 590 / 45	217 / 726 / 37	208 / 593 / 72	215 / 728 / 58
		3	188 / 719 / 24	155 / 890 / 19	208 / 651 / 40	170 / 801 / 32	158 / 692 / 60	155 / 867 / 50	176 / 778 / 22	152 / 948 / 18	196 / 710 / 38	168 / 860 / 30	153 / 751 / 56	157 / 929 / 46	165 / 831 / 21	155 / 1038 / 17	180 / 741 / 34	166 / 911 / 28	154 / 805 / 53	158 / 980 / 43
0	Wind Speed [mph]																			
	170									180										
	1	154 / 644 / 27	174 / 797 / 22	194 / 517 / 39	218 / 641 / 32	219 / 568 / 47	246 / 686 / 37	160 / 686 / 26	179 / 838 / 21	199 / 547 / 37	222 / 666 / 30	224 / 596 / 43	257 / 727 / 35	ASCE Group Zone						
	5	2	130 / 740 / 23	146 / 909 / 19	158 / 621 / 32	179 / 773 / 26	194 / 624 / 41	225 / 776 / 34	138 / 806 / 22	154 / 982 / 18	164 / 663 / 31	185 / 815 / 25	202 / 666 / 39	233 / 817 / 32	0 - 3	1 = 1' / 1				
		3	110 / 875 / 19	124 / 1076 / 16	122 / 787 / 25	140 / 991 / 21	144 / 852 / 31	162 / 1020 / 25	116 / 946 / 19	130 / 1152 / 15	128 / 855 / 24	142 / 1023 / 19	148 / 891 / 29	171 / 1095 / 24		2 = 2				
		1	171 / 644 / 27	175 / 797 / 22	213 / 517 / 42	219 / 641 / 34	219 / 568 / 58	246 / 686 / 46	172 / 686 / 26	179 / 838 / 21	213 / 547 / 39	222 / 666 / 31	224 / 596 / 54	257 / 727 / 43		3 = 3				
	10	2	144 / 740 / 23	147 / 909 / 19	173 / 621 / 34	179 / 773 / 28	194 / 624 / 51	225 / 776 / 42	148 / 806 / 22	154 / 982 / 18	175 / 663 / 32	185 / 815 / 26	202 / 666 / 49	233 / 817 / 40	3 - 10	1 = 1				
		3	121 / 875 / 19	125 / 1076 / 16	134 / 787 / 26	140 / 991 / 22	144 / 852 / 38	162 / 1020 / 30	124 / 946 / 19	130 / 1152 / 15	137 / 855 / 25	142 / 1023 / 20	148 / 891 / 36	171 / 1095 / 29		2 = 2' / 2				
		1	216 / 644 / 27	213 / 797 / 22	269 / 517 / 51	264 / 641 / 42	233 / 568 / 75	246 / 686 / 60	215 / 686 / 26	211 / 838 / 21	265 / 547 / 48	259 / 666 / 39	233 / 596 / 70	257 / 727 / 56		3 = 3' / 3				
0	2	182 / 740 / 23	178 / 909 / 19	219 / 621 / 42	217 / 773 / 34	207 / 624 / 67	225 / 776 / 55	185 / 806 / 22	182 / 982 / 18	218 / 663 / 40	216 / 815 / 32	210 / 666 / 63	233 / 817 / 51	10 - 30	1 = 1					
	3	154 / 875 / 19	151 / 1076 / 16	169 / 787 / 32	170 / 991 / 27	154 / 852 / 50	162 / 1020 / 39	156 / 946 / 19	153 / 1152 / 15	171 / 855 / 31	166 / 1023 / 25	153 / 891 / 46	171 / 1095 / 38		2 = 2					
	1	164 / 725 / 24	183 / 871 / 19	207 / 585 / 35	230 / 703 / 28	234 / 633 / 41	266 / 763 / 33	168 / 758 / 23	192 / 931 / 19	210 / 605 / 33	244 / 758 / 27	242 / 668 / 39	282 / 820 / 32		3 = 3					
5	2	140 / 842 / 21	156 / 1008 / 17	169 / 701 / 29	189 / 849 / 23	210 / 704 / 37	240 / 851 / 30	142 / 870 / 19	163 / 1070 / 16	173 / 734 / 27	199 / 909 / 22	216 / 737 / 35	254 / 911 / 29							
	3	116 / 975 / 17	136 / 1224 / 15	130 / 888 / 22	149 / 1092 / 18	156 / 958 / 28	180 / 1165 / 23	121 / 1037 / 17	141 / 1290 / 14	136 / 949 / 22	155 / 1156 / 18	157 / 981 / 26	188 / 1231 / 21							
	1	172 / 725 / 24	183 / 871 / 19	216 / 585 / 37	230 / 703 / 30	234 / 633 / 51	266 / 763 / 41	172 / 758 / 23	192 / 931 / 19	213 / 605 / 35	244 / 758 / 29	242 / 668 / 49	282 / 820 / 40							
10	2	147 / 842 / 21	156 / 1008 / 17	176 / 701 / 30	189 / 849 / 24	210 / 704 / 46	240 / 851 / 37	146 / 870 / 19	163 / 1070 / 16	176 / 734 / 29	199 / 909 / 24	216 / 737 / 43	254 / 911 / 36							
	3	122 / 975 / 17	136 / 1224 / 15	136 / 888 / 24	149 / 1092 / 19	156 / 958 / 34	180 / 1165 / 28	124 / 1037 / 17	141 / 1290 / 14	139 / 949 / 23	155 / 1156 / 18	157 / 981 / 32	188 / 1231 / 27							
	1	213 / 725 / 24	209 / 871 / 19	266 / 585 / 46	260 / 703 / 37	237 / 633 / 67	266 / 763 / 53	211 / 758 / 23	213 / 931 / 19	260 / 605 / 43	268 / 758 / 36	242 / 668 / 63	282 / 820 / 51							
0	2	182 / 842 / 21	178 / 1008 / 17	217 / 701 / 38	214 / 849 / 30	213 / 704 / 60	240 / 851 / 48	178 / 870 / 19	180 / 1070 / 16	215 / 734 / 36	219 / 909 / 29	216 / 737 / 56	254 / 911 / 46							
	3	151 / 975 / 17	155 / 1224 / 15	167 / 888 / 29	168 / 1092 / 24	158 / 958 / 45	180 / 1165 / 36	152 / 1037 / 17	156 / 1290 / 14	169 / 949 / 28	171 / 1156 / 23	157 / 981 / 41	188 / 1231 / 34							

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edge shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 Θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
15	1	420 / 413 / 45	338 / 511 / 36	454 / 280 / 85	413 / 400 / 78	364 / 358 / 147	291 / 443 / 117	399 / 432 / 43	317 / 527 / 34	454 / 310 / 85	400 / 426 / 75	343 / 372 / 138	276 / 461 / 111	379 / 449 / 41	303 / 551 / 33	454 / 341 / 85	379 / 443 / 72	328 / 389 / 132	265 / 485 / 107	
	2	351 / 477 / 38	283 / 587 / 30	427 / 399 / 80	339 / 490 / 64	323 / 397 / 130	260 / 493 / 105	338 / 503 / 36	276 / 628 / 30	406 / 419 / 77	325 / 516 / 61	307 / 416 / 124	250 / 520 / 101	324 / 528 / 35	262 / 651 / 28	386 / 436 / 73	312 / 541 / 59	297 / 440 / 120	240 / 544 / 97	
	3	296 / 569 / 32	241 / 705 / 26	325 / 511 / 61	264 / 634 / 50	234 / 541 / 95	193 / 676 / 78	283 / 595 / 30	227 / 728 / 25	312 / 538 / 59	251 / 660 / 47	224 / 567 / 90	182 / 701 / 74	269 / 619 / 29	221 / 770 / 24	298 / 563 / 56	237 / 681 / 45	214 / 590 / 86	172 / 721 / 69	
	1	493 / 413 / 49	396 / 511 / 39	508 / 268 / 95	484 / 400 / 90	412 / 358 / 181	330 / 443 / 145	469 / 432 / 46	372 / 527 / 37	508 / 296 / 95	469 / 426 / 87	388 / 372 / 171	312 / 461 / 137	445 / 449 / 44	356 / 551 / 35	508 / 325 / 95	445 / 443 / 83	371 / 389 / 163	300 / 485 / 132	
	2	413 / 477 / 41	332 / 587 / 33	500 / 399 / 93	397 / 490 / 74	365 / 397 / 161	294 / 493 / 130	396 / 503 / 39	324 / 628 / 32	477 / 419 / 89	381 / 516 / 71	347 / 416 / 153	283 / 520 / 125	380 / 528 / 38	308 / 651 / 31	453 / 436 / 85	365 / 541 / 68	336 / 440 / 148	271 / 544 / 119	
	3	348 / 569 / 35	283 / 705 / 28	381 / 511 / 71	310 / 634 / 58	265 / 541 / 117	218 / 676 / 96	332 / 595 / 33	267 / 728 / 27	365 / 538 / 68	294 / 660 / 55	253 / 567 / 112	206 / 701 / 91	316 / 619 / 31	259 / 770 / 26	350 / 563 / 65	278 / 681 / 52	242 / 590 / 106	194 / 721 / 86	
	1	493 / 413 / 49	396 / 511 / 39	508 / 268 / 95	484 / 400 / 90	447 / 348 / 212	368 / 443 / 175	469 / 432 / 46	372 / 527 / 37	508 / 296 / 95	469 / 426 / 87	434 / 372 / 206	348 / 461 / 165	445 / 449 / 44	356 / 551 / 35	508 / 325 / 95	445 / 443 / 83	414 / 389 / 196	335 / 485 / 159	
	2	413 / 477 / 41	332 / 587 / 33	500 / 399 / 93	397 / 490 / 74	407 / 397 / 193	329 / 493 / 156	396 / 503 / 39	324 / 628 / 32	477 / 419 / 89	381 / 516 / 71	388 / 416 / 184	315 / 520 / 150	380 / 528 / 38	308 / 651 / 31	453 / 436 / 85	365 / 541 / 68	375 / 440 / 178	302 / 544 / 144	
	3	348 / 569 / 35	283 / 705 / 28	381 / 511 / 71	310 / 634 / 58	296 / 541 / 140	243 / 676 / 116	332 / 595 / 33	267 / 728 / 27	365 / 538 / 68	294 / 660 / 55	283 / 567 / 134	230 / 701 / 109	316 / 619 / 31	259 / 770 / 26	350 / 563 / 65	278 / 681 / 52	270 / 590 / 128	217 / 721 / 103	
20	1	365 / 472 / 39	289 / 573 / 31	454 / 373 / 85	366 / 466 / 69	317 / 412 / 128	265 / 508 / 103	351 / 493 / 38	283 / 607 / 30	434 / 388 / 82	346 / 478 / 65	302 / 426 / 122	263 / 529 / 99							
	2	310 / 551 / 33	248 / 671 / 27	366 / 451 / 69	298 / 564 / 56	281 / 455 / 113	238 / 567 / 92	296 / 571 / 32	241 / 708 / 26	352 / 472 / 66	285 / 584 / 54	271 / 476 / 109	235 / 587 / 88							
	3	262 / 656 / 28	214 / 811 / 23	285 / 585 / 54	231 / 720 / 44	208 / 627 / 84	173 / 760 / 67	248 / 674 / 27	200 / 822 / 22	271 / 604 / 51	224 / 757 / 42	198 / 645 / 80	174 / 797 / 65							
	1	429 / 472 / 42	340 / 573 / 34	508 / 356 / 95	429 / 466 / 80	359 / 412 / 158	298 / 508 / 127	413 / 493 / 41	332 / 607 / 33	508 / 388 / 95	405 / 478 / 76	341 / 426 / 150	296 / 529 / 122							
	2	364 / 551 / 36	291 / 671 / 29	429 / 451 / 80	350 / 564 / 65	318 / 455 / 140	268 / 567 / 114	348 / 571 / 35	283 / 708 / 28	413 / 472 / 77	334 / 584 / 62	306 / 476 / 135	264 / 587 / 109							
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25	1	338 / 513 / 36	269 / 624 / 29	413 / 402 / 78	332 / 498 / 63	291 / 445 / 117	262 / 548 / 95	351 / 493 / 38	283 / 607 / 30	434 / 388 / 82	346 / 478 / 65	302 / 426 / 122	263 / 529 / 99							
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	3	241 / 708 / 26	193 / 857 / 21	264 / 637 / 50	210 / 768 / 40	193 / 679 / 78	175 / 833 / 63	248 / 674 / 27	200 / 822 / 22	271 / 604 / 51	224 / 757 / 42	198 / 645 / 80	174 / 797 / 65							
	1	396 / 513 / 39	316 / 624 / 31	484 / 402 / 90	389 / 498 / 73	330 / 445 / 145	293 / 548 / 117	413 / 493 / 41	332 / 607 / 33	508 / 388 / 95	405 / 478 / 76	341 / 426 / 150	296 / 529 / 122							
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ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																																		
	140						150						160																						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
15	1	324 / 532 / 35	264 / 656 / 28	400 / 420 / 75	321 / 516 / 60	281 / 464 / 113	260 / 565 / 90	296 / 562 / 32	255 / 696 / 26	373 / 454 / 70	316 / 558 / 56	265 / 497 / 105	260 / 606 / 84	283 / 613 / 30	253 / 749 / 25	346 / 483 / 65	309 / 594 / 52	265 / 534 / 99	266 / 658 / 80																
	2	276 / 620 / 30	222 / 753 / 24	325 / 510 / 61	266 / 632 / 50	250 / 513 / 101	236 / 635 / 82	255 / 662 / 27	219 / 813 / 22	305 / 552 / 58	258 / 673 / 46	239 / 555 / 95	234 / 675 / 76	241 / 715 / 26	215 / 866 / 21	285 / 590 / 54	257 / 726 / 44	237 / 593 / 88	238 / 728 / 72																
	3	227 / 719 / 25	187 / 890 / 20	251 / 651 / 47	205 / 801 / 39	182 / 692 / 74	175 / 867 / 61	214 / 778 / 23	182 / 948 / 19	237 / 710 / 45	201 / 860 / 36	175 / 751 / 69	176 / 929 / 57	200 / 831 / 22	184 / 1038 / 18	217 / 741 / 41	196 / 911 / 33	175 / 805 / 65	175 / 980 / 53																
	1	380 / 532 / 38	309 / 656 / 31	469 / 420 / 87	376 / 516 / 70	318 / 464 / 140	289 / 565 / 112	348 / 562 / 35	297 / 696 / 28	437 / 454 / 82	367 / 558 / 65	299 / 497 / 130	287 / 606 / 104	332 / 613 / 33	292 / 749 / 27	405 / 483 / 76	357 / 594 / 61	297 / 534 / 122	292 / 658 / 99																
	2	324 / 620 / 32	260 / 753 / 26	381 / 510 / 71	312 / 632 / 58	283 / 513 / 125	262 / 635 / 101	299 / 662 / 30	255 / 813 / 24	358 / 552 / 67	300 / 673 / 54	269 / 555 / 117	259 / 675 / 94	283 / 715 / 28	248 / 866 / 23	334 / 590 / 62	296 / 726 / 51	265 / 593 / 109	261 / 728 / 88																
	3	267 / 719 / 27	220 / 890 / 22	294 / 651 / 55	240 / 801 / 45	206 / 692 / 91	195 / 867 / 75	251 / 778 / 25	212 / 948 / 20	278 / 710 / 52	234 / 860 / 42	198 / 751 / 86	194 / 929 / 70	235 / 831 / 23	213 / 1038 / 19	254 / 741 / 48	227 / 911 / 39	196 / 805 / 81	192 / 980 / 65																
	1	380 / 532 / 38	309 / 656 / 31	469 / 420 / 87	376 / 516 / 70	355 / 464 / 168	318 / 565 / 134	348 / 562 / 35	297 / 696 / 28	437 / 454 / 82	367 / 558 / 65	333 / 497 / 156	315 / 606 / 125	332 / 613 / 33	292 / 749 / 27	405 / 483 / 76	357 / 594 / 61	329 / 534 / 147	318 / 658 / 119																
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	3	267 / 719 / 27	220 / 890 / 22	294 / 651 / 55	240 / 801 / 45	230 / 692 / 109	215 / 867 / 91	251 / 778 / 25	212 / 948 / 20	278 / 710 / 52	234 / 860 / 42	220 / 751 / 103	213 / 929 / 84	235 / 831 / 23	213 / 1038 / 19	254 / 741 / 48	227 / 911 / 39	217 / 805 / 97	209 / 980 / 78																
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K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		30	1	533 / 413 / 51	428 / 511 / 41	540 / 264 / 100	523 / 400 / 97	479 / 337 / 240	406 / 443 / 204	506 / 432 / 48	402 / 527 / 38	540 / 291 / 100	506 / 426 / 94	479 / 372 / 240	384 / 461 / 193	480 / 449 / 46	384 / 551 / 37	540 / 320 / 100	480 / 443 / 89	457 / 389 / 230	370 / 485 / 186				
30	2	445 / 477 / 43	358 / 587 / 34	540 / 399 / 100	428 / 490 / 80	450 / 397 / 226	363 / 493 / 182	428 / 503 / 41	349 / 628 / 34	514 / 419 / 96	411 / 516 / 77	428 / 416 / 215	348 / 520 / 175	410 / 528 / 39	332 / 651 / 32	488 / 436 / 91	394 / 541 / 73	413 / 440 / 208	334 / 544 / 168						
30	3	376 / 569 / 36	306 / 705 / 29	411 / 511 / 77	334 / 634 / 62	326 / 541 / 164	269 / 676 / 135	358 / 595 / 34	288 / 728 / 28	394 / 538 / 73	317 / 660 / 59	312 / 567 / 157	254 / 701 / 128	341 / 619 / 33	280 / 770 / 27	377 / 563 / 70	300 / 681 / 56	298 / 590 / 150	240 / 721 / 120						
35	1	578 / 199 / 53	472 / 511 / 43	567 / 251 / 105	567 / 393 / 105	508 / 327 / 267	444 / 443 / 234	559 / 432 / 51	444 / 527 / 41	567 / 277 / 105	558 / 426 / 103	508 / 361 / 267	421 / 461 / 221	530 / 449 / 49	424 / 551 / 39	567 / 305 / 105	529 / 443 / 98	500 / 389 / 263	405 / 485 / 213						
35	2	492 / 477 / 45	395 / 587 / 36	567 / 380 / 105	473 / 490 / 87	492 / 397 / 259	397 / 493 / 209	472 / 503 / 43	386 / 628 / 35	567 / 419 / 105	454 / 516 / 84	468 / 416 / 246	381 / 520 / 200	453 / 528 / 42	366 / 651 / 34	539 / 436 / 100	435 / 541 / 81	452 / 440 / 238	365 / 544 / 192						
35	3	415 / 569 / 38	338 / 705 / 31	454 / 511 / 84	369 / 634 / 68	357 / 541 / 188	294 / 676 / 154	395 / 595 / 36	318 / 728 / 29	435 / 538 / 81	350 / 660 / 65	341 / 567 / 179	278 / 701 / 146	376 / 619 / 35	309 / 770 / 28	416 / 563 / 77	331 / 681 / 61	326 / 590 / 171	262 / 721 / 138						
40	1	618 / 192 / 117	522 / 511 / 99	602 / 243 / 166	602 / 380 / 166	543 / 322 / 303	483 / 443 / 269	618 / 213 / 117	490 / 527 / 93	602 / 268 / 166	602 / 419 / 166	543 / 355 / 303	457 / 461 / 255	586 / 449 / 111	469 / 551 / 89	602 / 295 / 166	581 / 443 / 160	543 / 389 / 303	440 / 485 / 245						
40	2	544 / 477 / 103	437 / 587 / 83	602 / 368 / 166	519 / 490 / 143	534 / 397 / 298	431 / 493 / 241	522 / 503 / 99	426 / 628 / 81	602 / 405 / 166	498 / 516 / 137	509 / 416 / 284	414 / 520 / 231	501 / 528 / 95	405 / 651 / 77	592 / 436 / 163	477 / 541 / 132	491 / 440 / 274	397 / 544 / 221						
40	3	458 / 569 / 87	373 / 705 / 71	498 / 511 / 137	405 / 634 / 112	388 / 541 / 217	319 / 676 / 178	437 / 595 / 83	352 / 728 / 67	477 / 538 / 132	384 / 660 / 106	371 / 567 / 207	302 / 701 / 169	416 / 619 / 79	341 / 770 / 65	457 / 563 / 126	363 / 681 / 100	354 / 590 / 197	285 / 721 / 159						
Wind Speed [mph]		110								115															
Exposure Category : B	30	1	463 / 472 / 44	367 / 573 / 35	540 / 351 / 100	463 / 466 / 86	442 / 412 / 222	365 / 508 / 179	445 / 493 / 43	358 / 607 / 34	540 / 382 / 100	437 / 478 / 81	421 / 426 / 211	360 / 529 / 171											
	30	2	393 / 551 / 38	315 / 671 / 30	463 / 451 / 86	377 / 564 / 70	392 / 455 / 197	328 / 567 / 160	376 / 571 / 36	306 / 708 / 29	446 / 472 / 83	360 / 584 / 67	377 / 476 / 190	321 / 587 / 153											
	30	3	332 / 656 / 32	271 / 811 / 26	360 / 585 / 67	292 / 720 / 54	290 / 627 / 146	239 / 760 / 117	315 / 674 / 30	253 / 822 / 24	343 / 604 / 64	283 / 757 / 53	276 / 645 / 139	237 / 797 / 113											
	35	1	511 / 472 / 47	405 / 573 / 37	567 / 334 / 105	510 / 466 / 94	484 / 412 / 254	398 / 508 / 204	492 / 493 / 45	395 / 607 / 36	567 / 364 / 105	482 / 478 / 89	460 / 426 / 242	392 / 529 / 196											
	35	2	434 / 551 / 40	347 / 671 / 32	510 / 451 / 94	416 / 564 / 77	429 / 455 / 225	358 / 567 / 184	415 / 571 / 38	338 / 708 / 31	492 / 472 / 91	397 / 584 / 74	413 / 476 / 217	350 / 587 / 175											
	35	3	366 / 656 / 34	299 / 811 / 28	397 / 585 / 74	322 / 720 / 60	318 / 627 / 167	260 / 760 / 134	347 / 674 / 32	280 / 822 / 26	378 / 604 / 70	312 / 757 / 58	302 / 645 / 159	259 / 797 / 130											
	40	1	565 / 472 / 107	448 / 573 / 85	602 / 323 / 166	560 / 466 / 155	526 / 412 / 293	432 / 508 / 236	544 / 493 / 103	437 / 607 / 83	602 / 352 / 166	529 / 478 / 146	500 / 426 / 279	424 / 529 / 226											
	40	2	480 / 551 / 91	384 / 671 / 73	560 / 451 / 155	457 / 564 / 126	465 / 455 / 260	388 / 567 / 212	458 / 571 / 87	373 / 708 / 71	540 / 472 / 149	436 / 584 / 120	448 / 476 / 250	379 / 587 / 202											
	40	3	405 / 656 / 77	331 / 811 / 63	436 / 585 / 120	353 / 720 / 98	345 / 627 / 193	282 / 760 / 154	384 / 674 / 73	309 / 822 / 59	415 / 604 / 115	343 / 757 / 95	328 / 645 / 183	280 / 797 / 149											
Wind Speed [mph]		120								130															
Exposure Category : B	30	1	428 / 513 / 41	341 / 624 / 33	523 / 402 / 97	420 / 498 / 78	406 / 445 / 204	354 / 548 / 164	445 / 493 / 43	358 / 607 / 34	540 / 382 / 100	437 / 478 / 81	421 / 426 / 211	360 / 529 / 171											
	30	2	358 / 589 / 34	288 / 721 / 28	428 / 492 / 80	343 / 601 / 64	363 / 495 / 182	315 / 604 / 146	376 / 571 / 36	306 / 708 / 29	446 / 472 / 83	360 / 584 / 67	377 / 476 / 190	321 / 587 / 153											
	30	3	306 / 708 / 29	245 / 857 / 24	334 / 637 / 62	266 / 768 / 50	269 / 679 / 135	236 / 833 / 110	315 / 674 / 30	253 / 822 / 24	343 / 604 / 64	283 / 757 / 53	276 / 645 / 139	237 / 797 / 113											
	35	1	472 / 513 / 43	376 / 624 / 35	567 / 395 / 105	463 / 498 / 86	444 / 445 / 234	385 / 548 / 188	492 / 493 / 45	395 / 607 / 36	567 / 364 / 105	482 / 478 / 89	460 / 426 / 242	392 / 529 / 196											
	35	2	395 / 589 / 36	318 / 721 / 29	473 / 492 / 87	378 / 601 / 70	397 / 495 / 209	342 / 604 / 167	415 / 571 / 38	338 / 708 / 31	492 / 472 / 91	397 / 584 / 74	413 / 476 / 217	350 / 587 / 175											
	35	3	338 / 708 / 31	270 / 857 / 25	369 / 637 / 68	293 / 768 / 54	294 / 679 / 154	257 / 833 / 125	347 / 674 / 32	280 / 822 / 26	378 / 604 / 70	312 / 757 / 58	302 / 645 / 159	259 / 797 / 130											
	40	1	522 / 513 / 99	416 / 624 / 79	602 / 382 / 166	509 / 498 / 140	483 / 445 / 269	415 / 548 / 217	544 / 493 / 103	437 / 607 / 83	602 / 352 / 166	529 / 478 / 146	500 / 426 / 279	424 / 529 / 226											
	40	2	437 / 589 / 83	352 / 721 / 67	519 / 492 / 143	415 / 601 / 115	431 / 495 / 241	369 / 604 / 193	458 / 571 / 87	373 / 708 / 71	540 / 472 / 149	436 / 584 / 120	448 / 476 / 250	379 / 587 / 202											
	40	3	373 / 708 / 71	299 / 857 / 57	405 / 637 / 112	322 / 768 / 89	319 / 679 / 178	277 / 833 / 145	384 / 674 / 73	309 / 822 / 59	415 / 604 / 115	343 / 757 / 95	328 / 645 / 183	280 / 797 / 149											

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	410 / 532 / 39	334 / 656 / 32	506 / 420 / 94	405 / 516 / 75	392 / 464 / 197	348 / 565 / 157	376 / 562 / 36	320 / 696 / 29	471 / 454 / 88	394 / 558 / 70	367 / 497 / 182	342 / 606 / 146	358 / 613 / 34	314 / 749 / 28	437 / 483 / 81	383 / 594 / 65	361 / 534 / 171	344 / 658 / 139	
	2	349 / 620 / 34	281 / 753 / 27	411 / 510 / 77	336 / 632 / 62	348 / 513 / 175	315 / 635 / 142	323 / 662 / 31	274 / 813 / 25	386 / 552 / 72	323 / 673 / 58	331 / 555 / 164	308 / 675 / 131	306 / 715 / 29	266 / 866 / 24	360 / 590 / 67	318 / 726 / 54	323 / 593 / 153	308 / 728 / 124	
	3	288 / 719 / 28	237 / 890 / 23	317 / 651 / 59	259 / 801 / 48	254 / 692 / 128	235 / 867 / 106	271 / 778 / 26	228 / 948 / 21	300 / 710 / 56	251 / 860 / 45	243 / 751 / 120	231 / 929 / 99	253 / 831 / 24	228 / 1038 / 20	274 / 741 / 51	243 / 911 / 42	238 / 805 / 113	226 / 980 / 91	
	35	1	453 / 532 / 42	368 / 656 / 34	558 / 420 / 103	446 / 516 / 82	429 / 464 / 225	377 / 565 / 179	415 / 562 / 38	351 / 696 / 31	520 / 454 / 96	433 / 558 / 77	402 / 497 / 209	369 / 606 / 167	395 / 613 / 36	344 / 749 / 29	482 / 483 / 89	419 / 594 / 72	393 / 534 / 196	370 / 658 / 159
		2	386 / 620 / 35	310 / 753 / 28	454 / 510 / 84	371 / 632 / 68	381 / 513 / 200	342 / 635 / 163	357 / 662 / 33	301 / 813 / 27	425 / 552 / 79	355 / 673 / 63	361 / 555 / 188	333 / 675 / 150	338 / 715 / 31	292 / 866 / 25	397 / 590 / 74	348 / 726 / 60	351 / 593 / 175	331 / 728 / 142
		3	318 / 719 / 29	262 / 890 / 24	350 / 651 / 65	285 / 801 / 53	278 / 692 / 146	254 / 867 / 121	299 / 778 / 28	251 / 948 / 22	331 / 710 / 61	276 / 860 / 49	265 / 751 / 138	250 / 929 / 113	280 / 831 / 26	250 / 1038 / 21	303 / 741 / 56	266 / 911 / 46	259 / 805 / 130	244 / 980 / 105
	40	1	501 / 532 / 95	405 / 656 / 77	602 / 413 / 166	488 / 516 / 135	465 / 464 / 260	406 / 565 / 207	458 / 562 / 87	383 / 696 / 71	571 / 454 / 157	472 / 558 / 126	436 / 497 / 241	397 / 606 / 193	437 / 613 / 83	374 / 749 / 67	529 / 483 / 146	455 / 594 / 118	425 / 534 / 226	396 / 658 / 183
		2	426 / 620 / 81	341 / 753 / 65	498 / 510 / 137	405 / 632 / 112	414 / 513 / 231	369 / 635 / 188	394 / 662 / 75	328 / 813 / 61	467 / 552 / 129	386 / 673 / 103	392 / 555 / 217	357 / 675 / 173	373 / 715 / 71	317 / 866 / 57	436 / 590 / 120	378 / 726 / 98	380 / 593 / 202	354 / 728 / 164
		3	352 / 719 / 67	288 / 890 / 55	384 / 651 / 106	312 / 801 / 86	302 / 692 / 169	274 / 867 / 140	331 / 778 / 63	274 / 948 / 51	363 / 710 / 100	301 / 860 / 80	288 / 751 / 159	268 / 929 / 130	309 / 831 / 59	272 / 1038 / 49	332 / 741 / 92	289 / 911 / 75	281 / 805 / 149	261 / 980 / 121
30	Wind Speed [mph]																			
	170						180													
	1	332 / 644 / 32	307 / 797 / 26	412 / 517 / 77	380 / 641 / 62	353 / 568 / 160	335 / 686 / 128	325 / 686 / 30	299 / 838 / 24	399 / 547 / 72	366 / 666 / 58	345 / 596 / 150	335 / 727 / 120							
	2	280 / 740 / 27	258 / 909 / 22	335 / 621 / 62	312 / 773 / 51	313 / 624 / 142	307 / 776 / 117	280 / 806 / 26	258 / 982 / 21	328 / 663 / 59	305 / 815 / 48	311 / 666 / 135	304 / 817 / 110							
	3	236 / 875 / 23	218 / 1076 / 19	257 / 787 / 48	244 / 991 / 40	233 / 852 / 106	221 / 1020 / 84	235 / 946 / 22	217 / 1152 / 18	257 / 855 / 46	234 / 1023 / 37	227 / 891 / 99	223 / 1095 / 80							
	35	1	367 / 644 / 34	335 / 797 / 28	454 / 517 / 84	414 / 641 / 68	384 / 568 / 184	359 / 686 / 146	358 / 686 / 32	326 / 838 / 26	438 / 547 / 79	398 / 666 / 63	373 / 596 / 171	357 / 727 / 138						
		2	309 / 740 / 28	281 / 909 / 23	369 / 621 / 68	340 / 773 / 56	340 / 624 / 163	329 / 776 / 134	308 / 806 / 28	281 / 982 / 22	360 / 663 / 65	331 / 815 / 53	336 / 666 / 154	325 / 817 / 125						
		3	261 / 875 / 24	238 / 1076 / 20	284 / 787 / 53	266 / 991 / 44	253 / 852 / 121	236 / 1020 / 96	258 / 946 / 23	236 / 1152 / 19	283 / 855 / 51	254 / 1023 / 41	246 / 891 / 113	238 / 1095 / 92						
	40	1	405 / 644 / 77	363 / 797 / 63	498 / 517 / 137	449 / 641 / 112	414 / 568 / 212	383 / 686 / 169	390 / 686 / 73	352 / 838 / 59	478 / 547 / 129	429 / 666 / 103	401 / 596 / 197	380 / 727 / 159						
2		341 / 740 / 65	305 / 909 / 53	405 / 621 / 112	368 / 773 / 92	367 / 624 / 188	350 / 776 / 154	336 / 806 / 63	304 / 982 / 51	393 / 663 / 106	358 / 815 / 86	362 / 666 / 178	345 / 817 / 145							
3		288 / 875 / 55	258 / 1076 / 45	312 / 787 / 86	288 / 991 / 72	273 / 852 / 140	252 / 1020 / 111	282 / 946 / 53	255 / 1152 / 43	308 / 855 / 83	274 / 1023 / 66	264 / 891 / 130	253 / 1095 / 106							
30	Wind Speed [mph]																			
	190						200													
	1	317 / 725 / 29	291 / 871 / 23	394 / 585 / 69	361 / 703 / 54	343 / 633 / 142	333 / 763 / 113	308 / 758 / 27	292 / 931 / 22	379 / 605 / 64	365 / 758 / 53	341 / 668 / 135	341 / 820 / 110							
	2	270 / 842 / 24	248 / 1008 / 19	320 / 701 / 56	297 / 849 / 45	308 / 704 / 128	301 / 851 / 102	260 / 870 / 23	247 / 1070 / 19	313 / 734 / 53	299 / 909 / 43	304 / 737 / 120	307 / 911 / 99							
	3	224 / 975 / 20	216 / 1224 / 17	247 / 888 / 43	233 / 1092 / 35	229 / 958 / 95	226 / 1165 / 77	222 / 1037 / 19	214 / 1290 / 16	246 / 949 / 42	233 / 1156 / 34	222 / 981 / 88	227 / 1231 / 73							
	35	1	348 / 725 / 30	315 / 871 / 24	432 / 585 / 75	391 / 703 / 60	370 / 633 / 163	354 / 763 / 130	337 / 758 / 28	316 / 931 / 23	414 / 605 / 70	395 / 758 / 58	367 / 668 / 154	361 / 820 / 125						
		2	297 / 842 / 26	269 / 1008 / 21	351 / 701 / 61	322 / 849 / 49	332 / 704 / 146	320 / 851 / 117	285 / 870 / 24	267 / 1070 / 20	342 / 734 / 58	323 / 909 / 47	327 / 737 / 138	325 / 911 / 113						
		3	246 / 975 / 21	234 / 1224 / 18	271 / 888 / 47	253 / 1092 / 39	247 / 958 / 109	240 / 1165 / 88	243 / 1037 / 21	231 / 1290 / 17	269 / 949 / 46	251 / 1156 / 37	238 / 981 / 100	241 / 1231 / 84						
	40	1	379 / 725 / 69	340 / 871 / 55	470 / 585 / 123	421 / 703 / 98	397 / 633 / 188	375 / 763 / 149	366 / 758 / 65	340 / 931 / 53	449 / 605 / 115	424 / 758 / 95	392 / 668 / 178	382 / 820 / 145						
2		323 / 842 / 59	290 / 1008 / 47	382 / 701 / 100	346 / 849 / 80	356 / 704 / 169	339 / 851 / 135	309 / 870 / 55	287 / 1070 / 45	371 / 734 / 95	347 / 909 / 78	349 / 737 / 159	344 / 911 / 130							
3		267 / 975 / 49	252 / 1224 / 41	295 / 888 / 78	272 / 1092 / 63	265 / 958 / 125	254 / 1165 / 101	263 / 1037 / 47	248 / 1290 / 39	292 / 949 / 75	270 / 1156 / 60	254 / 981 / 116	255 / 1231 / 97							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 2.5in x 45.9in

Exposure Category : B

Ground Snow	Group	Wind Speed [mph]																															
		95				100				105				110				115				120				130							
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge				
45	1	653 / 182 / 120	582 / 511 / 107	647 / 234 / 176	647 / 367 / 176	567 / 312 / 323	521 / 443 / 297	653 / 202 / 120	546 / 527 / 101	647 / 259 / 176	647 / 404 / 176	567 / 344 / 323	493 / 461 / 281	653 / 223 / 120	522 / 551 / 96	647 / 285 / 176	647 / 443 / 176	567 / 377 / 323	474 / 485 / 270														
	2	605 / 477 / 112	487 / 587 / 90	647 / 355 / 176	578 / 490 / 157	567 / 391 / 323	465 / 493 / 265	582 / 503 / 107	475 / 628 / 88	647 / 391 / 176	555 / 516 / 151	549 / 416 / 313	447 / 520 / 254	558 / 528 / 103	451 / 651 / 83	647 / 429 / 176	532 / 541 / 144	530 / 440 / 302	428 / 544 / 244														
	3	510 / 569 / 94	416 / 705 / 77	555 / 511 / 151	451 / 634 / 123	419 / 541 / 238	344 / 676 / 196	487 / 595 / 90	392 / 728 / 72	532 / 538 / 144	428 / 660 / 116	400 / 567 / 228	326 / 701 / 186	463 / 619 / 86	380 / 770 / 70	509 / 563 / 138	405 / 681 / 110	382 / 590 / 217	307 / 721 / 175														
50	1	706 / 179 / 127	641 / 511 / 115	688 / 226 / 184	688 / 354 / 184	589 / 302 / 341	559 / 443 / 324	706 / 198 / 127	602 / 527 / 108	688 / 250 / 184	688 / 390 / 184	589 / 333 / 341	529 / 461 / 307	706 / 219 / 127	576 / 551 / 104	688 / 275 / 184	688 / 427 / 184	589 / 365 / 341	509 / 485 / 295														
	2	667 / 477 / 120	536 / 587 / 97	688 / 342 / 184	637 / 490 / 171	589 / 378 / 341	499 / 493 / 289	641 / 503 / 115	523 / 628 / 94	688 / 377 / 184	611 / 516 / 164	589 / 416 / 341	479 / 520 / 278	615 / 528 / 111	497 / 651 / 90	688 / 413 / 184	586 / 541 / 157	569 / 440 / 330	459 / 544 / 266														
	3	562 / 569 / 101	458 / 705 / 83	611 / 511 / 164	497 / 634 / 133	449 / 541 / 260	370 / 676 / 214	536 / 595 / 97	432 / 728 / 78	586 / 538 / 157	471 / 660 / 126	429 / 567 / 249	350 / 701 / 203	510 / 619 / 92	419 / 770 / 76	560 / 563 / 150	446 / 681 / 120	410 / 590 / 237	330 / 721 / 191														
60	1	775 / 166 / 134	760 / 511 / 132	754 / 209 / 198	754 / 328 / 198	659 / 286 / 381	659 / 443 / 381	775 / 184 / 134	713 / 527 / 123	754 / 231 / 198	754 / 361 / 198	659 / 316 / 381	624 / 461 / 360	775 / 203 / 134	682 / 551 / 118	754 / 254 / 198	754 / 395 / 198	659 / 346 / 381	600 / 485 / 347														
	2	775 / 468 / 134	636 / 587 / 110	754 / 317 / 198	754 / 490 / 198	659 / 359 / 381	589 / 493 / 340	760 / 503 / 132	620 / 628 / 107	754 / 349 / 198	724 / 516 / 190	659 / 395 / 381	565 / 520 / 326	729 / 528 / 126	589 / 651 / 102	754 / 383 / 198	694 / 541 / 182	659 / 432 / 381	542 / 544 / 313														
	3	667 / 569 / 115	543 / 705 / 94	724 / 511 / 190	589 / 634 / 155	530 / 541 / 306	436 / 676 / 252	636 / 595 / 110	512 / 728 / 89	694 / 538 / 182	558 / 660 / 147	506 / 567 / 292	412 / 701 / 238	605 / 619 / 105	496 / 770 / 86	664 / 563 / 175	528 / 681 / 139	483 / 590 / 279	389 / 721 / 225														
45	1	629 / 472 / 116	499 / 573 / 92	647 / 312 / 176	624 / 466 / 169	567 / 412 / 323	465 / 508 / 260	605 / 493 / 112	487 / 607 / 90	647 / 340 / 176	589 / 478 / 160	540 / 426 / 307	456 / 529 / 249																				
	2	534 / 551 / 99	427 / 671 / 79	624 / 451 / 169	509 / 564 / 138	502 / 455 / 286	418 / 567 / 233	510 / 571 / 94	416 / 708 / 77	601 / 472 / 163	485 / 584 / 132	484 / 476 / 275	408 / 587 / 223																				
	3	451 / 656 / 83	368 / 811 / 68	485 / 585 / 132	393 / 720 / 107	372 / 627 / 212	304 / 760 / 170	427 / 674 / 79	344 / 822 / 64	462 / 604 / 126	382 / 757 / 104	354 / 645 / 201	301 / 797 / 164																				
50	1	693 / 472 / 125	549 / 573 / 99	688 / 301 / 184	688 / 466 / 184	589 / 398 / 341	499 / 508 / 283	667 / 493 / 120	536 / 607 / 97	688 / 328 / 184	649 / 478 / 174	579 / 426 / 335	488 / 529 / 272																				
	2	589 / 551 / 106	471 / 671 / 85	688 / 451 / 184	560 / 564 / 150	539 / 455 / 312	448 / 567 / 255	562 / 571 / 101	458 / 708 / 83	662 / 472 / 178	535 / 584 / 144	519 / 476 / 301	436 / 587 / 243																				
	3	497 / 656 / 90	406 / 811 / 73	535 / 585 / 144	433 / 720 / 116	400 / 627 / 232	326 / 760 / 185	471 / 674 / 85	380 / 822 / 69	509 / 604 / 137	420 / 757 / 113	380 / 645 / 220	322 / 797 / 180																				
60	1	775 / 222 / 134	651 / 573 / 113	754 / 278 / 198	754 / 431 / 198	659 / 378 / 381	577 / 508 / 333	775 / 243 / 134	636 / 607 / 110	754 / 303 / 198	754 / 469 / 198	659 / 411 / 381	553 / 529 / 320																				
	2	698 / 551 / 121	558 / 671 / 97	754 / 418 / 198	664 / 564 / 175	636 / 455 / 367	518 / 567 / 299	667 / 571 / 115	543 / 708 / 94	754 / 454 / 198	634 / 584 / 167	612 / 476 / 354	494 / 587 / 286																				
	3	589 / 656 / 102	481 / 811 / 83	634 / 585 / 167	513 / 720 / 135	471 / 627 / 272	377 / 760 / 218	558 / 674 / 97	450 / 822 / 78	604 / 604 / 159	498 / 757 / 131	447 / 645 / 259	365 / 797 / 211																				
45	1	582 / 513 / 107	463 / 624 / 86	647 / 369 / 176	566 / 498 / 154	521 / 445 / 297	446 / 548 / 238	605 / 493 / 112	487 / 607 / 90	647 / 340 / 176	589 / 478 / 160	540 / 426 / 307	456 / 529 / 249																				
	2	487 / 589 / 90	392 / 721 / 72	578 / 492 / 157	462 / 601 / 126	465 / 495 / 265	397 / 604 / 212	510 / 571 / 94	416 / 708 / 77	601 / 472 / 163	485 / 584 / 132	484 / 476 / 275	408 / 587 / 223																				
	3	416 / 708 / 77	333 / 857 / 62	451 / 637 / 123	358 / 768 / 98	344 / 679 / 196	298 / 833 / 159	427 / 674 / 79	344 / 822 / 64	462 / 604 / 126	382 / 757 / 104	354 / 645 / 201	301 / 797 / 164																				
50	1	641 / 513 / 115	510 / 624 / 92	688 / 356 / 184	624 / 498 / 167	559 / 445 / 324	477 / 548 / 260	667 / 493 / 120	536 / 607 / 97	688 / 328 / 184	649 / 478 / 174	579 / 426 / 335	488 / 529 / 272																				
	2	536 / 589 / 97	432 / 721 / 78	637 / 492 / 171	509 / 601 / 137	499 / 495 / 289	424 / 604 / 232	562 / 571 / 101	458 / 708 / 83	662 / 472 / 178	535 / 584 / 144	519 / 476 / 301	436 / 587 / 243																				
	3	458 / 708 / 83	366 / 857 / 66	497 / 637 / 133	395 / 768 / 106	370 / 679 / 214	318 / 833 / 174	471 / 674 / 85	380 / 822 / 69	509 / 604 / 137	420 / 757 / 113	380 / 645 / 220	322 / 797 / 180																				
60	1	760 / 513 / 132	605 / 624 / 105	754 / 329 / 198	739 / 498 / 194	659 / 445 / 381	538 / 548 / 306	775 / 243 / 134	636 / 607 / 110	754 / 303 / 198	754 / 469 / 198	659 / 411 / 381	553 / 529 / 320																				
	2	636 / 589 / 110	512 / 721 / 89	754 / 492 / 198	604 / 601 / 159	589 / 495 / 340	479 / 604 / 272	667 / 571 / 115	543 / 708 / 94	754 / 454 / 198	634 / 584 / 167	612 / 476 / 354	494 / 587 / 286																				
	3	543 / 708 / 94	434 / 857 / 75	589 / 637 / 155	468 / 768 / 123	436 / 679 / 252	359 / 833 / 204	558 / 674 / 97	450 / 822 / 78	604 / 604 / 159	498 / 757 / 131	447 / 645 / 259	365 / 797 / 211																				

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge			
45	1	558 / 532 / 103	451 / 656 / 83	647 / 399 / 176	543 / 516 / 148	502 / 464 / 286	436 / 565 / 228	510 / 562 / 94	416 / 696 / 77	636 / 454 / 173	511 / 558 / 138	470 / 497 / 265	424 / 606 / 212	487 / 613 / 90	404 / 749 / 72	589 / 483 / 160	492 / 594 / 129	457 / 534 / 249	422 / 658 / 201	
	2	475 / 620 / 88	380 / 753 / 70	555 / 510 / 151	451 / 632 / 123	447 / 513 / 254	395 / 635 / 207	439 / 662 / 81	356 / 813 / 66	520 / 552 / 141	418 / 673 / 113	423 / 555 / 238	382 / 675 / 191	416 / 715 / 77	342 / 866 / 62	485 / 590 / 132	408 / 726 / 107	409 / 593 / 223	377 / 728 / 180	
	3	392 / 719 / 72	321 / 890 / 59	428 / 651 / 116	347 / 801 / 94	326 / 692 / 186	294 / 867 / 154	368 / 778 / 68	297 / 948 / 55	405 / 710 / 110	325 / 860 / 88	310 / 751 / 175	286 / 929 / 143	344 / 831 / 64	294 / 1038 / 53	370 / 741 / 101	312 / 911 / 82	302 / 805 / 164	278 / 980 / 133	
	50	1	615 / 532 / 111	497 / 656 / 90	688 / 385 / 184	599 / 516 / 161	539 / 464 / 312	465 / 565 / 249	562 / 562 / 101	458 / 696 / 83	688 / 446 / 184	560 / 558 / 150	504 / 497 / 289	451 / 606 / 232	536 / 613 / 97	434 / 749 / 78	649 / 483 / 174	528 / 594 / 140	489 / 534 / 272	448 / 658 / 220
		2	523 / 620 / 94	419 / 753 / 76	611 / 510 / 164	497 / 632 / 133	479 / 513 / 278	422 / 635 / 226	484 / 662 / 87	393 / 813 / 71	573 / 552 / 154	459 / 673 / 123	454 / 555 / 260	406 / 675 / 208	458 / 715 / 83	368 / 866 / 66	535 / 590 / 144	438 / 726 / 116	437 / 593 / 243	401 / 728 / 197
		3	432 / 719 / 78	353 / 890 / 64	471 / 651 / 126	382 / 801 / 103	350 / 692 / 203	314 / 867 / 168	406 / 778 / 73	327 / 948 / 59	446 / 710 / 120	357 / 860 / 96	333 / 751 / 191	305 / 929 / 156	380 / 831 / 69	315 / 1038 / 57	408 / 741 / 109	335 / 911 / 89	323 / 805 / 180	295 / 980 / 145
	60	1	729 / 532 / 126	589 / 656 / 102	754 / 356 / 198	709 / 516 / 186	636 / 464 / 367	524 / 565 / 292	667 / 562 / 115	543 / 696 / 94	754 / 413 / 198	664 / 558 / 175	589 / 497 / 340	506 / 606 / 272	636 / 613 / 110	512 / 749 / 89	754 / 474 / 198	619 / 594 / 163	554 / 534 / 320	500 / 658 / 259
		2	620 / 620 / 107	496 / 753 / 86	724 / 510 / 190	589 / 632 / 155	565 / 513 / 326	475 / 635 / 265	574 / 662 / 99	465 / 813 / 81	679 / 552 / 179	543 / 673 / 143	530 / 555 / 306	455 / 675 / 245	543 / 715 / 94	434 / 866 / 75	634 / 590 / 167	513 / 726 / 135	495 / 593 / 286	447 / 728 / 231
		3	512 / 719 / 89	419 / 890 / 73	558 / 651 / 147	453 / 801 / 119	412 / 692 / 238	354 / 867 / 197	481 / 778 / 83	388 / 948 / 67	528 / 710 / 139	423 / 860 / 111	389 / 751 / 225	342 / 929 / 184	450 / 831 / 78	372 / 1038 / 65	483 / 741 / 127	393 / 911 / 103	365 / 805 / 211	329 / 980 / 170
45	Wind Speed [mph]																			
	170						180													
	1	451 / 644 / 83	391 / 797 / 68	555 / 517 / 151	483 / 641 / 123	444 / 568 / 233	407 / 686 / 186	427 / 686 / 79	378 / 838 / 64	520 / 547 / 141	461 / 666 / 113	429 / 596 / 217	402 / 727 / 175	ASCE Group Zone						
	2	380 / 740 / 70	328 / 909 / 57	451 / 621 / 123	396 / 773 / 101	393 / 624 / 207	372 / 776 / 170	368 / 806 / 68	326 / 982 / 55	428 / 663 / 116	384 / 815 / 94	387 / 666 / 196	366 / 817 / 159	Panal Angle						
	3	321 / 875 / 59	278 / 1076 / 48	347 / 787 / 94	310 / 991 / 79	293 / 852 / 154	268 / 1020 / 122	309 / 946 / 57	274 / 1152 / 46	335 / 855 / 91	295 / 1023 / 72	283 / 891 / 143	268 / 1095 / 117	Mono Slope						
	50	1	497 / 644 / 90	420 / 797 / 73	611 / 517 / 164	517 / 641 / 133	474 / 568 / 255	431 / 686 / 203	471 / 686 / 85	405 / 838 / 69	573 / 547 / 154	493 / 666 / 123	457 / 596 / 237	425 / 727 / 191	0 - 3					
		2	419 / 740 / 76	352 / 909 / 61	497 / 621 / 133	425 / 773 / 109	420 / 624 / 226	394 / 776 / 185	406 / 806 / 73	349 / 982 / 59	471 / 663 / 126	411 / 815 / 103	412 / 666 / 214	386 / 817 / 174	2 = 2					
		3	353 / 875 / 64	298 / 1076 / 52	382 / 787 / 103	332 / 991 / 86	312 / 852 / 168	283 / 1020 / 133	340 / 946 / 61	293 / 1152 / 50	369 / 855 / 99	315 / 1023 / 79	301 / 891 / 156	283 / 1095 / 128	3 = 3					
	60	1	589 / 644 / 102	481 / 797 / 83	724 / 517 / 190	589 / 641 / 155	534 / 568 / 299	479 / 686 / 238	558 / 686 / 97	457 / 838 / 78	679 / 547 / 179	556 / 666 / 143	513 / 596 / 279	470 / 727 / 225	3 - 10					
2		496 / 740 / 86	403 / 909 / 70	589 / 621 / 155	483 / 773 / 127	473 / 624 / 265	438 / 776 / 218	481 / 806 / 83	394 / 982 / 67	558 / 663 / 147	464 / 815 / 119	463 / 666 / 252	427 / 817 / 204	1 = 1						
3		419 / 875 / 73	341 / 1076 / 59	453 / 787 / 119	377 / 991 / 99	352 / 852 / 197	315 / 1020 / 157	403 / 946 / 70	331 / 1152 / 57	438 / 855 / 115	356 / 1023 / 91	338 / 891 / 184	313 / 1095 / 150	2 = 2' / 2						
45	Wind Speed [mph]																			
	190						200													
	1	410 / 725 / 75	364 / 871 / 59	508 / 585 / 135	451 / 703 / 107	423 / 633 / 207	396 / 763 / 164	395 / 758 / 70	363 / 931 / 57	485 / 605 / 126	453 / 758 / 104	417 / 668 / 196	402 / 820 / 159	1 = 1						
	2	349 / 842 / 64	310 / 1008 / 51	413 / 701 / 110	371 / 849 / 88	380 / 704 / 186	358 / 851 / 149	334 / 870 / 59	307 / 1070 / 48	400 / 734 / 104	371 / 909 / 85	372 / 737 / 175	362 / 911 / 143	2 = 2						
	3	289 / 975 / 53	270 / 1224 / 44	319 / 888 / 85	292 / 1092 / 69	282 / 958 / 138	269 / 1165 / 112	284 / 1037 / 51	265 / 1290 / 42	315 / 949 / 82	288 / 1156 / 66	271 / 981 / 127	268 / 1231 / 106	3 = 3						
	50	1	445 / 725 / 80	389 / 871 / 64	548 / 585 / 147	481 / 703 / 116	450 / 633 / 226	418 / 763 / 180	425 / 758 / 76	387 / 931 / 61	520 / 605 / 137	482 / 758 / 113	442 / 668 / 214	423 / 820 / 174	ASCE Group Zone					
		2	380 / 842 / 69	331 / 1008 / 54	446 / 701 / 120	396 / 849 / 96	404 / 704 / 203	377 / 851 / 162	358 / 870 / 64	327 / 1070 / 52	429 / 734 / 113	394 / 909 / 92	395 / 737 / 191	381 / 911 / 156	Panal Angle					
		3	314 / 975 / 57	288 / 1224 / 47	344 / 888 / 92	311 / 1092 / 75	300 / 958 / 151	283 / 1165 / 122	305 / 1037 / 54	283 / 1290 / 45	338 / 949 / 89	307 / 1156 / 72	287 / 981 / 139	282 / 1231 / 116	Mono Slope					
	60	1	527 / 725 / 91	438 / 871 / 73	649 / 585 / 171	541 / 703 / 135	503 / 633 / 265	460 / 763 / 211	496 / 758 / 86	434 / 931 / 70	604 / 605 / 159	540 / 758 / 131	493 / 668 / 252	464 / 820 / 204	0 - 3					
2		450 / 842 / 78	373 / 1008 / 62	528 / 701 / 139	445 / 849 / 111	452 / 704 / 238	415 / 851 / 191	419 / 870 / 73	367 / 1070 / 59	498 / 734 / 131	442 / 909 / 107	440 / 737 / 225	418 / 911 / 184	2 = 2						
3		372 / 975 / 65	325 / 1224 / 54	408 / 888 / 107	350 / 1092 / 88	336 / 958 / 177	312 / 1165 / 143	357 / 1037 / 62	317 / 1290 / 51	393 / 949 / 103	344 / 1156 / 84	320 / 981 / 163	309 / 1231 / 136	3 = 3						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]		95						100						105																				
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
70	1	824 / 152 / 139	824 / 242 / 139	820 / 197 / 212	820 / 308 / 212	720 / 271 / 416	720 / 420 / 416	824 / 169 / 139	824 / 267 / 139	820 / 217 / 212	820 / 339 / 212	720 / 299 / 416	720 / 461 / 416	824 / 186 / 139	789 / 551 / 133	820 / 239 / 212	820 / 372 / 212	720 / 328 / 416	693 / 485 / 400																
	2	824 / 430 / 139	735 / 587 / 124	820 / 298 / 212	820 / 460 / 212	720 / 340 / 416	680 / 493 / 393	824 / 473 / 139	717 / 628 / 121	820 / 328 / 212	820 / 505 / 212	720 / 374 / 416	652 / 520 / 377	824 / 517 / 139	681 / 651 / 115	820 / 360 / 212	802 / 541 / 208	720 / 409 / 416	625 / 544 / 361																
	3	771 / 569 / 130	627 / 705 / 106	820 / 501 / 212	680 / 634 / 176	612 / 541 / 353	503 / 676 / 291	735 / 595 / 124	592 / 728 / 100	802 / 538 / 208	646 / 660 / 167	585 / 567 / 338	476 / 701 / 275	699 / 619 / 118	574 / 770 / 97	768 / 563 / 199	611 / 681 / 158	557 / 590 / 322	449 / 721 / 259																
	1	895 / 146 / 147	895 / 231 / 147	871 / 184 / 223	871 / 289 / 223	771 / 256 / 445	771 / 396 / 445	895 / 162 / 147	895 / 255 / 147	871 / 204 / 223	871 / 318 / 223	771 / 282 / 445	771 / 435 / 445	895 / 178 / 147	895 / 280 / 147	871 / 224 / 223	871 / 348 / 223	771 / 309 / 445	771 / 476 / 445																
	2	895 / 412 / 147	834 / 587 / 137	871 / 279 / 223	871 / 431 / 223	771 / 320 / 445	771 / 493 / 445	895 / 452 / 147	814 / 628 / 134	871 / 307 / 223	871 / 473 / 223	771 / 353 / 445	740 / 520 / 427	895 / 495 / 147	773 / 651 / 127	871 / 337 / 223	871 / 517 / 223	771 / 386 / 445	709 / 544 / 410																
	3	875 / 569 / 144	712 / 705 / 117	871 / 469 / 223	772 / 634 / 198	694 / 541 / 401	570 / 676 / 330	834 / 595 / 137	672 / 728 / 110	871 / 515 / 223	733 / 660 / 188	663 / 567 / 383	540 / 701 / 312	794 / 619 / 130	651 / 770 / 107	871 / 563 / 223	693 / 681 / 178	632 / 590 / 365	509 / 721 / 294																
	1	933 / 136 / 151	933 / 216 / 151	931 / 176 / 236	931 / 275 / 236	810 / 240 / 468	810 / 372 / 468	933 / 151 / 151	933 / 238 / 151	931 / 194 / 236	931 / 303 / 236	810 / 265 / 468	810 / 409 / 468	933 / 166 / 151	933 / 261 / 151	931 / 214 / 236	931 / 332 / 236	810 / 291 / 468	810 / 447 / 468																
	2	933 / 384 / 151	933 / 587 / 151	931 / 266 / 236	931 / 411 / 236	810 / 301 / 468	810 / 463 / 468	933 / 421 / 151	911 / 628 / 147	931 / 293 / 236	931 / 452 / 236	810 / 331 / 468	810 / 509 / 468	933 / 461 / 151	865 / 651 / 140	931 / 322 / 236	931 / 494 / 236	810 / 363 / 468	793 / 544 / 458																
	3	933 / 543 / 151	797 / 705 / 129	931 / 448 / 236	864 / 634 / 219	776 / 541 / 448	638 / 676 / 368	933 / 595 / 151	751 / 728 / 121	931 / 491 / 236	820 / 660 / 208	741 / 567 / 428	603 / 701 / 349	888 / 619 / 143	729 / 770 / 118	931 / 537 / 236	776 / 681 / 197	707 / 590 / 408	569 / 721 / 329																
80	1	824 / 205 / 139	753 / 573 / 127	820 / 262 / 212	820 / 406 / 212	720 / 358 / 416	666 / 508 / 385	824 / 223 / 139	735 / 607 / 124	820 / 285 / 212	820 / 441 / 212	720 / 389 / 416	639 / 529 / 369	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
		2 = 2' / 2																																	
		3 = 3' / 3																																	
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	807 / 551 / 136	645 / 671 / 109	820 / 393 / 212	768 / 564 / 199	720 / 446 / 416	598 / 567 / 346	771 / 571 / 130	627 / 708 / 106	820 / 427 / 212	733 / 584 / 190	707 / 476 / 408	571 / 587 / 330																							
3	681 / 656 / 115	556 / 811 / 94	733 / 585 / 190	593 / 720 / 154	544 / 627 / 314	435 / 760 / 251	645 / 674 / 109	520 / 822 / 88	698 / 604 / 181	576 / 757 / 149	517 / 645 / 298	422 / 797 / 244																							
1	895 / 196 / 147	855 / 573 / 140	871 / 245 / 223	871 / 380 / 223	771 / 337 / 445	755 / 508 / 436	895 / 214 / 147	834 / 607 / 137	871 / 267 / 223	871 / 413 / 223	771 / 367 / 445	724 / 529 / 418																							
2	895 / 539 / 147	733 / 671 / 120	871 / 368 / 223	871 / 564 / 223	771 / 421 / 445	678 / 567 / 392	875 / 571 / 144	712 / 708 / 117	871 / 400 / 223	832 / 584 / 213	771 / 457 / 445	647 / 587 / 374																							
3	773 / 656 / 127	631 / 811 / 104	832 / 585 / 213	673 / 720 / 172	617 / 627 / 356	493 / 760 / 285	733 / 674 / 120	590 / 822 / 97	792 / 604 / 203	654 / 757 / 167	586 / 645 / 338	478 / 797 / 276																							
1	933 / 182 / 151	933 / 285 / 151	931 / 234 / 236	931 / 363 / 236	810 / 317 / 468	810 / 487 / 468	933 / 199 / 151	933 / 310 / 151	931 / 255 / 236	931 / 394 / 236	810 / 345 / 468	810 / 529 / 468																							
2	933 / 502 / 151	820 / 671 / 132	931 / 351 / 236	931 / 538 / 236	810 / 396 / 468	758 / 567 / 438	933 / 545 / 151	797 / 708 / 129	931 / 381 / 236	931 / 584 / 236	810 / 430 / 468	724 / 587 / 418																							
3	865 / 656 / 140	706 / 811 / 114	931 / 585 / 236	753 / 720 / 191	689 / 627 / 398	552 / 760 / 319	820 / 674 / 132	660 / 822 / 107	886 / 604 / 225	731 / 757 / 186	655 / 645 / 378	534 / 797 / 309																							
90	1	824 / 243 / 139	699 / 624 / 118	820 / 310 / 212	820 / 478 / 212	720 / 422 / 416	612 / 548 / 353	824 / 223 / 139	735 / 607 / 124	820 / 285 / 212	820 / 441 / 212	720 / 389 / 416	639 / 529 / 369																						
	2	735 / 589 / 124	592 / 721 / 100	820 / 462 / 212	698 / 601 / 181	680 / 495 / 393	544 / 604 / 314	771 / 571 / 130	627 / 708 / 106	820 / 427 / 212	733 / 584 / 190	707 / 476 / 408	571 / 587 / 330																						
	3	627 / 708 / 106	502 / 857 / 85	680 / 637 / 176	541 / 768 / 140	503 / 679 / 291	408 / 833 / 236	645 / 674 / 109	520 / 822 / 88	698 / 604 / 181	576 / 757 / 149	517 / 645 / 298	422 / 797 / 244																						
	1	895 / 232 / 147	794 / 624 / 130	871 / 290 / 223	871 / 447 / 223	771 / 398 / 445	694 / 548 / 401	895 / 214 / 147	834 / 607 / 137	871 / 267 / 223	871 / 413 / 223	771 / 367 / 445	724 / 529 / 418																						
	2	834 / 589 / 137	672 / 721 / 110	871 / 433 / 223	792 / 601 / 203	771 / 495 / 445	617 / 604 / 356	875 / 571 / 144	712 / 708 / 117	871 / 400 / 223	832 / 584 / 213	771 / 457 / 445	647 / 587 / 374																						
	3	712 / 708 / 117	570 / 857 / 94	772 / 637 / 198	614 / 768 / 157	570 / 679 / 330	463 / 833 / 267	733 / 674 / 120	590 / 822 / 97	792 / 604 / 203	654 / 757 / 167	586 / 645 / 338	478 / 797 / 276																						
	1	933 / 217 / 151	888 / 624 / 143	931 / 277 / 236	931 / 427 / 236	810 / 374 / 468	776 / 548 / 448	933 / 199 / 151	933 / 310 / 151	931 / 255 / 236	931 / 394 / 236	810 / 345 / 468	810 / 529 / 468																						
	2	933 / 589 / 151	751 / 721 / 121	931 / 413 / 236	886 / 601 / 225	810 / 465 / 468	689 / 604 / 398	933 / 545 / 151	797 / 708 / 129	931 / 381 / 236	931 / 584 / 236	810 / 430 / 468	724 / 587 / 418																						
	3	797 / 708 / 129	638 / 857 / 103	864 / 637 / 219	687 / 768 / 174	638 / 679 / 368	517 / 833 / 299	820 / 674 / 132	660 / 822 / 107	886 / 604 / 225	731 / 757 / 186	655 / 645 / 378	534 / 797 / 309																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																									
Wind Speed [mph]		140								150								160																	
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
Exposure Category : B	Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge															
	70	1	1	824 / 263 / 139	681 / 656 / 115	820 / 335 / 212	820 / 516 / 212	720 / 455 / 416	585 / 565 / 338	771 / 562 / 130	627 / 696 / 106	820 / 388 / 212	768 / 558 / 199	680 / 497 / 393	561 / 606 / 314	735 / 613 / 124	592 / 749 / 100	820 / 445 / 212	715 / 594 / 185	639 / 534 / 369	552 / 658 / 298														
2			717 / 620 / 121	574 / 753 / 97	820 / 499 / 212	680 / 632 / 176	652 / 513 / 377	530 / 635 / 306	663 / 662 / 112	538 / 813 / 91	785 / 552 / 203	628 / 673 / 163	612 / 555 / 353	505 / 675 / 283	627 / 715 / 106	502 / 866 / 85	733 / 590 / 190	593 / 726 / 154	571 / 593 / 330	494 / 728 / 267															
3			592 / 719 / 100	484 / 890 / 82	646 / 651 / 167	523 / 801 / 136	476 / 692 / 275	394 / 867 / 228	556 / 778 / 94	448 / 948 / 76	611 / 710 / 158	489 / 860 / 127	449 / 751 / 259	379 / 929 / 212	520 / 831 / 88	430 / 1038 / 73	558 / 741 / 145	454 / 911 / 118	422 / 805 / 244	363 / 980 / 197															
80		1	895 / 252 / 147	773 / 656 / 127	871 / 314 / 223	871 / 483 / 223	771 / 430 / 445	663 / 565 / 383	875 / 562 / 144	712 / 696 / 117	871 / 364 / 223	871 / 558 / 223	771 / 497 / 445	617 / 606 / 356	834 / 613 / 137	672 / 749 / 110	871 / 417 / 223	812 / 594 / 208	724 / 534 / 418	603 / 658 / 338															
		2	814 / 620 / 134	651 / 753 / 107	871 / 467 / 223	772 / 632 / 198	740 / 513 / 427	601 / 635 / 347	753 / 662 / 124	611 / 813 / 100	871 / 540 / 223	713 / 673 / 183	694 / 555 / 401	555 / 675 / 321	712 / 715 / 117	570 / 866 / 94	832 / 590 / 213	673 / 726 / 172	647 / 593 / 374	540 / 728 / 303															
		3	672 / 719 / 110	550 / 890 / 90	733 / 651 / 188	594 / 801 / 152	540 / 692 / 312	447 / 867 / 258	631 / 778 / 104	509 / 948 / 84	693 / 710 / 178	555 / 860 / 142	509 / 751 / 294	416 / 929 / 241	590 / 831 / 97	489 / 1038 / 80	634 / 741 / 162	515 / 911 / 132	478 / 805 / 276	397 / 980 / 223															
90		1	933 / 235 / 151	865 / 656 / 140	931 / 299 / 236	931 / 461 / 236	810 / 404 / 468	741 / 565 / 428	933 / 273 / 151	797 / 696 / 129	931 / 347 / 236	931 / 532 / 236	810 / 467 / 468	689 / 606 / 398	933 / 314 / 151	751 / 749 / 121	931 / 398 / 236	908 / 594 / 230	810 / 534 / 468	655 / 658 / 378															
		2	911 / 620 / 147	729 / 753 / 118	931 / 446 / 236	864 / 632 / 219	810 / 502 / 468	672 / 635 / 388	842 / 662 / 136	683 / 813 / 110	931 / 516 / 236	798 / 673 / 202	776 / 555 / 448	621 / 675 / 359	797 / 715 / 129	638 / 866 / 103	931 / 590 / 236	753 / 726 / 191	724 / 593 / 418	586 / 728 / 339															
		3	751 / 719 / 121	615 / 890 / 99	820 / 651 / 208	665 / 801 / 169	603 / 692 / 349	500 / 867 / 289	706 / 778 / 114	569 / 948 / 92	776 / 710 / 197	621 / 860 / 158	569 / 751 / 329	466 / 929 / 269	660 / 831 / 107	547 / 1038 / 88	709 / 741 / 180	576 / 911 / 146	534 / 805 / 309	431 / 980 / 249															
70	1	1	681 / 644 / 115	556 / 797 / 94	820 / 506 / 212	680 / 641 / 176	598 / 568 / 346	527 / 686 / 275	645 / 686 / 109	520 / 838 / 88	785 / 547 / 203	628 / 666 / 163	569 / 596 / 322	515 / 727 / 259	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">ASCE Group Zone</th> </tr> <tr> <th style="text-align: center;">Panal Angle</th> <th style="text-align: center;">Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">0 - 3</td> <td style="text-align: center;">1 = 1' / 1</td> </tr> <tr> <td style="text-align: center;">2 = 2</td> </tr> <tr> <td style="text-align: center;">3 = 3</td> </tr> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">3 - 10</td> <td style="text-align: center;">1 = 1</td> </tr> <tr> <td style="text-align: center;">2 = 2' / 2</td> </tr> <tr> <td style="text-align: center;">3 = 3' / 3</td> </tr> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">10 - 30</td> <td style="text-align: center;">1 = 1</td> </tr> <tr> <td style="text-align: center;">2 = 2</td> </tr> <tr> <td style="text-align: center;">3 = 3</td> </tr> </tbody> </table>					ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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		Panal Angle	Mono Slope																																
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3	484 / 875 / 82	395 / 1076 / 67	523 / 787 / 136	436 / 991 / 113	394 / 852 / 228	346 / 1020 / 181	466 / 946 / 79	377 / 1152 / 64	506 / 855 / 131	401 / 1023 / 104	375 / 891 / 212	344 / 1095 / 173																							
80	1	773 / 644 / 127	631 / 797 / 104	871 / 474 / 223	772 / 641 / 198	678 / 568 / 392	574 / 686 / 312	733 / 686 / 120	590 / 838 / 97	871 / 534 / 223	713 / 666 / 183	632 / 596 / 365	560 / 727 / 294																						
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	3	550 / 875 / 90	448 / 1076 / 74	594 / 787 / 152	495 / 991 / 127	447 / 852 / 258	378 / 1020 / 205	529 / 946 / 87	428 / 1152 / 70	574 / 855 / 147	456 / 1023 / 117	416 / 891 / 241	374 / 1095 / 196																						
90	1	865 / 644 / 140	706 / 797 / 114	931 / 452 / 236	864 / 641 / 219	758 / 568 / 438	622 / 686 / 349	820 / 686 / 132	660 / 838 / 107	931 / 510 / 236	798 / 666 / 202	707 / 596 / 408	605 / 727 / 329																						
	2	729 / 740 / 118	592 / 909 / 96	864 / 621 / 219	709 / 773 / 180	672 / 624 / 388	569 / 776 / 319	706 / 806 / 114	569 / 982 / 92	820 / 663 / 208	665 / 815 / 169	638 / 666 / 368	550 / 817 / 299																						
	3	615 / 875 / 99	501 / 1076 / 81	665 / 787 / 169	554 / 991 / 141	500 / 852 / 289	409 / 1020 / 229	592 / 946 / 96	478 / 1152 / 77	643 / 855 / 163	510 / 1023 / 130	466 / 891 / 269	404 / 1095 / 219																						
70	1	1	610 / 725 / 103	487 / 871 / 82	750 / 585 / 194	601 / 703 / 154	556 / 633 / 306	502 / 763 / 244	574 / 758 / 97	481 / 931 / 79	698 / 605 / 181	599 / 758 / 149	543 / 668 / 291	505 / 820 / 236	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">ASCE Group Zone</th> </tr> <tr> <th style="text-align: center;">Panal Angle</th> <th style="text-align: center;">Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">0 - 3</td> <td style="text-align: center;">1 = 1' / 1</td> </tr> <tr> <td style="text-align: center;">2 = 2</td> </tr> <tr> <td style="text-align: center;">3 = 3</td> </tr> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">3 - 10</td> <td style="text-align: center;">1 = 1</td> </tr> <tr> <td style="text-align: center;">2 = 2' / 2</td> </tr> <tr> <td style="text-align: center;">3 = 3' / 3</td> </tr> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">10 - 30</td> <td style="text-align: center;">1 = 1</td> </tr> <tr> <td style="text-align: center;">2 = 2</td> </tr> <tr> <td style="text-align: center;">3 = 3</td> </tr> </tbody> </table>					ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
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2	520 / 842 / 88	415 / 1008 / 70	611 / 701 / 158	495 / 849 / 127	499 / 704 / 275	454 / 851 / 220	484 / 870 / 82	407 / 1070 / 67	576 / 734 / 149	490 / 909 / 122	485 / 737 / 259	454 / 911 / 212																							
3	430 / 975 / 73	361 / 1224 / 61	471 / 888 / 122	389 / 1092 / 100	371 / 958 / 204	340 / 1165 / 165	412 / 1037 / 70	352 / 1290 / 58	454 / 949 / 118	381 / 1156 / 95	353 / 981 / 189	337 / 1231 / 157																							
80	1	692 / 725 / 114	550 / 871 / 90	851 / 585 / 218	673 / 703 / 172	610 / 633 / 347	545 / 763 / 276	651 / 758 / 107	529 / 931 / 87	792 / 605 / 203	657 / 758 / 167	594 / 668 / 330	546 / 820 / 267																						
	2	590 / 842 / 97	468 / 1008 / 77	693 / 701 / 178	555 / 849 / 142	547 / 704 / 312	492 / 851 / 250	550 / 870 / 90	448 / 1070 / 74	654 / 734 / 167	538 / 909 / 137	530 / 737 / 294	491 / 911 / 241																						
	3	489 / 975 / 80	407 / 1224 / 67	535 / 888 / 137	436 / 1092 / 112	407 / 958 / 232	369 / 1165 / 187	468 / 1037 / 77	387 / 1290 / 64	515 / 949 / 132	418 / 1156 / 107	385 / 981 / 214	364 / 1231 / 178																						
90	1	774 / 725 / 125	615 / 871 / 99	931 / 571 / 236	753 / 703 / 191	672 / 633 / 388	587 / 763 / 309	729 / 758 / 118	592 / 931 / 96	886 / 605 / 225	731 / 758 / 186	644 / 668 / 368	587 / 820 / 299																						
	2	660 / 842 / 107	524 / 1008 / 85	776 / 701 / 197	621 / 849 / 158	603 / 704 / 349	530 / 851 / 279	615 / 870 / 99	501 / 1070 / 81	731 / 734 / 186	598 / 909 / 152	575 / 737 / 329	528 / 911 / 269																						
	3	547 / 975 / 88	456 / 1224 / 74	598 / 888 / 152	488 / 1092 / 124	448 / 958 / 259	398 / 1165 / 209	524 / 1037 / 85	433 / 1290 / 70	576 / 949 / 146	466 / 1156 / 118	418 / 981 / 239	391 / 1231 / 199																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : B	Wind Speed [mph]																		
	95						100						105						
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30
Ground Snow	Group	Array Interior	Array Edge																
100	1	982 / 129 / 156	982 / 205 / 156	980 / 167 / 247	980 / 262 / 247	858 / 230 / 495	858 / 356 / 495	982 / 143 / 156	982 / 226 / 156	980 / 185 / 247	980 / 289 / 247	858 / 254 / 495	858 / 392 / 495	982 / 158 / 156	982 / 248 / 156	980 / 204 / 247	980 / 316 / 247	858 / 278 / 495	858 / 428 / 495
	2	982 / 365 / 156	982 / 558 / 156	980 / 254 / 247	980 / 392 / 247	858 / 288 / 495	858 / 444 / 495	982 / 401 / 156	982 / 612 / 156	980 / 279 / 247	980 / 430 / 247	858 / 317 / 495	858 / 487 / 495	982 / 438 / 156	957 / 651 / 152	980 / 306 / 247	980 / 470 / 247	858 / 348 / 495	858 / 532 / 495
	3	982 / 516 / 156	882 / 705 / 140	980 / 426 / 247	956 / 634 / 241	858 / 541 / 495	705 / 676 / 407	982 / 566 / 156	831 / 728 / 132	980 / 468 / 247	907 / 660 / 228	819 / 567 / 473	667 / 701 / 385	982 / 619 / 156	806 / 770 / 128	980 / 512 / 247	858 / 681 / 216	781 / 590 / 451	629 / 721 / 363
100	1	982 / 173 / 156	982 / 271 / 156	980 / 223 / 247	980 / 345 / 247	858 / 304 / 495	858 / 467 / 495	982 / 189 / 156	982 / 295 / 156	980 / 243 / 247	980 / 375 / 247	858 / 330 / 495	858 / 507 / 495						
	2	982 / 478 / 156	907 / 671 / 144	980 / 334 / 247	980 / 512 / 247	858 / 379 / 495	838 / 567 / 484	982 / 518 / 156	882 / 708 / 140	980 / 363 / 247	980 / 556 / 247	858 / 412 / 495	800 / 587 / 462						
	3	957 / 656 / 152	781 / 811 / 124	980 / 557 / 247	833 / 720 / 210	762 / 627 / 440	610 / 760 / 352	907 / 674 / 144	731 / 822 / 116	980 / 604 / 247	809 / 757 / 204	724 / 645 / 418	591 / 797 / 341						
100	1	982 / 206 / 156	982 / 320 / 156	980 / 264 / 247	980 / 406 / 247	858 / 358 / 495	858 / 548 / 495	982 / 189 / 156	982 / 295 / 156	980 / 243 / 247	980 / 375 / 247	858 / 330 / 495	858 / 507 / 495						
	2	982 / 561 / 156	831 / 721 / 132	980 / 393 / 247	980 / 601 / 247	858 / 446 / 495	762 / 604 / 440	982 / 518 / 156	882 / 708 / 140	980 / 363 / 247	980 / 556 / 247	858 / 412 / 495	800 / 587 / 462						
	3	882 / 708 / 140	705 / 857 / 112	956 / 637 / 241	760 / 768 / 191	705 / 679 / 407	572 / 833 / 330	907 / 674 / 144	731 / 822 / 116	980 / 604 / 247	809 / 757 / 204	724 / 645 / 418	591 / 797 / 341						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																			
	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	211 / 482 / 37	170 / 596 / 30	263 / 377 / 53	210 / 467 / 43	232 / 415 / 62	207 / 518 / 51	199 / 499 / 35	162 / 622 / 29	250 / 396 / 51	202 / 494 / 41	224 / 440 / 60	213 / 545 / 49	191 / 523 / 34	155 / 646 / 27	238 / 414 / 48	195 / 518 / 39	212 / 457 / 57	219 / 569 / 47	
	2	179 / 560 / 31	146 / 698 / 26	214 / 461 / 43	174 / 573 / 35	208 / 464 / 56	186 / 576 / 46	170 / 587 / 30	138 / 722 / 24	206 / 487 / 42	166 / 599 / 34	200 / 491 / 54	190 / 602 / 43	162 / 611 / 29	130 / 742 / 23	198 / 512 / 40	158 / 623 / 32	189 / 505 / 51	194 / 625 / 41	
	3	150 / 664 / 27	122 / 816 / 22	166 / 594 / 34	134 / 726 / 27	153 / 635 / 41	134 / 765 / 33	142 / 688 / 25	118 / 864 / 21	158 / 619 / 32	130 / 771 / 26	145 / 660 / 39	139 / 811 / 32	138 / 730 / 24	110 / 877 / 19	154 / 659 / 31	122 / 789 / 25	138 / 682 / 37	144 / 854 / 31	
	5	1	233 / 482 / 37	188 / 596 / 30	288 / 377 / 56	231 / 467 / 45	232 / 415 / 77	207 / 518 / 63	220 / 499 / 35	180 / 622 / 29	275 / 396 / 54	222 / 494 / 43	224 / 440 / 75	213 / 545 / 60	211 / 523 / 34	171 / 646 / 27	262 / 414 / 51	214 / 518 / 42	212 / 457 / 71	219 / 569 / 58
	2	197 / 560 / 31	162 / 698 / 26	235 / 461 / 46	191 / 573 / 37	208 / 464 / 69	186 / 576 / 56	188 / 587 / 30	153 / 722 / 24	226 / 487 / 44	182 / 599 / 36	200 / 491 / 67	190 / 602 / 54	180 / 611 / 29	144 / 742 / 23	218 / 512 / 42	174 / 623 / 34	189 / 505 / 63	194 / 625 / 51	
	3	166 / 664 / 27	135 / 816 / 22	182 / 594 / 36	147 / 726 / 29	153 / 635 / 51	134 / 765 / 41	157 / 688 / 25	130 / 864 / 21	173 / 619 / 34	142 / 771 / 28	145 / 660 / 49	139 / 811 / 40	153 / 730 / 24	122 / 877 / 19	169 / 659 / 33	134 / 789 / 26	138 / 682 / 46	144 / 854 / 38	
	10	1	296 / 482 / 37	239 / 596 / 30	364 / 377 / 70	292 / 467 / 56	267 / 415 / 100	231 / 518 / 82	279 / 499 / 35	228 / 622 / 29	348 / 396 / 66	280 / 494 / 54	258 / 440 / 97	233 / 545 / 78	267 / 523 / 34	217 / 646 / 27	331 / 414 / 63	270 / 518 / 51	244 / 457 / 92	234 / 569 / 75
	2	250 / 560 / 31	205 / 698 / 26	297 / 461 / 57	241 / 573 / 46	240 / 464 / 90	207 / 576 / 73	239 / 587 / 30	194 / 722 / 24	286 / 487 / 55	230 / 599 / 44	231 / 491 / 87	207 / 602 / 70	228 / 611 / 29	183 / 742 / 23	275 / 512 / 53	219 / 623 / 42	217 / 505 / 82	207 / 625 / 67	
	3	211 / 664 / 27	171 / 816 / 22	230 / 594 / 44	185 / 726 / 36	176 / 635 / 67	149 / 765 / 53	199 / 688 / 25	165 / 864 / 21	219 / 619 / 42	180 / 771 / 34	167 / 660 / 63	152 / 811 / 51	194 / 730 / 24	154 / 877 / 19	213 / 659 / 41	169 / 789 / 32	158 / 682 / 60	154 / 854 / 50	
5	1	183 / 546 / 32	156 / 665 / 26	230 / 436 / 47	199 / 541 / 38	204 / 479 / 55	224 / 591 / 45	174 / 566 / 31	161 / 701 / 25	218 / 450 / 44	202 / 562 / 36	204 / 501 / 53	228 / 611 / 42	150 / 667 / 27	138 / 819 / 22	182 / 557 / 37	166 / 678 / 30	179 / 547 / 47	205 / 680 / 38	
	2	154 / 631 / 27	135 / 781 / 22	186 / 524 / 38	164 / 660 / 31	181 / 527 / 49	197 / 645 / 39	126 / 784 / 22	115 / 956 / 18	142 / 716 / 29	129 / 867 / 23	135 / 757 / 35	148 / 901 / 28	193 / 566 / 31	172 / 701 / 25	240 / 450 / 47	214 / 562 / 38	204 / 501 / 66	228 / 611 / 53	
	3	130 / 747 / 23	113 / 918 / 19	146 / 679 / 30	125 / 829 / 24	134 / 720 / 36	149 / 896 / 30	166 / 667 / 27	147 / 819 / 22	200 / 557 / 39	175 / 678 / 31	179 / 547 / 58	205 / 680 / 47	139 / 784 / 22	123 / 956 / 18	156 / 716 / 30	136 / 867 / 24	135 / 757 / 43	148 / 901 / 34	
	5	1	202 / 546 / 32	169 / 665 / 26	253 / 436 / 49	214 / 541 / 40	204 / 479 / 68	224 / 591 / 55	193 / 566 / 31	172 / 701 / 25	240 / 450 / 47	214 / 562 / 38	204 / 501 / 66	228 / 611 / 53	166 / 667 / 27	147 / 819 / 22	200 / 557 / 39	175 / 678 / 31	179 / 547 / 58	205 / 680 / 47
	2	171 / 631 / 27	146 / 781 / 22	204 / 524 / 40	177 / 660 / 33	181 / 527 / 60	197 / 645 / 49	139 / 784 / 22	123 / 956 / 18	156 / 716 / 30	136 / 867 / 24	135 / 757 / 43	148 / 901 / 34	245 / 566 / 31	214 / 701 / 25	303 / 450 / 58	265 / 562 / 47	232 / 501 / 85	234 / 611 / 68	
	3	144 / 747 / 23	122 / 918 / 19	160 / 679 / 31	135 / 829 / 25	134 / 720 / 45	149 / 896 / 37	211 / 667 / 27	183 / 819 / 22	252 / 557 / 48	217 / 678 / 39	204 / 547 / 75	211 / 680 / 62	176 / 784 / 22	153 / 956 / 18	196 / 716 / 38	169 / 867 / 30	153 / 757 / 56	152 / 901 / 45	
	10	1	256 / 546 / 32	212 / 665 / 26	320 / 436 / 61	268 / 541 / 49	235 / 479 / 89	234 / 591 / 72	211 / 667 / 27	183 / 819 / 22	252 / 557 / 48	217 / 678 / 39	204 / 547 / 75	211 / 680 / 62	176 / 784 / 22	153 / 956 / 18	196 / 716 / 38	169 / 867 / 30	153 / 757 / 56	152 / 901 / 45
	2	216 / 631 / 27	183 / 781 / 22	258 / 524 / 49	221 / 660 / 41	208 / 527 / 78	206 / 645 / 63	174 / 566 / 31	161 / 701 / 25	218 / 450 / 44	202 / 562 / 36	204 / 501 / 53	228 / 611 / 42	170 / 587 / 30	138 / 819 / 22	182 / 557 / 37	166 / 678 / 30	179 / 547 / 47	205 / 680 / 38	
	3	182 / 747 / 23	154 / 918 / 19	202 / 679 / 39	169 / 829 / 31	154 / 720 / 58	156 / 896 / 48	126 / 784 / 22	115 / 956 / 18	142 / 716 / 29	129 / 867 / 23	135 / 757 / 35	148 / 901 / 28	193 / 566 / 31	172 / 701 / 25	240 / 450 / 47	214 / 562 / 38	204 / 501 / 66	228 / 611 / 53	
10	1	170 / 598 / 30	167 / 736 / 24	210 / 469 / 43	205 / 580 / 35	208 / 520 / 51	237 / 644 / 41	174 / 566 / 31	161 / 701 / 25	218 / 450 / 44	202 / 562 / 36	204 / 501 / 53	228 / 611 / 42	150 / 667 / 27	138 / 819 / 22	182 / 557 / 37	166 / 678 / 30	179 / 547 / 47	205 / 680 / 38	
	2	142 / 682 / 25	142 / 855 / 21	174 / 575 / 35	171 / 712 / 29	186 / 578 / 46	213 / 715 / 37	126 / 784 / 22	115 / 956 / 18	142 / 716 / 29	129 / 867 / 23	135 / 757 / 35	148 / 901 / 28	193 / 566 / 31	172 / 701 / 25	240 / 450 / 47	214 / 562 / 38	204 / 501 / 66	228 / 611 / 53	
	3	122 / 820 / 22	118 / 990 / 17	134 / 729 / 27	132 / 903 / 22	134 / 768 / 33	152 / 935 / 27	166 / 667 / 27	147 / 819 / 22	200 / 557 / 39	175 / 678 / 31	179 / 547 / 58	205 / 680 / 47	139 / 784 / 22	123 / 956 / 18	156 / 716 / 30	136 / 867 / 24	135 / 757 / 43	148 / 901 / 34	
	5	1	188 / 598 / 30	174 / 736 / 24	231 / 469 / 45	213 / 580 / 36	208 / 520 / 63	237 / 644 / 51	193 / 566 / 31	172 / 701 / 25	240 / 450 / 47	214 / 562 / 38	204 / 501 / 66	228 / 611 / 53	166 / 667 / 27	147 / 819 / 22	200 / 557 / 39	175 / 678 / 31	179 / 547 / 58	205 / 680 / 47
	2	157 / 682 / 25	149 / 855 / 21	191 / 575 / 37	178 / 712 / 30	186 / 578 / 56	213 / 715 / 46	245 / 566 / 31	214 / 701 / 25	303 / 450 / 58	265 / 562 / 47	232 / 501 / 85	234 / 611 / 68	211 / 667 / 27	183 / 819 / 22	252 / 557 / 48	217 / 678 / 39	204 / 547 / 75	211 / 680 / 62	
	3	135 / 820 / 22	123 / 990 / 17	147 / 729 / 29	137 / 903 / 24	134 / 768 / 41	152 / 935 / 33	176 / 784 / 22	153 / 956 / 18	196 / 716 / 38	169 / 867 / 30	153 / 757 / 56	152 / 901 / 45	188 / 598 / 30	174 / 736 / 24	231 / 469 / 45	213 / 580 / 36	208 / 520 / 63	237 / 644 / 51	
	10	1	239 / 598 / 30	215 / 736 / 24	292 / 469 / 56	262 / 580 / 45	232 / 520 / 82	239 / 644 / 67	245 / 566 / 31	214 / 701 / 25	303 / 450 / 58	265 / 562 / 47	232 / 501 / 85	234 / 611 / 68	170 / 587 / 30	138 / 819 / 22	182 / 557 / 37	166 / 678 / 30	179 / 547 / 47	205 / 680 / 38
	2	199 / 682 / 25	183 / 855 / 21	241 / 575 / 46	218 / 712 / 38	208 / 578 / 73	215 / 715 / 60	126 / 784 / 22	115 / 956 / 18	142 / 716 / 29	129 / 867 / 23	135 / 757 / 35	148 / 901 / 28	193 / 566 / 31	172 / 701 / 25	240 / 450 / 47	214 / 562 / 38	204 / 501 / 66	228 / 611 / 53	
	3	171 / 820 / 22	152 / 990 / 17	185 / 729 / 36	169 / 903 / 29	150 / 768 / 53	154 / 935 / 43	211 / 667 / 27	183 / 819 / 22	252 / 557 / 48	217 / 678 / 39	204 / 547 / 75	211 / 680 / 62	176 / 784 / 22	153 / 956 / 18	196 / 716 / 38	169 / 867 / 30	153 / 757 / 56	152 / 901 / 45	

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C	140								150								160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30							
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge															
Ground Snow	0	1	162 / 615 / 29	166 / 747 / 23	202 / 487 / 41	212 / 611 / 34	211 / 538 / 49	239 / 658 / 39	155 / 656 / 27	175 / 806 / 22	197 / 530 / 39	220 / 653 / 31	221 / 580 / 46	256 / 717 / 37	163 / 708 / 25	182 / 858 / 20	204 / 568 / 36	226 / 687 / 29	230 / 617 / 42	262 / 748 / 34				
		2	138 / 714 / 24	145 / 889 / 20	166 / 592 / 34	171 / 724 / 27	188 / 595 / 43	214 / 726 / 35	135 / 774 / 23	151 / 950 / 19	159 / 633 / 31	180 / 783 / 26	196 / 635 / 40	226 / 785 / 33	140 / 828 / 22	156 / 1000 / 17	167 / 685 / 30	188 / 836 / 24	207 / 687 / 38	238 / 838 / 31				
		3	118 / 853 / 21	120 / 1022 / 17	130 / 762 / 26	135 / 936 / 22	138 / 801 / 32	155 / 967 / 26	114 / 914 / 19	128 / 1124 / 16	126 / 822 / 25	139 / 994 / 20	144 / 860 / 30	168 / 1065 / 25	116 / 965 / 18	130 / 1164 / 15	130 / 875 / 23	149 / 1085 / 19	149 / 910 / 28	172 / 1108 / 23				
	5	1	180 / 615 / 29	171 / 747 / 23	222 / 487 / 43	217 / 611 / 36	211 / 538 / 60	239 / 658 / 49	170 / 656 / 27	175 / 806 / 22	214 / 530 / 41	220 / 653 / 33	221 / 580 / 56	256 / 717 / 46	173 / 708 / 25	182 / 858 / 20	215 / 568 / 38	226 / 687 / 30	230 / 617 / 53	262 / 748 / 42				
		2	153 / 714 / 24	150 / 889 / 20	182 / 592 / 36	175 / 724 / 29	188 / 595 / 54	214 / 726 / 43	147 / 774 / 23	151 / 950 / 19	173 / 633 / 33	180 / 783 / 27	196 / 635 / 50	226 / 785 / 41	148 / 828 / 22	156 / 1000 / 17	176 / 685 / 31	188 / 836 / 25	207 / 687 / 47	238 / 838 / 38				
		3	130 / 853 / 21	123 / 1022 / 17	142 / 762 / 28	138 / 936 / 23	138 / 801 / 40	155 / 967 / 32	124 / 914 / 19	128 / 1124 / 16	137 / 822 / 26	139 / 994 / 21	144 / 860 / 37	168 / 1065 / 30	123 / 965 / 18	130 / 1164 / 15	137 / 875 / 24	149 / 1085 / 20	149 / 910 / 34	172 / 1108 / 28				
	10	1	228 / 615 / 29	209 / 747 / 23	280 / 487 / 54	265 / 611 / 44	231 / 538 / 78	239 / 658 / 63	215 / 656 / 27	210 / 806 / 22	269 / 530 / 50	263 / 653 / 41	234 / 580 / 73	256 / 717 / 60	215 / 708 / 25	210 / 858 / 20	266 / 568 / 47	260 / 687 / 38	235 / 617 / 68	262 / 748 / 55				
		2	194 / 714 / 24	183 / 889 / 20	230 / 592 / 44	213 / 724 / 36	206 / 595 / 70	214 / 726 / 56	186 / 774 / 23	182 / 950 / 19	217 / 633 / 41	215 / 783 / 33	207 / 635 / 65	226 / 785 / 53	184 / 828 / 22	180 / 1000 / 17	218 / 685 / 39	216 / 836 / 31	212 / 687 / 62	238 / 838 / 50				
		3	165 / 853 / 21	151 / 1022 / 17	180 / 762 / 34	168 / 936 / 28	151 / 801 / 51	155 / 967 / 41	157 / 914 / 19	154 / 1124 / 16	172 / 822 / 32	166 / 994 / 26	152 / 860 / 48	168 / 1065 / 39	153 / 965 / 18	150 / 1164 / 15	170 / 875 / 30	171 / 1085 / 25	153 / 910 / 45	172 / 1108 / 36				
Wind Speed [mph]	170								180															
	0	1	169 / 756 / 24	187 / 901 / 19	209 / 600 / 34	237 / 734 / 27	236 / 646 / 39	274 / 794 / 32	174 / 799 / 22	199 / 973 / 18	219 / 643 / 32	246 / 775 / 26	247 / 688 / 37	294 / 862 / 31										
		2	143 / 874 / 20	166 / 1083 / 17	174 / 733 / 28	194 / 880 / 22	217 / 735 / 36	247 / 882 / 29	146 / 912 / 19	167 / 1111 / 15	180 / 775 / 26	206 / 952 / 22	225 / 777 / 34	264 / 954 / 28										
		3	123 / 1048 / 17	137 / 1249 / 14	133 / 920 / 22	151 / 1120 / 18	160 / 990 / 27	183 / 1192 / 21	124 / 1078 / 16	143 / 1328 / 13	140 / 993 / 21	159 / 1197 / 17	162 / 1022 / 25	193 / 1271 / 20										
	5	1	174 / 756 / 24	187 / 901 / 19	215 / 600 / 36	237 / 734 / 29	236 / 646 / 49	274 / 794 / 40	176 / 799 / 22	199 / 973 / 18	219 / 643 / 34	246 / 775 / 27	247 / 688 / 46	294 / 862 / 38										
		2	148 / 874 / 20	166 / 1083 / 17	178 / 733 / 30	194 / 880 / 24	217 / 735 / 45	247 / 882 / 36	147 / 912 / 19	167 / 1111 / 15	180 / 775 / 28	206 / 952 / 23	225 / 777 / 42	264 / 954 / 34										
		3	127 / 1048 / 17	137 / 1249 / 14	136 / 920 / 23	151 / 1120 / 18	160 / 990 / 33	183 / 1192 / 27	125 / 1078 / 16	143 / 1328 / 13	141 / 993 / 22	159 / 1197 / 18	162 / 1022 / 30	193 / 1271 / 25										
	10	1	214 / 756 / 24	209 / 901 / 19	263 / 600 / 44	263 / 734 / 36	236 / 646 / 63	274 / 794 / 51	213 / 799 / 22	215 / 973 / 18	265 / 643 / 42	264 / 775 / 33	247 / 688 / 60	294 / 862 / 50										
		2	182 / 874 / 20	185 / 1083 / 17	218 / 733 / 37	215 / 880 / 29	217 / 735 / 58	247 / 882 / 46	179 / 912 / 19	181 / 1111 / 15	217 / 775 / 34	222 / 952 / 28	225 / 777 / 55	264 / 954 / 45										
3		156 / 1048 / 17	153 / 1249 / 14	167 / 920 / 28	167 / 1120 / 23	160 / 990 / 43	183 / 1192 / 34	151 / 1078 / 16	155 / 1328 / 13	170 / 993 / 27	171 / 1197 / 22	162 / 1022 / 39	193 / 1271 / 33											
Wind Speed [mph]	190								200															
	0	1	179 / 835 / 21	210 / 1043 / 17	221 / 663 / 30	262 / 838 / 25	256 / 724 / 35	303 / 896 / 29	188 / 895 / 20	211 / 1061 / 16	234 / 717 / 29	268 / 868 / 23	272 / 780 / 34	320 / 957 / 28										
		2	154 / 978 / 18	175 / 1180 / 15	184 / 812 / 25	210 / 981 / 20	233 / 814 / 32	269 / 983 / 26	161 / 1042 / 17	182 / 1243 / 14	188 / 841 / 23	220 / 1043 / 19	238 / 843 / 30	284 / 1044 / 25										
		3	129 / 1148 / 15	149 / 1399 / 12	141 / 1019 / 19	166 / 1268 / 16	171 / 1090 / 24	202 / 1343 / 19	134 / 1213 / 15	154 / 1460 / 12	148 / 1082 / 18	172 / 1333 / 15	179 / 1154 / 23	210 / 1406 / 18										
	5	1	179 / 835 / 21	210 / 1043 / 17	221 / 663 / 31	262 / 838 / 26	256 / 724 / 43	303 / 896 / 36	188 / 895 / 20	211 / 1061 / 16	234 / 717 / 30	268 / 868 / 24	272 / 780 / 42	320 / 957 / 34										
		2	154 / 978 / 18	175 / 1180 / 15	184 / 812 / 26	210 / 981 / 21	233 / 814 / 40	269 / 983 / 32	161 / 1042 / 17	182 / 1243 / 14	188 / 841 / 24	220 / 1043 / 20	238 / 843 / 37	284 / 1044 / 30										
		3	129 / 1148 / 15	149 / 1399 / 12	141 / 1019 / 20	166 / 1268 / 17	171 / 1090 / 29	202 / 1343 / 24	134 / 1213 / 15	154 / 1460 / 12	148 / 1082 / 19	172 / 1333 / 16	179 / 1154 / 28	210 / 1406 / 23										
	10	1	211 / 835 / 21	221 / 1043 / 17	259 / 663 / 39	274 / 838 / 32	256 / 724 / 56	303 / 896 / 46	215 / 895 / 20	216 / 1061 / 16	266 / 717 / 38	273 / 868 / 30	272 / 780 / 55	320 / 957 / 45										
		2	182 / 978 / 18	184 / 1180 / 15	216 / 812 / 32	219 / 981 / 26	233 / 814 / 51	269 / 983 / 41	185 / 1042 / 17	187 / 1243 / 14	213 / 841 / 30	224 / 1043 / 25	238 / 843 / 48	284 / 1044 / 39										
3		153 / 1148 / 15	157 / 1399 / 12	165 / 1019 / 25	174 / 1268 / 21	171 / 1090 / 38	202 / 1343 / 31	154 / 1213 / 15	158 / 1460 / 12	167 / 1082 / 24	176 / 1333 / 20	179 / 1154 / 36	210 / 1406 / 29											

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						92.5in x 45.9in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		95						100						105					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	15	1	358 / 482 / 38	289 / 596 / 31	440 / 377 / 83	352 / 467 / 66	307 / 415 / 124	264 / 518 / 101	338 / 499 / 36	276 / 622 / 30	420 / 396 / 79	339 / 494 / 64	297 / 440 / 120	264 / 545 / 97	324 / 523 / 35	262 / 646 / 28	400 / 414 / 75	326 / 518 / 61	281 / 457 / 113
2		303 / 560 / 33	248 / 698 / 27	359 / 461 / 68	291 / 573 / 55	276 / 464 / 111	236 / 576 / 90	289 / 587 / 31	234 / 722 / 25	346 / 487 / 65	278 / 599 / 52	265 / 491 / 107	235 / 602 / 86	276 / 611 / 30	221 / 742 / 24	332 / 512 / 63	265 / 623 / 50	250 / 505 / 101	234 / 625 / 82
3		255 / 664 / 27	207 / 816 / 22	278 / 594 / 52	224 / 726 / 42	203 / 635 / 82	171 / 765 / 65	241 / 688 / 26	200 / 864 / 22	264 / 619 / 50	217 / 771 / 41	193 / 660 / 78	172 / 811 / 63	234 / 730 / 25	186 / 877 / 20	258 / 659 / 49	204 / 789 / 39	182 / 682 / 74	174 / 854 / 61
20	1	421 / 482 / 42	340 / 596 / 34	508 / 371 / 95	413 / 467 / 77	347 / 415 / 153	297 / 518 / 125	396 / 499 / 39	324 / 622 / 32	492 / 396 / 92	397 / 494 / 74	336 / 440 / 148	295 / 545 / 119	380 / 523 / 38	308 / 646 / 31	469 / 414 / 87	382 / 518 / 71	318 / 457 / 140	294 / 569 / 114
	2	356 / 560 / 35	291 / 698 / 29	421 / 461 / 79	342 / 573 / 64	312 / 464 / 137	266 / 576 / 112	340 / 587 / 34	275 / 722 / 27	405 / 487 / 76	326 / 599 / 61	300 / 491 / 132	263 / 602 / 106	324 / 611 / 32	259 / 742 / 26	389 / 512 / 73	310 / 623 / 58	283 / 505 / 125	260 / 625 / 101
	3	299 / 664 / 30	243 / 816 / 24	326 / 594 / 61	262 / 726 / 49	230 / 635 / 101	192 / 765 / 81	283 / 688 / 28	235 / 864 / 23	310 / 619 / 58	254 / 771 / 48	218 / 660 / 96	193 / 811 / 78	275 / 730 / 27	219 / 877 / 22	302 / 659 / 57	239 / 789 / 45	206 / 682 / 91	194 / 854 / 75
25	1	421 / 482 / 42	340 / 596 / 34	508 / 371 / 95	413 / 467 / 77	388 / 415 / 184	329 / 518 / 150	396 / 499 / 39	324 / 622 / 32	492 / 396 / 92	397 / 494 / 74	375 / 440 / 178	327 / 545 / 144	380 / 523 / 38	308 / 646 / 31	469 / 414 / 87	382 / 518 / 71	355 / 457 / 168	324 / 569 / 137
	2	356 / 560 / 35	291 / 698 / 29	421 / 461 / 79	342 / 573 / 64	348 / 464 / 165	295 / 576 / 134	340 / 587 / 34	275 / 722 / 27	405 / 487 / 76	326 / 599 / 61	335 / 491 / 159	291 / 602 / 128	324 / 611 / 32	259 / 742 / 26	389 / 512 / 73	310 / 623 / 58	315 / 505 / 150	287 / 625 / 122
	3	299 / 664 / 30	243 / 816 / 24	326 / 594 / 61	262 / 726 / 49	256 / 635 / 122	213 / 765 / 97	283 / 688 / 28	235 / 864 / 23	310 / 619 / 58	254 / 771 / 48	243 / 660 / 116	213 / 811 / 94	275 / 730 / 27	219 / 877 / 22	302 / 659 / 57	239 / 789 / 45	230 / 682 / 109	214 / 854 / 91
15	1	310 / 546 / 33	256 / 665 / 27	386 / 436 / 73	321 / 541 / 59	271 / 479 / 109	263 / 591 / 88	296 / 566 / 32	256 / 701 / 26	366 / 450 / 69	316 / 562 / 56	266 / 501 / 105	261 / 611 / 84						
	2	262 / 631 / 28	220 / 781 / 23	312 / 524 / 59	266 / 660 / 49	240 / 527 / 97	232 / 645 / 78	255 / 667 / 27	219 / 819 / 22	305 / 557 / 58	259 / 678 / 46	234 / 547 / 92	235 / 680 / 76						
	3	221 / 747 / 24	185 / 918 / 19	244 / 679 / 46	203 / 829 / 37	177 / 720 / 72	175 / 896 / 59	214 / 784 / 23	183 / 956 / 19	237 / 716 / 45	202 / 867 / 36	176 / 757 / 69	170 / 901 / 55						
20	1	364 / 546 / 36	299 / 665 / 29	453 / 436 / 85	375 / 541 / 68	306 / 479 / 135	291 / 591 / 109	348 / 566 / 35	298 / 701 / 28	429 / 450 / 80	368 / 562 / 65	300 / 501 / 130	289 / 611 / 104						
	2	308 / 631 / 31	257 / 781 / 25	365 / 524 / 68	310 / 660 / 57	271 / 527 / 119	257 / 645 / 96	299 / 667 / 30	255 / 819 / 24	358 / 557 / 67	301 / 678 / 54	264 / 547 / 114	260 / 680 / 94						
	3	259 / 747 / 26	216 / 918 / 21	286 / 679 / 54	237 / 829 / 43	200 / 720 / 88	194 / 896 / 73	251 / 784 / 25	213 / 956 / 20	278 / 716 / 52	234 / 867 / 42	198 / 757 / 86	188 / 901 / 68						
25	1	364 / 546 / 36	299 / 665 / 29	453 / 436 / 85	375 / 541 / 68	342 / 479 / 162	320 / 591 / 131	348 / 566 / 35	298 / 701 / 28	429 / 450 / 80	368 / 562 / 65	334 / 501 / 156	316 / 611 / 125						
	2	308 / 631 / 31	257 / 781 / 25	365 / 524 / 68	310 / 660 / 57	302 / 527 / 144	282 / 645 / 116	299 / 667 / 30	255 / 819 / 24	358 / 557 / 67	301 / 678 / 54	294 / 547 / 137	284 / 680 / 112						
	3	259 / 747 / 26	216 / 918 / 21	286 / 679 / 54	237 / 829 / 43	224 / 720 / 106	214 / 896 / 88	251 / 784 / 25	213 / 956 / 20	278 / 716 / 52	234 / 867 / 42	221 / 757 / 103	205 / 901 / 81						
15	1	289 / 598 / 31	256 / 736 / 25	352 / 469 / 66	311 / 580 / 54	264 / 520 / 101	266 / 644 / 82	296 / 566 / 32	256 / 701 / 26	366 / 450 / 69	316 / 562 / 56	266 / 501 / 105	261 / 611 / 84						
	2	241 / 682 / 26	218 / 855 / 22	291 / 575 / 55	259 / 712 / 45	237 / 578 / 90	239 / 715 / 74	255 / 667 / 27	219 / 819 / 22	305 / 557 / 58	259 / 678 / 46	234 / 547 / 92	235 / 680 / 76						
	3	207 / 820 / 22	181 / 990 / 18	224 / 729 / 42	200 / 903 / 35	171 / 768 / 65	171 / 935 / 53	214 / 784 / 23	183 / 956 / 19	237 / 716 / 45	202 / 867 / 36	176 / 757 / 69	170 / 901 / 55						
20	1	340 / 598 / 34	297 / 736 / 27	413 / 469 / 77	360 / 580 / 62	297 / 520 / 125	292 / 644 / 101	348 / 566 / 35	298 / 701 / 28	429 / 450 / 80	368 / 562 / 65	300 / 501 / 130	289 / 611 / 104						
	2	283 / 682 / 28	253 / 855 / 23	342 / 575 / 64	300 / 712 / 52	266 / 578 / 112	263 / 715 / 91	299 / 667 / 30	255 / 819 / 24	358 / 557 / 67	301 / 678 / 54	264 / 547 / 114	260 / 680 / 94						
	3	243 / 820 / 24	209 / 990 / 19	262 / 729 / 49	232 / 903 / 40	192 / 768 / 81	188 / 935 / 65	251 / 784 / 25	213 / 956 / 20	278 / 716 / 52	234 / 867 / 42	198 / 757 / 86	188 / 901 / 68						
25	1	340 / 598 / 34	297 / 736 / 27	413 / 469 / 77	360 / 580 / 62	330 / 520 / 150	319 / 644 / 122	348 / 566 / 35	298 / 701 / 28	429 / 450 / 80	368 / 562 / 65	334 / 501 / 156	316 / 611 / 125						
	2	283 / 682 / 28	253 / 855 / 23	342 / 575 / 64	300 / 712 / 52	296 / 578 / 134	286 / 715 / 109	299 / 667 / 30	255 / 819 / 24	358 / 557 / 67	301 / 678 / 54	294 / 547 / 137	284 / 680 / 112						
	3	243 / 820 / 24	209 / 990 / 19	262 / 729 / 49	232 / 903 / 40	213 / 768 / 97	205 / 935 / 78	251 / 784 / 25	213 / 956 / 20	278 / 716 / 52	234 / 867 / 42	221 / 757 / 103	205 / 901 / 81						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																			
	140						150						160							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge																	
15	1	276 / 615 / 30	248 / 747 / 24	339 / 487 / 64	313 / 611 / 52	262 / 538 / 97	263 / 658 / 78	259 / 656 / 27	246 / 806 / 22	324 / 530 / 60	308 / 653 / 49	263 / 580 / 90	271 / 717 / 74	257 / 708 / 26	244 / 858 / 21	318 / 568 / 56	301 / 687 / 45	263 / 617 / 84	269 / 748 / 67	
	2	234 / 714 / 25	217 / 889 / 21	278 / 592 / 52	252 / 724 / 42	234 / 595 / 86	235 / 726 / 69	224 / 774 / 24	214 / 950 / 19	262 / 633 / 49	251 / 783 / 40	233 / 635 / 80	240 / 785 / 65	220 / 828 / 22	209 / 1000 / 18	260 / 685 / 46	249 / 836 / 37	236 / 687 / 76	244 / 838 / 61	
	3	200 / 853 / 22	178 / 1022 / 17	217 / 762 / 41	199 / 936 / 33	171 / 801 / 63	171 / 967 / 51	189 / 914 / 20	181 / 1124 / 17	207 / 822 / 39	195 / 994 / 31	172 / 860 / 59	178 / 1065 / 49	183 / 965 / 19	174 / 1164 / 15	202 / 875 / 36	198 / 1085 / 30	171 / 910 / 55	177 / 1108 / 44	
	20	1	324 / 615 / 32	286 / 747 / 26	397 / 487 / 74	361 / 611 / 61	294 / 538 / 119	288 / 658 / 96	303 / 656 / 30	282 / 806 / 24	378 / 530 / 70	352 / 653 / 57	293 / 580 / 112	295 / 717 / 91	299 / 708 / 28	278 / 858 / 23	369 / 568 / 65	342 / 687 / 52	290 / 617 / 104	291 / 748 / 83
		2	275 / 714 / 27	251 / 889 / 23	326 / 592 / 61	290 / 724 / 49	262 / 595 / 106	257 / 726 / 86	262 / 774 / 26	245 / 950 / 21	306 / 633 / 57	287 / 783 / 46	259 / 635 / 99	261 / 785 / 81	256 / 828 / 24	238 / 1000 / 19	302 / 685 / 54	283 / 836 / 43	261 / 687 / 94	264 / 838 / 75
		3	235 / 853 / 23	206 / 1022 / 19	254 / 762 / 48	229 / 936 / 39	192 / 801 / 78	187 / 967 / 63	222 / 914 / 22	207 / 1124 / 18	242 / 822 / 45	223 / 994 / 36	191 / 860 / 73	194 / 1065 / 60	214 / 965 / 20	198 / 1164 / 16	235 / 875 / 42	225 / 1085 / 34	189 / 910 / 68	191 / 1108 / 55
	25	1	324 / 615 / 32	286 / 747 / 26	397 / 487 / 74	361 / 611 / 61	325 / 538 / 144	314 / 658 / 116	303 / 656 / 30	282 / 806 / 24	378 / 530 / 70	352 / 653 / 57	322 / 580 / 134	319 / 717 / 109	299 / 708 / 28	278 / 858 / 23	369 / 568 / 65	342 / 687 / 52	317 / 617 / 125	313 / 748 / 100
		2	275 / 714 / 27	251 / 889 / 23	326 / 592 / 61	290 / 724 / 49	290 / 595 / 128	280 / 726 / 103	262 / 774 / 26	245 / 950 / 21	306 / 633 / 57	287 / 783 / 46	285 / 635 / 119	282 / 785 / 97	256 / 828 / 24	238 / 1000 / 19	302 / 685 / 54	283 / 836 / 43	286 / 687 / 112	283 / 838 / 91
		3	235 / 853 / 23	206 / 1022 / 19	254 / 762 / 48	229 / 936 / 39	212 / 801 / 94	204 / 967 / 75	222 / 914 / 22	207 / 1124 / 18	242 / 822 / 45	223 / 994 / 36	210 / 860 / 88	210 / 1065 / 72	214 / 965 / 20	198 / 1164 / 16	235 / 875 / 42	225 / 1085 / 34	206 / 910 / 81	205 / 1108 / 66
15	Wind Speed [mph]																			
	170						180													
	1	254 / 756 / 25	240 / 901 / 19	311 / 600 / 52	301 / 734 / 42	261 / 646 / 78	274 / 794 / 63	250 / 799 / 23	245 / 973 / 19	310 / 643 / 50	301 / 775 / 40	264 / 688 / 74	294 / 862 / 61							
	2	215 / 874 / 21	213 / 1083 / 17	258 / 733 / 44	247 / 880 / 35	239 / 735 / 72	247 / 882 / 57	210 / 912 / 19	206 / 1111 / 16	255 / 775 / 41	252 / 952 / 33	241 / 777 / 67	264 / 954 / 55							
	3	185 / 1048 / 18	176 / 1249 / 14	197 / 920 / 33	192 / 1120 / 27	176 / 990 / 53	183 / 1192 / 42	178 / 1078 / 17	177 / 1328 / 14	199 / 993 / 32	194 / 1197 / 26	174 / 1022 / 49	193 / 1271 / 40							
	20	1	293 / 756 / 27	272 / 901 / 21	358 / 600 / 61	340 / 734 / 49	286 / 646 / 96	294 / 794 / 78	287 / 799 / 25	275 / 973 / 20	356 / 643 / 58	337 / 775 / 46	288 / 688 / 91	306 / 862 / 75						
		2	249 / 874 / 23	240 / 1083 / 19	297 / 733 / 51	278 / 880 / 40	263 / 735 / 88	265 / 882 / 70	241 / 912 / 21	231 / 1111 / 17	292 / 775 / 48	283 / 952 / 39	263 / 777 / 83	274 / 954 / 68						
		3	214 / 1048 / 19	199 / 1249 / 16	227 / 920 / 39	216 / 1120 / 31	193 / 990 / 65	196 / 1192 / 52	204 / 1078 / 18	198 / 1328 / 15	228 / 993 / 37	217 / 1197 / 30	189 / 1022 / 60	201 / 1271 / 50						
	25	1	293 / 756 / 27	272 / 901 / 21	358 / 600 / 61	340 / 734 / 49	311 / 646 / 116	314 / 794 / 94	287 / 799 / 25	275 / 973 / 20	356 / 643 / 58	337 / 775 / 46	312 / 688 / 109	326 / 862 / 91						
2		249 / 874 / 23	240 / 1083 / 19	297 / 733 / 51	278 / 880 / 40	286 / 735 / 106	283 / 882 / 84	241 / 912 / 21	231 / 1111 / 17	292 / 775 / 48	283 / 952 / 39	285 / 777 / 100	292 / 954 / 81							
3		214 / 1048 / 19	199 / 1249 / 16	227 / 920 / 39	216 / 1120 / 31	210 / 990 / 78	210 / 1192 / 63	204 / 1078 / 18	198 / 1328 / 15	228 / 993 / 37	217 / 1197 / 30	205 / 1022 / 72	214 / 1271 / 60							
15	Wind Speed [mph]																			
	190						200													
	1	246 / 835 / 22	250 / 1043 / 18	301 / 663 / 46	309 / 838 / 39	266 / 724 / 69	303 / 896 / 57	249 / 895 / 21	243 / 1061 / 17	307 / 717 / 45	306 / 868 / 36	276 / 780 / 67	320 / 957 / 55							
	2	212 / 978 / 19	208 / 1180 / 15	251 / 812 / 39	247 / 981 / 31	242 / 814 / 63	269 / 983 / 51	213 / 1042 / 18	210 / 1243 / 14	246 / 841 / 36	251 / 1043 / 30	242 / 843 / 59	284 / 1044 / 49							
	3	178 / 1148 / 16	177 / 1399 / 13	192 / 1019 / 30	196 / 1268 / 25	178 / 1090 / 46	202 / 1343 / 38	178 / 1213 / 15	177 / 1460 / 12	193 / 1082 / 28	197 / 1333 / 23	182 / 1154 / 44	210 / 1406 / 36							
	20	1	280 / 835 / 23	279 / 1043 / 19	343 / 663 / 54	344 / 838 / 45	289 / 724 / 86	306 / 896 / 70	282 / 895 / 23	269 / 1061 / 18	348 / 717 / 52	339 / 868 / 42	298 / 780 / 83	320 / 957 / 68						
		2	242 / 978 / 20	232 / 1180 / 16	286 / 812 / 45	275 / 981 / 36	263 / 814 / 78	272 / 983 / 63	242 / 1042 / 19	233 / 1243 / 16	278 / 841 / 42	278 / 1043 / 34	261 / 843 / 73	284 / 1044 / 60						
		3	203 / 1148 / 17	198 / 1399 / 14	219 / 1019 / 34	218 / 1268 / 29	193 / 1090 / 57	204 / 1343 / 47	202 / 1213 / 16	196 / 1460 / 13	219 / 1082 / 33	218 / 1333 / 27	196 / 1154 / 55	210 / 1406 / 44						
	25	1	280 / 835 / 23	279 / 1043 / 19	343 / 663 / 54	344 / 838 / 45	312 / 724 / 103	325 / 896 / 84	282 / 895 / 23	269 / 1061 / 18	348 / 717 / 52	339 / 868 / 42	320 / 780 / 100	335 / 957 / 81						
2		242 / 978 / 20	232 / 1180 / 16	286 / 812 / 45	275 / 981 / 36	283 / 814 / 94	289 / 983 / 75	242 / 1042 / 19	233 / 1243 / 16	278 / 841 / 42	278 / 1043 / 34	280 / 843 / 88	296 / 1044 / 72							
3		203 / 1148 / 17	198 / 1399 / 14	219 / 1019 / 34	218 / 1268 / 29	208 / 1090 / 69	217 / 1343 / 56	202 / 1213 / 16	196 / 1460 / 13	219 / 1082 / 33	218 / 1333 / 27	210 / 1154 / 66	219 / 1406 / 53							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C

Wind Speed [mph]	95							100							105							
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	454 / 482 / 43	367 / 596 / 35	540 / 365 / 100	446 / 467 / 83	428 / 415 / 215	362 / 518 / 175	428 / 499 / 41	349 / 622 / 34	531 / 396 / 99	428 / 494 / 80	413 / 440 / 208	358 / 545 / 168	410 / 523 / 39	332 / 646 / 32	506 / 414 / 94	412 / 518 / 77	392 / 457 / 197	354 / 569 / 160			
	2	384 / 560 / 37	315 / 698 / 30	454 / 461 / 84	369 / 573 / 69	384 / 464 / 193	324 / 576 / 157	367 / 587 / 35	297 / 722 / 29	437 / 487 / 81	351 / 599 / 65	370 / 491 / 186	319 / 602 / 150	349 / 611 / 34	280 / 742 / 27	420 / 512 / 78	335 / 623 / 62	348 / 505 / 175	314 / 625 / 142			
	3	323 / 664 / 31	262 / 816 / 25	351 / 594 / 65	283 / 726 / 53	283 / 635 / 142	234 / 765 / 113	306 / 688 / 29	253 / 864 / 24	334 / 619 / 62	274 / 771 / 51	269 / 660 / 135	234 / 811 / 110	297 / 730 / 29	236 / 877 / 23	326 / 659 / 61	258 / 789 / 48	254 / 682 / 128	233 / 854 / 106			
	35	1	501 / 482 / 46	405 / 596 / 37	567 / 348 / 105	492 / 467 / 91	468 / 415 / 246	395 / 518 / 200	472 / 499 / 43	386 / 622 / 35	567 / 384 / 105	473 / 494 / 87	452 / 440 / 238	390 / 545 / 192	453 / 523 / 42	367 / 646 / 34	558 / 414 / 103	454 / 518 / 84	429 / 457 / 225	384 / 569 / 184		
		2	424 / 560 / 39	347 / 698 / 32	501 / 461 / 93	407 / 573 / 75	421 / 464 / 221	354 / 576 / 179	405 / 587 / 37	328 / 722 / 30	482 / 487 / 89	388 / 599 / 72	405 / 491 / 213	347 / 602 / 171	386 / 611 / 35	309 / 742 / 28	463 / 512 / 86	369 / 623 / 68	381 / 505 / 200	340 / 625 / 163		
		3	357 / 664 / 33	289 / 816 / 27	388 / 594 / 72	312 / 726 / 58	310 / 635 / 163	255 / 765 / 130	338 / 688 / 31	280 / 864 / 26	369 / 619 / 68	303 / 771 / 56	294 / 660 / 154	254 / 811 / 125	328 / 730 / 30	261 / 877 / 24	359 / 659 / 67	284 / 789 / 53	278 / 682 / 146	253 / 854 / 121		
	40	1	554 / 482 / 105	448 / 596 / 85	602 / 337 / 166	540 / 467 / 149	509 / 415 / 284	428 / 518 / 231	522 / 499 / 99	426 / 622 / 81	602 / 371 / 166	519 / 494 / 143	491 / 440 / 274	421 / 545 / 221	501 / 523 / 95	405 / 646 / 77	602 / 407 / 166	498 / 518 / 137	465 / 457 / 260	414 / 569 / 212		
		2	469 / 560 / 89	384 / 698 / 73	550 / 461 / 152	446 / 573 / 123	457 / 464 / 255	383 / 576 / 207	448 / 587 / 85	363 / 722 / 69	529 / 487 / 146	426 / 599 / 118	440 / 491 / 245	375 / 602 / 197	426 / 611 / 81	341 / 742 / 65	509 / 512 / 140	405 / 623 / 112	414 / 505 / 231	367 / 625 / 188		
		3	394 / 664 / 75	320 / 816 / 61	426 / 594 / 118	343 / 726 / 95	336 / 635 / 188	276 / 765 / 149	373 / 688 / 71	309 / 864 / 59	405 / 619 / 112	332 / 771 / 92	319 / 660 / 178	275 / 811 / 145	363 / 730 / 69	288 / 877 / 55	395 / 659 / 109	312 / 789 / 86	302 / 682 / 169	273 / 854 / 140		
30	Wind Speed [mph]																					
	110							115														
	1	393 / 546 / 38	322 / 665 / 30	488 / 436 / 91	404 / 541 / 73	377 / 479 / 190	349 / 591 / 153	376 / 566 / 36	320 / 701 / 29	463 / 450 / 86	395 / 562 / 70	368 / 501 / 182	343 / 611 / 146									
	2	332 / 631 / 32	277 / 781 / 26	394 / 524 / 73	334 / 660 / 61	334 / 527 / 168	307 / 645 / 135	323 / 667 / 31	275 / 819 / 25	386 / 557 / 72	324 / 678 / 58	324 / 547 / 160	309 / 680 / 131									
	3	280 / 747 / 27	233 / 918 / 22	309 / 679 / 58	255 / 829 / 46	247 / 720 / 124	233 / 896 / 102	271 / 784 / 26	229 / 956 / 21	300 / 716 / 56	252 / 867 / 45	243 / 757 / 120	223 / 901 / 95									
	35	1	434 / 546 / 40	355 / 665 / 32	539 / 436 / 100	444 / 541 / 81	413 / 479 / 217	377 / 591 / 175	415 / 566 / 38	352 / 701 / 31	510 / 450 / 94	434 / 562 / 77	402 / 501 / 209	371 / 611 / 167								
		2	366 / 631 / 34	306 / 781 / 28	435 / 524 / 81	367 / 660 / 67	365 / 527 / 192	333 / 645 / 154	357 / 667 / 33	302 / 819 / 27	425 / 557 / 79	355 / 678 / 63	354 / 547 / 184	334 / 680 / 150								
		3	309 / 747 / 28	256 / 918 / 23	340 / 679 / 63	280 / 829 / 51	270 / 720 / 142	252 / 896 / 117	299 / 784 / 28	252 / 956 / 22	331 / 716 / 61	277 / 867 / 49	266 / 757 / 138	241 / 901 / 109								
	40	1	480 / 546 / 91	387 / 665 / 73	592 / 436 / 163	485 / 541 / 132	448 / 479 / 250	406 / 591 / 202	458 / 566 / 87	384 / 701 / 71	560 / 450 / 155	473 / 562 / 126	437 / 501 / 241	398 / 611 / 193								
2		405 / 631 / 77	334 / 781 / 63	477 / 524 / 132	401 / 660 / 109	397 / 527 / 221	358 / 645 / 178	394 / 667 / 75	329 / 819 / 61	467 / 557 / 129	387 / 678 / 103	384 / 547 / 212	358 / 680 / 173									
3		341 / 747 / 65	280 / 918 / 53	374 / 679 / 103	306 / 829 / 83	293 / 720 / 164	271 / 896 / 135	331 / 784 / 63	274 / 956 / 51	363 / 716 / 100	301 / 867 / 80	288 / 757 / 159	259 / 901 / 125									
30	Wind Speed [mph]																					
	120							130														
	1	367 / 598 / 35	318 / 736 / 29	446 / 469 / 83	386 / 580 / 67	363 / 520 / 175	346 / 644 / 142	376 / 566 / 36	320 / 701 / 29	463 / 450 / 86	395 / 562 / 70	368 / 501 / 182	343 / 611 / 146									
	2	306 / 682 / 29	272 / 855 / 24	369 / 575 / 69	322 / 712 / 56	325 / 578 / 157	310 / 715 / 128	323 / 667 / 31	275 / 819 / 25	386 / 557 / 72	324 / 678 / 58	324 / 547 / 160	309 / 680 / 131									
	3	262 / 820 / 25	225 / 990 / 20	283 / 729 / 53	249 / 903 / 43	234 / 768 / 113	222 / 935 / 91	271 / 784 / 26	229 / 956 / 21	300 / 716 / 56	252 / 867 / 45	243 / 757 / 120	223 / 901 / 95									
	35	1	405 / 598 / 37	349 / 736 / 30	492 / 469 / 91	423 / 580 / 74	395 / 520 / 200	372 / 644 / 163	415 / 566 / 38	352 / 701 / 31	510 / 450 / 94	434 / 562 / 77	402 / 501 / 209	371 / 611 / 167								
		2	338 / 682 / 31	298 / 855 / 26	407 / 575 / 75	353 / 712 / 61	354 / 578 / 179	334 / 715 / 146	357 / 667 / 33	302 / 819 / 27	425 / 557 / 79	355 / 678 / 63	354 / 547 / 184	334 / 680 / 150								
		3	289 / 820 / 27	247 / 990 / 21	312 / 729 / 58	272 / 903 / 47	256 / 768 / 130	239 / 935 / 105	299 / 784 / 28	252 / 956 / 22	331 / 716 / 61	277 / 867 / 49	266 / 757 / 138	241 / 901 / 109								
	40	1	448 / 598 / 85	380 / 736 / 69	540 / 469 / 149	461 / 580 / 120	428 / 520 / 231	399 / 644 / 188	458 / 566 / 87	384 / 701 / 71	560 / 450 / 155	473 / 562 / 126	437 / 501 / 241	398 / 611 / 193								
2		373 / 682 / 71	324 / 855 / 59	446 / 575 / 123	384 / 712 / 100	384 / 578 / 207	358 / 715 / 169	394 / 667 / 75	329 / 819 / 61	467 / 557 / 129	387 / 678 / 103	384 / 547 / 212	358 / 680 / 173									
3		320 / 820 / 61	269 / 990 / 49	343 / 729 / 95	296 / 903 / 78	277 / 768 / 149	256 / 935 / 121	331 / 784 / 63	274 / 956 / 51	363 / 716 / 100	301 / 867 / 80	288 / 757 / 159	259 / 901 / 125									

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C

Wind Speed [mph]	140							150							160						
	0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30			0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	349 / 615 / 34	307 / 747 / 27	428 / 487 / 80	386 / 611 / 65	357 / 538 / 168	339 / 658 / 135	327 / 656 / 31	302 / 806 / 25	408 / 530 / 75	376 / 653 / 61	351 / 580 / 157	343 / 717 / 128	321 / 708 / 29	296 / 858 / 24	397 / 568 / 70	364 / 687 / 56	345 / 617 / 146	335 / 748 / 117		
	2	297 / 714 / 29	269 / 889 / 24	351 / 592 / 65	311 / 724 / 53	318 / 595 / 150	302 / 726 / 120	283 / 774 / 27	262 / 950 / 22	330 / 633 / 61	307 / 783 / 50	311 / 635 / 139	303 / 785 / 113	275 / 828 / 25	253 / 1000 / 20	325 / 685 / 58	301 / 836 / 46	310 / 687 / 131	303 / 838 / 106		
	3	253 / 853 / 24	221 / 1022 / 19	274 / 762 / 51	245 / 936 / 42	233 / 801 / 110	220 / 967 / 88	239 / 914 / 23	221 / 1124 / 19	261 / 822 / 48	238 / 994 / 39	229 / 860 / 102	225 / 1065 / 84	230 / 965 / 21	211 / 1164 / 17	253 / 875 / 45	239 / 1085 / 37	224 / 910 / 95	220 / 1108 / 77		
	35	1	386 / 615 / 35	336 / 747 / 28	473 / 487 / 87	423 / 611 / 72	388 / 538 / 192	364 / 658 / 154	361 / 656 / 33	329 / 806 / 27	449 / 530 / 82	409 / 653 / 67	381 / 580 / 179	366 / 717 / 146	353 / 708 / 31	321 / 858 / 25	435 / 568 / 77	395 / 687 / 61	372 / 617 / 167	356 / 748 / 134	
		2	328 / 714 / 30	294 / 889 / 25	388 / 592 / 72	340 / 724 / 58	346 / 595 / 171	325 / 726 / 138	312 / 774 / 28	285 / 950 / 23	363 / 633 / 67	334 / 783 / 54	336 / 635 / 159	325 / 785 / 130	303 / 828 / 27	275 / 1000 / 21	356 / 685 / 63	327 / 836 / 51	335 / 687 / 150	323 / 838 / 121	
		3	280 / 853 / 26	242 / 1022 / 21	303 / 762 / 56	268 / 936 / 46	253 / 801 / 125	236 / 967 / 100	263 / 914 / 24	241 / 1124 / 20	287 / 822 / 53	259 / 994 / 42	248 / 860 / 117	241 / 1065 / 96	252 / 965 / 22	229 / 1164 / 18	277 / 875 / 49	259 / 1085 / 41	242 / 910 / 109	234 / 1108 / 88	
	40	1	426 / 615 / 81	365 / 747 / 65	519 / 487 / 143	459 / 611 / 118	419 / 538 / 221	390 / 658 / 178	394 / 656 / 75	356 / 806 / 61	491 / 530 / 135	443 / 653 / 109	410 / 580 / 207	390 / 717 / 169	385 / 708 / 71	346 / 858 / 57	474 / 568 / 126	426 / 687 / 100	399 / 617 / 193	378 / 748 / 154	
		2	363 / 714 / 69	319 / 889 / 57	426 / 592 / 118	369 / 724 / 95	374 / 595 / 197	347 / 726 / 159	341 / 774 / 65	309 / 950 / 53	397 / 633 / 109	361 / 783 / 89	362 / 635 / 183	346 / 785 / 149	330 / 828 / 61	297 / 1000 / 49	388 / 685 / 103	353 / 836 / 83	359 / 687 / 173	343 / 838 / 140	
		3	309 / 853 / 59	262 / 1022 / 47	332 / 762 / 92	291 / 936 / 75	274 / 801 / 145	253 / 967 / 116	288 / 914 / 55	261 / 1124 / 45	314 / 822 / 86	280 / 994 / 69	267 / 860 / 135	257 / 1065 / 111	275 / 965 / 51	248 / 1164 / 41	302 / 875 / 80	280 / 1085 / 66	260 / 910 / 125	248 / 1108 / 101	
30	1	315 / 756 / 28	288 / 901 / 22	384 / 600 / 65	361 / 734 / 53	336 / 646 / 135	335 / 794 / 110	307 / 799 / 26	291 / 973 / 21	380 / 643 / 62	356 / 775 / 50	336 / 688 / 128	346 / 862 / 106								
	2	267 / 874 / 24	255 / 1083 / 19	319 / 733 / 54	295 / 880 / 43	309 / 735 / 124	302 / 882 / 99	258 / 912 / 22	245 / 1111 / 18	312 / 775 / 51	299 / 952 / 42	307 / 777 / 117	310 / 954 / 95								
	3	229 / 1048 / 20	211 / 1249 / 16	244 / 920 / 42	230 / 1120 / 34	227 / 990 / 91	223 / 1192 / 73	218 / 1078 / 19	210 / 1328 / 15	244 / 993 / 40	230 / 1197 / 32	221 / 1022 / 84	227 / 1271 / 70								
	35	1	345 / 756 / 29	312 / 901 / 23	420 / 600 / 72	390 / 734 / 58	362 / 646 / 154	355 / 794 / 125	335 / 799 / 28	314 / 973 / 22	415 / 643 / 68	384 / 775 / 54	360 / 688 / 146	365 / 862 / 121							
		2	292 / 874 / 25	276 / 1083 / 21	349 / 733 / 60	319 / 880 / 47	332 / 735 / 142	320 / 882 / 113	281 / 912 / 23	264 / 1111 / 19	340 / 775 / 56	322 / 952 / 46	329 / 777 / 134	328 / 954 / 109							
		3	251 / 1048 / 21	228 / 1249 / 17	267 / 920 / 46	248 / 1120 / 37	244 / 990 / 105	237 / 1192 / 84	238 / 1078 / 20	226 / 1328 / 16	266 / 993 / 44	248 / 1197 / 35	237 / 1022 / 96	240 / 1271 / 80							
	40	1	375 / 756 / 67	336 / 901 / 53	457 / 600 / 118	419 / 734 / 95	387 / 646 / 178	376 / 794 / 145	364 / 799 / 63	337 / 973 / 51	449 / 643 / 112	411 / 775 / 89	384 / 688 / 169	385 / 862 / 140							
		2	318 / 874 / 57	297 / 1083 / 47	379 / 733 / 98	343 / 880 / 78	356 / 735 / 164	338 / 882 / 130	305 / 912 / 53	283 / 1111 / 43	368 / 775 / 92	345 / 952 / 75	351 / 777 / 154	345 / 954 / 125							
		3	273 / 1048 / 49	245 / 1249 / 39	290 / 920 / 75	267 / 1120 / 60	262 / 990 / 121	251 / 1192 / 97	258 / 1078 / 45	243 / 1328 / 37	288 / 993 / 72	265 / 1197 / 58	252 / 1022 / 111	253 / 1271 / 92							
30	1	299 / 835 / 24	294 / 1043 / 20	365 / 663 / 58	363 / 838 / 48	334 / 724 / 120	343 / 896 / 99	300 / 895 / 24	284 / 1061 / 19	370 / 717 / 56	356 / 868 / 45	342 / 780 / 117	352 / 957 / 95								
	2	258 / 978 / 21	245 / 1180 / 17	304 / 812 / 48	290 / 981 / 39	304 / 814 / 110	305 / 983 / 88	258 / 1042 / 20	245 / 1243 / 16	296 / 841 / 45	293 / 1043 / 37	299 / 843 / 102	312 / 1044 / 84								
	3	217 / 1148 / 18	208 / 1399 / 15	233 / 1019 / 37	230 / 1268 / 31	223 / 1090 / 80	229 / 1343 / 66	215 / 1213 / 17	206 / 1460 / 14	233 / 1082 / 35	229 / 1333 / 29	225 / 1154 / 77	231 / 1406 / 62								
	35	1	325 / 835 / 26	316 / 1043 / 21	397 / 663 / 63	389 / 838 / 53	357 / 724 / 138	362 / 896 / 113	326 / 895 / 25	303 / 1061 / 20	401 / 717 / 61	381 / 868 / 49	364 / 780 / 134	370 / 957 / 109							
		2	281 / 978 / 22	263 / 1180 / 18	331 / 812 / 53	311 / 981 / 42	324 / 814 / 125	322 / 983 / 100	279 / 1042 / 21	262 / 1243 / 17	321 / 841 / 49	313 / 1043 / 41	318 / 843 / 117	328 / 1044 / 96							
		3	236 / 1148 / 19	224 / 1399 / 15	254 / 1019 / 41	247 / 1268 / 34	238 / 1090 / 92	241 / 1343 / 75	233 / 1213 / 18	221 / 1460 / 14	252 / 1082 / 39	245 / 1333 / 32	239 / 1154 / 88	242 / 1406 / 71							
	40	1	352 / 835 / 59	338 / 1043 / 49	429 / 663 / 103	416 / 838 / 86	379 / 724 / 159	380 / 896 / 130	351 / 895 / 57	323 / 1061 / 45	432 / 717 / 100	406 / 868 / 80	386 / 780 / 154	388 / 957 / 125							
		2	303 / 978 / 51	282 / 1180 / 41	357 / 812 / 86	333 / 981 / 69	345 / 814 / 145	338 / 983 / 116	301 / 1042 / 49	279 / 1243 / 39	345 / 841 / 80	333 / 1043 / 66	337 / 843 / 135	343 / 1044 / 111							
		3	255 / 1148 / 43	239 / 1399 / 35	274 / 1019 / 66	263 / 1268 / 55	253 / 1090 / 106	254 / 1343 / 87	251 / 1213 / 41	235 / 1460 / 33	271 / 1082 / 63	261 / 1333 / 52	253 / 1154 / 101	254 / 1406 / 82							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																																																												
	95						100						105																																																
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																										
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																				
45	1	617 / 482 / 114	499 / 596 / 92	647 / 325 / 176	601 / 467 / 163	549 / 415 / 313	461 / 518 / 254	582 / 499 / 107	475 / 622 / 88	647 / 358 / 176	578 / 494 / 157	530 / 440 / 302	452 / 545 / 244	558 / 523 / 103	451 / 646 / 83	647 / 393 / 176	555 / 518 / 151	502 / 457 / 286	444 / 569 / 233																																										
	2	522 / 560 / 96	427 / 698 / 79	612 / 461 / 166	497 / 573 / 135	493 / 464 / 281	413 / 576 / 228	499 / 587 / 92	404 / 722 / 75	589 / 487 / 160	474 / 599 / 129	474 / 491 / 270	403 / 602 / 217	475 / 611 / 88	380 / 742 / 70	566 / 512 / 154	451 / 623 / 123	447 / 505 / 254	394 / 625 / 207																																										
	3	439 / 664 / 81	356 / 816 / 66	474 / 594 / 129	382 / 726 / 104	363 / 635 / 207	298 / 765 / 164	416 / 688 / 77	344 / 864 / 64	451 / 619 / 123	370 / 771 / 101	344 / 660 / 196	295 / 811 / 159	404 / 730 / 75	321 / 877 / 59	439 / 659 / 119	347 / 789 / 94	326 / 682 / 186	293 / 854 / 154																																										
	1	680 / 482 / 122	549 / 596 / 99	688 / 313 / 184	662 / 467 / 178	589 / 415 / 341	493 / 518 / 278	641 / 499 / 115	523 / 622 / 94	688 / 345 / 184	637 / 494 / 171	569 / 440 / 330	484 / 545 / 266	615 / 523 / 111	497 / 646 / 90	688 / 379 / 184	611 / 518 / 164	539 / 457 / 312	474 / 569 / 255																																										
	2	576 / 560 / 104	471 / 698 / 85	675 / 461 / 181	548 / 573 / 147	529 / 464 / 307	442 / 576 / 249	549 / 587 / 99	445 / 722 / 80	649 / 487 / 174	522 / 599 / 140	509 / 491 / 295	431 / 602 / 237	523 / 611 / 94	419 / 742 / 76	624 / 512 / 167	497 / 623 / 133	479 / 505 / 278	420 / 625 / 226																																										
	3	484 / 664 / 87	393 / 816 / 71	522 / 594 / 140	420 / 726 / 113	390 / 635 / 226	319 / 765 / 180	458 / 688 / 83	380 / 864 / 69	497 / 619 / 133	408 / 771 / 109	370 / 660 / 214	316 / 811 / 174	445 / 730 / 80	353 / 877 / 64	484 / 659 / 130	382 / 789 / 103	350 / 682 / 203	313 / 854 / 168																																										
	1	775 / 232 / 134	651 / 596 / 113	754 / 290 / 198	754 / 449 / 198	659 / 394 / 381	565 / 518 / 326	760 / 499 / 132	620 / 622 / 107	754 / 320 / 198	754 / 494 / 198	659 / 433 / 381	547 / 545 / 313	729 / 523 / 126	589 / 646 / 102	754 / 351 / 198	724 / 518 / 190	636 / 457 / 367	534 / 569 / 299																																										
	2	682 / 560 / 118	558 / 698 / 97	754 / 435 / 198	649 / 573 / 171	624 / 464 / 360	506 / 576 / 292	651 / 587 / 113	527 / 722 / 91	754 / 478 / 198	619 / 599 / 163	600 / 491 / 347	487 / 602 / 279	620 / 611 / 107	496 / 742 / 86	739 / 512 / 194	589 / 623 / 155	565 / 505 / 326	473 / 625 / 265																																										
	3	574 / 664 / 99	465 / 816 / 81	619 / 594 / 163	498 / 726 / 131	459 / 635 / 265	365 / 765 / 211	543 / 688 / 94	450 / 864 / 78	589 / 619 / 155	483 / 771 / 127	436 / 660 / 252	357 / 811 / 204	527 / 730 / 91	419 / 877 / 73	573 / 659 / 151	453 / 789 / 119	412 / 682 / 238	352 / 854 / 197																																										
50	1	534 / 546 / 99	427 / 665 / 79	647 / 429 / 176	532 / 541 / 144	484 / 479 / 275	435 / 591 / 223	510 / 566 / 94	416 / 701 / 77	624 / 450 / 169	512 / 562 / 138	471 / 501 / 265	425 / 611 / 212	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3																										
	ASCE Group Zone																																																												
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2	451 / 631 / 83	368 / 781 / 68	532 / 524 / 144	439 / 660 / 119	428 / 527 / 244	383 / 645 / 196	439 / 667 / 81	356 / 819 / 66	520 / 557 / 141	419 / 678 / 113	414 / 547 / 233	383 / 680 / 191																																																	
3	380 / 747 / 70	309 / 918 / 57	416 / 679 / 113	335 / 829 / 91	316 / 720 / 180	290 / 896 / 149	368 / 784 / 68	297 / 956 / 55	405 / 716 / 110	326 / 867 / 88	311 / 757 / 175	277 / 901 / 138																																																	
1	589 / 546 / 106	471 / 665 / 85	688 / 413 / 184	586 / 541 / 157	519 / 479 / 301	464 / 591 / 243	562 / 566 / 101	458 / 701 / 83	688 / 450 / 184	560 / 562 / 150	505 / 501 / 289	452 / 611 / 232																																																	
2	497 / 631 / 90	406 / 781 / 73	586 / 524 / 157	484 / 660 / 130	459 / 527 / 266	408 / 645 / 214	484 / 667 / 87	393 / 819 / 71	573 / 557 / 154	459 / 678 / 123	444 / 547 / 255	407 / 680 / 208																																																	
3	419 / 747 / 76	340 / 918 / 61	459 / 679 / 123	369 / 829 / 99	340 / 720 / 197	309 / 896 / 162	406 / 784 / 73	327 / 956 / 59	446 / 716 / 120	357 / 867 / 96	333 / 757 / 191	294 / 901 / 151																																																	
1	698 / 546 / 121	558 / 665 / 97	754 / 383 / 198	694 / 541 / 182	612 / 479 / 354	521 / 591 / 286	667 / 566 / 115	543 / 701 / 94	754 / 416 / 198	664 / 562 / 175	589 / 501 / 340	507 / 611 / 272																																																	
2	589 / 631 / 102	481 / 781 / 83	694 / 524 / 182	573 / 660 / 151	542 / 527 / 313	459 / 645 / 252	574 / 667 / 99	465 / 819 / 81	679 / 557 / 179	543 / 678 / 143	518 / 547 / 299	456 / 680 / 245																																																	
3	496 / 747 / 86	403 / 918 / 70	543 / 679 / 143	438 / 829 / 115	400 / 720 / 231	347 / 896 / 191	481 / 784 / 83	388 / 956 / 67	528 / 716 / 139	423 / 867 / 111	389 / 757 / 225	330 / 901 / 177																																																	
60	1	499 / 598 / 92	411 / 736 / 75	601 / 469 / 163	498 / 580 / 132	461 / 520 / 254	426 / 644 / 207	510 / 566 / 94	416 / 701 / 77	624 / 450 / 169	512 / 562 / 138	471 / 501 / 265																																																	425 / 611 / 212
	2	416 / 682 / 77	351 / 855 / 64	497 / 575 / 135	415 / 712 / 110	413 / 578 / 228	382 / 715 / 186	439 / 667 / 81	356 / 819 / 66	520 / 557 / 141	419 / 678 / 113	414 / 547 / 233	383 / 680 / 191																																																
	3	356 / 820 / 66	290 / 990 / 53	382 / 729 / 104	320 / 903 / 85	298 / 768 / 164	273 / 935 / 133	368 / 784 / 68	297 / 956 / 55	405 / 716 / 110	326 / 867 / 88	311 / 757 / 175	277 / 901 / 138																																																
	1	549 / 598 / 99	445 / 736 / 80	662 / 469 / 178	535 / 580 / 144	494 / 520 / 278	452 / 644 / 226	562 / 566 / 101	458 / 701 / 83	688 / 450 / 184	560 / 562 / 150	505 / 501 / 289	452 / 611 / 232																																																
	2	458 / 682 / 83	380 / 855 / 69	548 / 575 / 147	446 / 712 / 120	442 / 578 / 249	406 / 715 / 203	484 / 667 / 87	393 / 819 / 71	573 / 557 / 154	459 / 678 / 123	444 / 547 / 255	407 / 680 / 208																																																
	3	393 / 820 / 71	314 / 990 / 57	420 / 729 / 113	344 / 903 / 92	319 / 768 / 180	290 / 935 / 145	406 / 784 / 73	327 / 956 / 59	446 / 716 / 120	357 / 867 / 96	333 / 757 / 191	294 / 901 / 151																																																
	1	651 / 598 / 113	527 / 736 / 91	754 / 451 / 198	634 / 580 / 167	565 / 520 / 326	506 / 644 / 265	667 / 566 / 115	543 / 701 / 94	754 / 416 / 198	664 / 562 / 175	589 / 501 / 340	507 / 611 / 272																																																
	2	543 / 682 / 94	450 / 855 / 78	649 / 575 / 171	528 / 712 / 139	506 / 578 / 292	454 / 715 / 238	574 / 667 / 99	465 / 819 / 81	679 / 557 / 179	543 / 678 / 143	518 / 547 / 299	456 / 680 / 245																																																
	3	465 / 820 / 81	372 / 990 / 65	498 / 729 / 131	408 / 903 / 107	365 / 768 / 211	324 / 935 / 170	481 / 784 / 83	388 / 956 / 67	528 / 716 / 139	423 / 867 / 111	389 / 757 / 225	330 / 901 / 177																																																

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C

Ground Snow	Wind Speed [mph]																		
	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	475 / 615 / 88	394 / 747 / 70	578 / 487 / 157	495 / 611 / 129	451 / 538 / 244	415 / 658 / 196	439 / 656 / 81	383 / 806 / 66	543 / 530 / 148	477 / 653 / 119	439 / 580 / 228	414 / 717 / 186	417 / 708 / 77	372 / 858 / 62	513 / 568 / 138	456 / 687 / 110	427 / 617 / 212	400 / 748 / 170
	2	404 / 714 / 75	345 / 889 / 62	474 / 592 / 129	398 / 724 / 104	402 / 595 / 217	370 / 726 / 175	380 / 774 / 70	332 / 950 / 57	439 / 633 / 119	389 / 783 / 98	388 / 635 / 201	367 / 785 / 164	357 / 828 / 66	319 / 1000 / 53	420 / 685 / 113	378 / 836 / 91	384 / 687 / 191	363 / 838 / 154
	3	344 / 853 / 64	283 / 1022 / 51	370 / 762 / 101	314 / 936 / 82	294 / 801 / 159	269 / 967 / 127	321 / 914 / 59	281 / 1124 / 48	347 / 822 / 94	301 / 994 / 76	286 / 860 / 149	272 / 1065 / 122	298 / 965 / 55	266 / 1164 / 44	327 / 875 / 88	300 / 1085 / 72	277 / 910 / 138	263 / 1108 / 112
50	1	523 / 615 / 94	423 / 747 / 76	637 / 487 / 171	531 / 611 / 140	482 / 538 / 266	440 / 658 / 214	484 / 656 / 87	411 / 806 / 71	599 / 530 / 161	510 / 653 / 130	469 / 580 / 249	438 / 717 / 203	458 / 708 / 83	397 / 858 / 66	560 / 568 / 150	487 / 687 / 120	454 / 617 / 232	422 / 748 / 185
	2	445 / 714 / 80	370 / 889 / 66	522 / 592 / 140	428 / 724 / 113	430 / 595 / 237	393 / 726 / 191	419 / 774 / 76	356 / 950 / 61	484 / 633 / 130	416 / 783 / 106	414 / 635 / 220	388 / 785 / 180	393 / 828 / 71	341 / 1000 / 57	459 / 685 / 123	404 / 836 / 99	409 / 687 / 208	382 / 838 / 168
	3	380 / 853 / 69	304 / 1022 / 54	408 / 762 / 109	337 / 936 / 89	315 / 801 / 174	286 / 967 / 139	353 / 914 / 64	301 / 1124 / 52	382 / 822 / 103	322 / 994 / 82	305 / 860 / 162	288 / 1065 / 133	327 / 965 / 59	284 / 1164 / 47	357 / 875 / 96	320 / 1085 / 79	295 / 910 / 151	277 / 1108 / 122
60	1	620 / 615 / 107	496 / 747 / 86	754 / 487 / 198	619 / 611 / 163	545 / 538 / 313	491 / 658 / 252	574 / 656 / 99	465 / 806 / 81	709 / 530 / 186	577 / 653 / 151	528 / 580 / 292	486 / 717 / 238	543 / 708 / 94	448 / 858 / 75	664 / 568 / 175	549 / 687 / 139	509 / 617 / 272	466 / 748 / 218
	2	527 / 714 / 91	434 / 889 / 75	619 / 592 / 163	498 / 724 / 131	486 / 595 / 279	438 / 726 / 225	496 / 774 / 86	403 / 950 / 70	573 / 633 / 151	471 / 783 / 123	466 / 635 / 259	430 / 785 / 211	465 / 828 / 81	384 / 1000 / 65	543 / 685 / 143	455 / 836 / 115	458 / 687 / 245	422 / 838 / 197
	3	450 / 853 / 78	357 / 1022 / 62	483 / 762 / 127	393 / 936 / 103	356 / 801 / 204	318 / 967 / 163	419 / 914 / 73	341 / 1124 / 59	453 / 822 / 119	365 / 994 / 95	344 / 860 / 191	319 / 1065 / 157	388 / 965 / 67	320 / 1164 / 54	423 / 875 / 111	361 / 1085 / 91	331 / 910 / 177	306 / 1108 / 143
45	Wind Speed [mph]																		
	170									180									
	1	405 / 756 / 72	359 / 901 / 57	493 / 600 / 129	448 / 734 / 104	412 / 646 / 196	396 / 794 / 159	392 / 799 / 68	360 / 973 / 55	483 / 643 / 123	438 / 775 / 98	407 / 688 / 186	405 / 862 / 154						
50	2	343 / 874 / 62	318 / 1083 / 51	409 / 733 / 107	367 / 880 / 85	379 / 735 / 180	357 / 882 / 143	329 / 912 / 57	302 / 1111 / 46	397 / 775 / 101	368 / 952 / 82	373 / 777 / 170	363 / 954 / 138						
	3	294 / 1048 / 53	263 / 1249 / 42	313 / 920 / 82	285 / 1120 / 66	279 / 990 / 133	264 / 1192 / 106	278 / 1078 / 48	259 / 1328 / 40	310 / 993 / 79	283 / 1197 / 63	268 / 1022 / 122	266 / 1271 / 101						
	60	1	434 / 756 / 78	383 / 901 / 61	529 / 600 / 140	477 / 734 / 113	437 / 646 / 214	417 / 794 / 174	420 / 799 / 73	382 / 973 / 59	518 / 643 / 133	466 / 775 / 106	431 / 688 / 203	425 / 862 / 168					
2		369 / 874 / 66	339 / 1083 / 54	439 / 733 / 116	390 / 880 / 92	402 / 735 / 197	375 / 882 / 156	352 / 912 / 61	321 / 1111 / 50	425 / 775 / 109	391 / 952 / 89	394 / 777 / 185	381 / 954 / 151						
3		316 / 1048 / 57	280 / 1249 / 45	336 / 920 / 89	304 / 1120 / 72	296 / 990 / 145	278 / 1192 / 116	298 / 1078 / 52	275 / 1328 / 43	332 / 993 / 86	301 / 1197 / 69	284 / 1022 / 133	279 / 1271 / 110						
45	1	512 / 756 / 89	430 / 901 / 70	619 / 600 / 163	535 / 734 / 131	488 / 646 / 252	458 / 794 / 204	481 / 799 / 83	428 / 973 / 67	589 / 643 / 155	520 / 775 / 123	479 / 688 / 238	464 / 862 / 197						
	2	434 / 874 / 75	380 / 1083 / 62	513 / 733 / 135	438 / 880 / 107	448 / 735 / 231	412 / 882 / 184	403 / 912 / 70	359 / 1111 / 57	483 / 775 / 127	437 / 952 / 103	438 / 777 / 218	416 / 954 / 177						
	3	372 / 1048 / 65	314 / 1249 / 51	393 / 920 / 103	341 / 1120 / 84	330 / 990 / 170	305 / 1192 / 136	341 / 1078 / 59	308 / 1328 / 49	377 / 993 / 99	336 / 1197 / 80	315 / 1022 / 157	304 / 1271 / 130						
45	Wind Speed [mph]																		
	190									200									
	1	378 / 835 / 64	360 / 1043 / 53	461 / 663 / 113	442 / 838 / 94	402 / 724 / 175	399 / 896 / 143	377 / 895 / 62	343 / 1061 / 48	462 / 717 / 110	430 / 868 / 88	407 / 780 / 170	406 / 957 / 138						
50	2	326 / 978 / 55	300 / 1180 / 44	384 / 812 / 94	354 / 981 / 76	365 / 814 / 159	354 / 983 / 127	323 / 1042 / 53	297 / 1243 / 42	370 / 841 / 88	354 / 1043 / 72	357 / 843 / 149	359 / 1044 / 122						
	3	274 / 1148 / 46	255 / 1399 / 38	294 / 1019 / 72	280 / 1268 / 60	268 / 1090 / 117	266 / 1343 / 96	269 / 1213 / 44	250 / 1460 / 35	291 / 1082 / 69	277 / 1333 / 57	268 / 1154 / 112	265 / 1406 / 90						
	60	1	404 / 835 / 69	381 / 1043 / 57	492 / 663 / 123	469 / 838 / 103	424 / 724 / 191	417 / 896 / 156	402 / 895 / 66	363 / 1061 / 52	493 / 717 / 120	455 / 868 / 96	429 / 780 / 185	423 / 957 / 151					
2		349 / 978 / 59	318 / 1180 / 47	410 / 812 / 103	375 / 981 / 82	386 / 814 / 174	371 / 983 / 139	345 / 1042 / 57	314 / 1243 / 45	395 / 841 / 96	374 / 1043 / 79	376 / 843 / 162	375 / 1044 / 133						
3		293 / 1148 / 50	270 / 1399 / 40	315 / 1019 / 79	297 / 1268 / 65	283 / 1090 / 128	278 / 1343 / 104	287 / 1213 / 47	264 / 1460 / 38	310 / 1082 / 75	293 / 1333 / 62	282 / 1154 / 122	277 / 1406 / 99						
45	1	457 / 835 / 78	425 / 1043 / 65	556 / 663 / 143	522 / 838 / 119	469 / 724 / 225	454 / 896 / 184	453 / 895 / 75	403 / 1061 / 59	555 / 717 / 139	504 / 868 / 111	473 / 780 / 218	459 / 957 / 177						
	2	394 / 978 / 67	354 / 1180 / 54	463 / 812 / 119	417 / 981 / 95	427 / 814 / 204	404 / 983 / 163	388 / 1042 / 65	348 / 1243 / 51	444 / 841 / 111	414 / 1043 / 91	414 / 843 / 191	406 / 1044 / 157						
	3	331 / 1148 / 57	301 / 1399 / 46	355 / 1019 / 91	331 / 1268 / 76	313 / 1090 / 150	303 / 1343 / 123	324 / 1213 / 54	293 / 1460 / 43	349 / 1082 / 88	324 / 1333 / 72	311 / 1154 / 143	300 / 1406 / 116						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C

Ground Snow	Group	95						100						105					
		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
		Array Interior	Array Edge																
70	1	824 / 213 / 139	753 / 596 / 127	820 / 273 / 212	820 / 422 / 212	720 / 373 / 416	652 / 518 / 377	824 / 236 / 139	717 / 622 / 121	820 / 301 / 212	820 / 464 / 212	720 / 410 / 416	625 / 545 / 361	824 / 259 / 139	681 / 646 / 115	820 / 330 / 212	820 / 508 / 212	720 / 448 / 416	598 / 569 / 346
	2	789 / 560 / 133	645 / 698 / 109	820 / 409 / 212	750 / 573 / 194	720 / 464 / 416	585 / 576 / 338	753 / 587 / 127	610 / 722 / 103	820 / 449 / 212	715 / 599 / 185	693 / 491 / 400	557 / 602 / 322	717 / 611 / 121	574 / 742 / 97	820 / 491 / 212	680 / 623 / 176	652 / 505 / 377	530 / 625 / 306
	3	663 / 664 / 112	538 / 816 / 91	715 / 594 / 185	576 / 726 / 149	530 / 635 / 306	422 / 765 / 244	627 / 688 / 106	520 / 864 / 88	680 / 619 / 176	558 / 771 / 145	503 / 660 / 291	408 / 811 / 236	610 / 730 / 103	484 / 877 / 82	663 / 659 / 172	523 / 789 / 136	476 / 682 / 275	394 / 854 / 228
80	1	895 / 204 / 147	855 / 596 / 140	871 / 255 / 223	871 / 395 / 223	771 / 351 / 445	740 / 518 / 427	895 / 225 / 147	814 / 622 / 134	871 / 281 / 223	871 / 434 / 223	771 / 386 / 445	709 / 545 / 410	895 / 248 / 147	773 / 646 / 127	871 / 309 / 223	871 / 475 / 223	771 / 423 / 445	678 / 569 / 392
	2	895 / 560 / 147	733 / 698 / 120	871 / 383 / 223	851 / 573 / 218	771 / 438 / 445	663 / 576 / 383	855 / 587 / 140	692 / 722 / 114	871 / 421 / 223	812 / 599 / 208	771 / 481 / 445	632 / 602 / 365	814 / 611 / 134	651 / 742 / 107	871 / 460 / 223	772 / 623 / 198	740 / 505 / 427	601 / 625 / 347
	3	753 / 664 / 124	611 / 816 / 100	812 / 594 / 208	654 / 726 / 167	601 / 635 / 347	478 / 765 / 276	712 / 688 / 117	590 / 864 / 97	772 / 619 / 198	634 / 771 / 162	570 / 660 / 330	463 / 811 / 267	692 / 730 / 114	550 / 877 / 90	752 / 659 / 193	594 / 789 / 152	540 / 682 / 312	447 / 854 / 258
90	1	933 / 190 / 151	933 / 297 / 151	931 / 244 / 236	931 / 377 / 236	810 / 330 / 468	810 / 507 / 468	933 / 210 / 151	911 / 622 / 147	931 / 269 / 236	931 / 415 / 236	810 / 363 / 468	793 / 545 / 458	933 / 231 / 151	865 / 646 / 140	931 / 295 / 236	931 / 454 / 236	810 / 398 / 468	758 / 569 / 438
	2	933 / 522 / 151	820 / 698 / 132	931 / 365 / 236	931 / 560 / 236	810 / 412 / 468	741 / 576 / 428	933 / 573 / 151	774 / 722 / 125	931 / 401 / 236	908 / 599 / 230	810 / 452 / 468	707 / 602 / 408	911 / 611 / 147	729 / 742 / 118	931 / 439 / 236	864 / 623 / 219	810 / 495 / 468	672 / 625 / 388
	3	842 / 664 / 136	683 / 816 / 110	908 / 594 / 230	731 / 726 / 186	672 / 635 / 388	534 / 765 / 309	797 / 688 / 129	660 / 864 / 107	864 / 619 / 219	709 / 771 / 180	638 / 660 / 368	517 / 811 / 299	774 / 730 / 125	615 / 877 / 99	842 / 659 / 214	665 / 789 / 169	603 / 682 / 349	500 / 854 / 289
70	1	807 / 546 / 136	645 / 665 / 109	820 / 360 / 212	802 / 541 / 208	707 / 479 / 408	578 / 591 / 330	771 / 566 / 130	627 / 701 / 106	820 / 391 / 212	768 / 562 / 199	680 / 501 / 393	562 / 611 / 314						
	2	681 / 631 / 115	556 / 781 / 94	802 / 524 / 208	663 / 660 / 172	625 / 527 / 361	509 / 645 / 291	663 / 667 / 112	538 / 819 / 91	785 / 557 / 203	628 / 678 / 163	598 / 547 / 346	506 / 680 / 283						
	3	574 / 747 / 97	466 / 918 / 79	628 / 679 / 163	506 / 829 / 131	462 / 720 / 267	386 / 896 / 220	556 / 784 / 94	448 / 956 / 76	611 / 716 / 158	489 / 867 / 127	449 / 757 / 259	365 / 901 / 204						
80	1	895 / 271 / 147	733 / 665 / 120	871 / 337 / 223	871 / 518 / 223	771 / 461 / 445	647 / 591 / 374	875 / 566 / 144	712 / 701 / 117	871 / 366 / 223	871 / 562 / 223	771 / 501 / 445	617 / 611 / 356						
	2	773 / 631 / 127	631 / 781 / 104	871 / 501 / 223	752 / 660 / 193	709 / 527 / 410	570 / 645 / 330	753 / 667 / 124	611 / 819 / 100	871 / 544 / 223	713 / 678 / 183	678 / 547 / 392	555 / 680 / 321						
	3	651 / 747 / 107	529 / 918 / 87	713 / 679 / 183	574 / 829 / 147	524 / 720 / 303	432 / 896 / 250	631 / 784 / 104	509 / 956 / 84	693 / 716 / 178	555 / 867 / 142	509 / 757 / 294	401 / 901 / 232						
90	1	933 / 252 / 151	820 / 665 / 132	931 / 322 / 236	931 / 494 / 236	810 / 433 / 468	724 / 591 / 418	933 / 275 / 151	797 / 701 / 129	931 / 350 / 236	931 / 536 / 236	810 / 471 / 468	689 / 611 / 398						
	2	865 / 631 / 140	706 / 781 / 114	931 / 479 / 236	842 / 660 / 214	793 / 527 / 458	638 / 645 / 368	842 / 667 / 136	683 / 819 / 110	931 / 519 / 236	798 / 678 / 202	758 / 547 / 438	621 / 680 / 359						
	3	729 / 747 / 118	592 / 918 / 96	798 / 679 / 202	643 / 829 / 163	586 / 720 / 339	483 / 896 / 279	706 / 784 / 114	569 / 956 / 92	776 / 716 / 197	621 / 867 / 158	569 / 757 / 329	448 / 901 / 259						
70	1	753 / 598 / 127	610 / 736 / 103	820 / 424 / 212	733 / 580 / 190	652 / 520 / 377	559 / 644 / 306	771 / 566 / 130	627 / 701 / 106	820 / 391 / 212	768 / 562 / 199	680 / 501 / 393	562 / 611 / 314						
	2	627 / 682 / 106	520 / 855 / 88	750 / 575 / 194	611 / 712 / 158	585 / 578 / 338	502 / 715 / 275	663 / 667 / 112	538 / 819 / 91	785 / 557 / 203	628 / 678 / 163	598 / 547 / 346	506 / 680 / 283						
	3	538 / 820 / 91	430 / 990 / 73	576 / 729 / 149	471 / 903 / 122	422 / 768 / 244	358 / 935 / 197	556 / 784 / 94	448 / 956 / 76	611 / 716 / 158	489 / 867 / 127	449 / 757 / 259	365 / 901 / 204						
80	1	855 / 598 / 140	692 / 736 / 114	871 / 397 / 223	832 / 580 / 213	740 / 520 / 427	612 / 644 / 347	875 / 566 / 144	712 / 701 / 117	871 / 366 / 223	871 / 562 / 223	771 / 501 / 445	617 / 611 / 356						
	2	712 / 682 / 117	590 / 855 / 97	851 / 575 / 218	693 / 712 / 178	663 / 578 / 383	549 / 715 / 312	753 / 667 / 124	611 / 819 / 100	871 / 544 / 223	713 / 678 / 183	678 / 547 / 392	555 / 680 / 321						
	3	611 / 820 / 100	489 / 990 / 80	654 / 729 / 167	535 / 903 / 137	478 / 768 / 276	393 / 935 / 223	631 / 784 / 104	509 / 956 / 84	693 / 716 / 178	555 / 867 / 142	509 / 757 / 294	401 / 901 / 232						
90	1	933 / 298 / 151	774 / 736 / 125	931 / 379 / 236	931 / 580 / 236	810 / 509 / 468	672 / 644 / 388	933 / 275 / 151	797 / 701 / 129	931 / 350 / 236	931 / 536 / 236	810 / 471 / 468	689 / 611 / 398						
	2	797 / 682 / 129	660 / 855 / 107	931 / 562 / 236	776 / 712 / 197	741 / 578 / 428	603 / 715 / 349	842 / 667 / 136	683 / 819 / 110	931 / 519 / 236	798 / 678 / 202	758 / 547 / 438	621 / 680 / 359						
	3	683 / 820 / 110	547 / 990 / 88	731 / 729 / 186	598 / 903 / 152	534 / 768 / 309	431 / 935 / 249	706 / 784 / 114	569 / 956 / 92	776 / 716 / 197	621 / 867 / 158	569 / 757 / 329	448 / 901 / 259						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
10 - 30	3 = 3' / 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																																																												
	140						150						160																																																
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																																												
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																										
70	1	717 / 615 / 121	574 / 747 / 97	820 / 458 / 212	715 / 611 / 185	625 / 538 / 361	541 / 658 / 291	663 / 656 / 112	538 / 806 / 91	820 / 530 / 212	663 / 653 / 172	586 / 580 / 338	534 / 717 / 275	627 / 708 / 106	502 / 858 / 85	768 / 568 / 199	611 / 687 / 158	563 / 617 / 314	509 / 748 / 251																																										
	2	610 / 714 / 103	502 / 889 / 85	715 / 592 / 185	576 / 724 / 149	557 / 595 / 322	483 / 726 / 259	574 / 774 / 97	466 / 950 / 79	663 / 633 / 172	541 / 783 / 140	518 / 635 / 298	473 / 785 / 244	538 / 828 / 91	430 / 1000 / 73	628 / 685 / 163	506 / 836 / 131	507 / 687 / 283	462 / 838 / 228																																										
	3	520 / 853 / 88	412 / 1022 / 70	558 / 762 / 145	454 / 936 / 118	408 / 801 / 236	351 / 967 / 189	484 / 914 / 82	395 / 1124 / 67	523 / 822 / 136	419 / 994 / 109	382 / 860 / 220	351 / 1065 / 181	448 / 965 / 76	359 / 1164 / 61	489 / 875 / 127	402 / 1085 / 104	366 / 910 / 204	334 / 1108 / 165																																										
	1	814 / 615 / 134	651 / 747 / 107	871 / 429 / 223	812 / 611 / 208	709 / 538 / 410	592 / 658 / 330	753 / 656 / 124	611 / 806 / 100	871 / 496 / 223	752 / 653 / 193	663 / 580 / 383	582 / 717 / 312	712 / 708 / 117	570 / 858 / 94	871 / 568 / 223	693 / 687 / 178	618 / 617 / 356	553 / 748 / 285																																										
	2	692 / 714 / 114	570 / 889 / 94	812 / 592 / 208	654 / 724 / 167	632 / 595 / 365	528 / 726 / 294	651 / 774 / 107	529 / 950 / 87	752 / 633 / 193	614 / 783 / 157	586 / 635 / 338	515 / 785 / 276	611 / 828 / 100	489 / 1000 / 80	713 / 685 / 183	574 / 836 / 147	556 / 687 / 321	501 / 838 / 258																																										
	3	590 / 853 / 97	468 / 1022 / 77	634 / 762 / 162	515 / 936 / 132	463 / 801 / 267	384 / 967 / 214	550 / 914 / 90	448 / 1124 / 74	594 / 822 / 152	475 / 994 / 122	432 / 860 / 250	382 / 1065 / 205	509 / 965 / 84	407 / 1164 / 67	555 / 875 / 142	456 / 1085 / 117	402 / 910 / 232	363 / 1108 / 187																																										
	1	911 / 615 / 147	729 / 747 / 118	931 / 409 / 236	908 / 611 / 230	793 / 538 / 458	642 / 658 / 368	842 / 656 / 136	683 / 806 / 110	931 / 474 / 236	842 / 653 / 214	741 / 580 / 428	629 / 717 / 349	797 / 708 / 129	638 / 858 / 103	931 / 542 / 236	776 / 687 / 197	689 / 617 / 398	597 / 748 / 319																																										
	2	774 / 714 / 125	638 / 889 / 103	908 / 592 / 230	731 / 724 / 186	707 / 595 / 408	573 / 726 / 329	729 / 774 / 118	592 / 950 / 96	842 / 633 / 214	687 / 783 / 174	655 / 635 / 378	557 / 785 / 309	683 / 828 / 110	547 / 1000 / 88	798 / 685 / 202	643 / 836 / 163	621 / 687 / 359	541 / 838 / 289																																										
	3	660 / 853 / 107	524 / 1022 / 85	709 / 762 / 180	576 / 936 / 146	517 / 801 / 299	417 / 967 / 239	615 / 914 / 99	501 / 1124 / 81	665 / 822 / 169	532 / 994 / 135	483 / 860 / 279	414 / 1065 / 229	569 / 965 / 92	456 / 1164 / 74	621 / 875 / 158	510 / 1085 / 130	448 / 910 / 259	392 / 1108 / 209																																										
80	1	592 / 756 / 100	477 / 901 / 79	715 / 600 / 185	594 / 734 / 149	538 / 646 / 291	499 / 794 / 236	556 / 799 / 94	473 / 973 / 76	680 / 643 / 176	575 / 775 / 140	527 / 688 / 275	504 / 862 / 228	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3																										
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10 - 30	1 = 1																																																												
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2	502 / 874 / 85	422 / 1083 / 70	593 / 733 / 154	486 / 880 / 122	495 / 735 / 267	449 / 882 / 212	466 / 912 / 79	397 / 1111 / 64	558 / 775 / 145	483 / 952 / 118	482 / 777 / 251	452 / 954 / 204																																																	
3	430 / 1048 / 73	349 / 1249 / 58	454 / 920 / 118	378 / 1120 / 95	364 / 990 / 197	333 / 1192 / 157	395 / 1078 / 67	341 / 1328 / 55	436 / 993 / 113	371 / 1197 / 91	346 / 1022 / 181	330 / 1271 / 149																																																	
1	672 / 756 / 110	529 / 901 / 87	812 / 600 / 208	654 / 734 / 167	589 / 646 / 330	540 / 794 / 267	631 / 799 / 104	518 / 973 / 84	772 / 643 / 198	630 / 775 / 157	575 / 688 / 312	544 / 862 / 258																																																	
2	570 / 874 / 94	468 / 1083 / 77	673 / 733 / 172	535 / 880 / 137	541 / 735 / 303	486 / 882 / 241	529 / 912 / 87	436 / 1111 / 70	634 / 775 / 162	528 / 952 / 132	526 / 777 / 285	488 / 954 / 232																																																	
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1	751 / 756 / 121	592 / 901 / 96	908 / 600 / 230	731 / 734 / 186	640 / 646 / 368	581 / 794 / 299	706 / 799 / 114	569 / 973 / 92	864 / 643 / 219	687 / 775 / 174	623 / 688 / 349	583 / 862 / 289																																																	
2	638 / 874 / 103	524 / 1083 / 85	753 / 733 / 191	598 / 880 / 152	588 / 735 / 339	523 / 882 / 269	592 / 912 / 96	478 / 1111 / 77	709 / 775 / 180	576 / 952 / 146	569 / 777 / 319	523 / 954 / 259																																																	
3	547 / 1048 / 88	433 / 1249 / 70	576 / 920 / 146	466 / 1120 / 118	432 / 990 / 249	387 / 1192 / 199	501 / 1078 / 81	410 / 1328 / 66	554 / 993 / 141	443 / 1197 / 113	409 / 1022 / 229	382 / 1271 / 189																																																	
90	1	520 / 835 / 88	468 / 1043 / 73	628 / 663 / 163	575 / 838 / 136	514 / 724 / 259	491 / 896 / 212	504 / 895 / 85	443 / 1061 / 67	617 / 717 / 158	554 / 868 / 127	517 / 780 / 251																																																	494 / 957 / 204
	2	448 / 978 / 76	390 / 1180 / 61	523 / 812 / 136	460 / 981 / 109	468 / 814 / 236	436 / 983 / 189	432 / 1042 / 73	383 / 1243 / 58	494 / 841 / 127	455 / 1043 / 104	452 / 843 / 220	437 / 1044 / 181																																																
	3	377 / 1148 / 64	332 / 1399 / 52	401 / 1019 / 104	364 / 1268 / 86	343 / 1090 / 173	327 / 1343 / 142	360 / 1213 / 61	323 / 1460 / 49	388 / 1082 / 100	356 / 1333 / 82	339 / 1154 / 165	323 / 1406 / 134																																																
	1	590 / 835 / 97	512 / 1043 / 80	713 / 663 / 183	628 / 838 / 152	559 / 724 / 294	528 / 896 / 241	570 / 895 / 94	483 / 1061 / 74	693 / 717 / 178	603 / 868 / 142	560 / 780 / 285	530 / 957 / 232																																																
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	3	428 / 1148 / 70	363 / 1399 / 57	456 / 1019 / 117	398 / 1268 / 97	373 / 1090 / 196	352 / 1343 / 161	407 / 1213 / 67	352 / 1460 / 54	436 / 1082 / 112	388 / 1333 / 92	368 / 1154 / 187	347 / 1406 / 152																																																
	1	660 / 835 / 107	556 / 1043 / 88	798 / 663 / 202	681 / 838 / 169	605 / 724 / 329	565 / 896 / 269	638 / 895 / 103	523 / 1061 / 81	776 / 717 / 197	653 / 868 / 158	604 / 780 / 319	566 / 957 / 259																																																
	2	569 / 978 / 92	463 / 1180 / 74	665 / 812 / 169	545 / 981 / 135	550 / 814 / 299	502 / 983 / 239	547 / 1042 / 88	452 / 1243 / 70	621 / 841 / 158	536 / 1043 / 130	529 / 843 / 279	500 / 1044 / 229																																																
	3	478 / 1148 / 77	394 / 1399 / 63	510 / 1019 / 130	431 / 1268 / 107	403 / 1090 / 219	377 / 1343 / 180	456 / 1213 / 74	381 / 1460 / 59	488 / 1082 / 124	420 / 1333 / 101	397 / 1154 / 209	370 / 1406 / 170																																																

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge																	
100	1	982 / 181 / 156	982 / 283 / 156	980 / 232 / 247	980 / 359 / 247	858 / 316 / 495	858 / 486 / 495	982 / 200 / 156	982 / 311 / 156	980 / 256 / 247	980 / 395 / 247	858 / 348 / 495	858 / 533 / 495	982 / 220 / 156	957 / 646 / 152	980 / 281 / 247	980 / 432 / 247	858 / 381 / 495	838 / 569 / 484	
	2	982 / 497 / 156	907 / 698 / 144	980 / 348 / 247	980 / 533 / 247	858 / 394 / 495	819 / 576 / 473	982 / 545 / 156	857 / 722 / 136	980 / 382 / 247	980 / 585 / 247	858 / 433 / 495	781 / 602 / 451	982 / 595 / 156	806 / 742 / 128	980 / 418 / 247	956 / 623 / 241	858 / 474 / 495	743 / 625 / 429	
	3	932 / 664 / 148	756 / 816 / 120	980 / 579 / 247	809 / 726 / 204	743 / 635 / 429	591 / 765 / 341	882 / 688 / 140	731 / 864 / 116	956 / 619 / 241	784 / 771 / 198	705 / 660 / 407	572 / 811 / 330	857 / 730 / 136	680 / 877 / 108	931 / 659 / 235	735 / 789 / 185	667 / 682 / 385	553 / 854 / 319	
100	1	982 / 240 / 156	907 / 665 / 144	980 / 306 / 247	980 / 471 / 247	858 / 415 / 495	800 / 591 / 462	982 / 262 / 156	882 / 701 / 140	980 / 333 / 247	980 / 511 / 247	858 / 451 / 495	762 / 611 / 440							
	2	957 / 631 / 152	781 / 781 / 124	980 / 456 / 247	931 / 660 / 235	858 / 516 / 495	705 / 645 / 407	932 / 667 / 148	756 / 819 / 120	980 / 495 / 247	882 / 678 / 222	838 / 547 / 484	686 / 680 / 396							
	3	806 / 747 / 128	655 / 918 / 104	882 / 679 / 222	711 / 829 / 179	648 / 720 / 374	534 / 896 / 308	781 / 784 / 124	630 / 956 / 100	858 / 716 / 216	686 / 867 / 173	629 / 757 / 363	496 / 901 / 286							
100	1	982 / 284 / 156	857 / 736 / 136	980 / 361 / 247	980 / 553 / 247	858 / 488 / 495	743 / 644 / 429	982 / 262 / 156	882 / 701 / 140	980 / 333 / 247	980 / 511 / 247	858 / 451 / 495	762 / 611 / 440							
	2	882 / 682 / 140	731 / 855 / 116	980 / 535 / 247	858 / 712 / 216	819 / 578 / 473	667 / 715 / 385	932 / 667 / 148	756 / 819 / 120	980 / 495 / 247	882 / 678 / 222	838 / 547 / 484	686 / 680 / 396							
	3	756 / 820 / 120	605 / 990 / 96	809 / 729 / 204	662 / 903 / 167	591 / 768 / 341	477 / 935 / 275	781 / 784 / 124	630 / 956 / 100	858 / 716 / 216	686 / 867 / 173	629 / 757 / 363	496 / 901 / 286							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : C	Wind Speed [mph]																		
	140						150						160						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	982 / 307 / 156	806 / 747 / 128	980 / 390 / 247	980 / 596 / 247	858 / 526 / 495	705 / 658 / 407	932 / 656 / 148	756 / 806 / 120	980 / 451 / 247	931 / 653 / 235	819 / 580 / 473	677 / 717 / 385	882 / 708 / 140	705 / 858 / 112	980 / 516 / 247	858 / 687 / 216	762 / 617 / 440	640 / 748 / 352
	2	857 / 714 / 136	705 / 889 / 112	980 / 577 / 247	809 / 724 / 204	781 / 595 / 451	629 / 726 / 363	806 / 774 / 128	655 / 950 / 104	931 / 633 / 235	760 / 783 / 191	724 / 635 / 418	600 / 785 / 341	756 / 828 / 120	605 / 1000 / 96	882 / 685 / 222	711 / 836 / 179	686 / 687 / 396	580 / 838 / 319
	3	731 / 853 / 116	580 / 1022 / 92	784 / 762 / 198	637 / 936 / 161	572 / 801 / 330	458 / 967 / 264	680 / 914 / 108	554 / 1124 / 88	735 / 822 / 185	588 / 994 / 148	534 / 860 / 308	445 / 1065 / 253	630 / 965 / 100	504 / 1164 / 80	686 / 875 / 173	564 / 1085 / 142	496 / 910 / 286	420 / 1108 / 231
100	1	831 / 756 / 132	655 / 901 / 104	980 / 586 / 247	809 / 734 / 204	705 / 646 / 407	622 / 794 / 330	781 / 799 / 124	630 / 973 / 100	956 / 643 / 241	760 / 775 / 191	670 / 688 / 385	623 / 862 / 319						
	2	705 / 874 / 112	580 / 1083 / 92	833 / 733 / 210	662 / 880 / 167	648 / 735 / 374	560 / 882 / 297	655 / 912 / 104	529 / 1111 / 84	784 / 775 / 198	637 / 952 / 161	613 / 777 / 352	559 / 954 / 286						
	3	605 / 1048 / 96	479 / 1249 / 76	637 / 920 / 161	515 / 1120 / 130	477 / 990 / 275	415 / 1192 / 220	554 / 1078 / 88	454 / 1328 / 72	613 / 993 / 154	490 / 1197 / 124	441 / 1022 / 253	408 / 1271 / 209						
100	1	731 / 835 / 116	605 / 1043 / 96	882 / 663 / 222	735 / 838 / 185	650 / 724 / 363	601 / 896 / 297	705 / 895 / 112	563 / 1061 / 88	858 / 717 / 216	702 / 868 / 173	648 / 780 / 352	601 / 957 / 286						
	2	630 / 978 / 100	504 / 1180 / 80	735 / 812 / 185	588 / 981 / 148	591 / 814 / 330	535 / 983 / 264	605 / 1042 / 96	486 / 1243 / 76	686 / 841 / 173	577 / 1043 / 142	567 / 843 / 308	532 / 1044 / 253						
	3	529 / 1148 / 84	429 / 1399 / 68	564 / 1019 / 142	466 / 1268 / 118	433 / 1090 / 242	401 / 1343 / 198	504 / 1213 / 80	410 / 1460 / 64	539 / 1082 / 136	452 / 1333 / 111	425 / 1154 / 231	393 / 1406 / 187						

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior
0	1	195 / 515 / 34	158 / 639 / 28	246 / 412 / 50	198 / 510 / 40	216 / 448 / 58	213 / 549 / 47	187 / 542 / 33	157 / 665 / 27	234 / 431 / 48	195 / 526 / 38	208 / 475 / 56	219 / 574 / 45	179 / 567 / 31	159 / 686 / 25	222 / 448 / 45	199 / 550 / 36	200 / 490 / 53	229 / 612 / 43	
	2	166 / 604 / 29	134 / 738 / 24	198 / 494 / 40	162 / 616 / 33	192 / 497 / 52	193 / 619 / 42	158 / 630 / 28	136 / 784 / 23	190 / 520 / 39	161 / 641 / 31	185 / 523 / 50	198 / 644 / 40	150 / 652 / 27	136 / 802 / 22	182 / 544 / 37	163 / 663 / 30	180 / 548 / 48	201 / 666 / 38	
	3	138 / 704 / 24	114 / 878 / 20	154 / 636 / 31	125 / 786 / 26	142 / 676 / 38	140 / 824 / 31	134 / 749 / 24	115 / 926 / 19	150 / 678 / 31	127 / 833 / 25	134 / 700 / 36	146 / 871 / 30	126 / 767 / 22	114 / 935 / 18	142 / 700 / 29	127 / 848 / 23	132 / 741 / 35	151 / 916 / 29	
	5	1	215 / 515 / 34	175 / 639 / 28	271 / 412 / 53	218 / 510 / 42	216 / 448 / 70	213 / 549 / 56	206 / 542 / 33	171 / 665 / 27	257 / 431 / 50	211 / 526 / 40	208 / 475 / 67	219 / 574 / 53	197 / 567 / 31	170 / 686 / 25	244 / 448 / 48	211 / 550 / 38	200 / 490 / 63	229 / 612 / 52
	2	184 / 604 / 29	148 / 738 / 24	218 / 494 / 42	178 / 616 / 35	192 / 497 / 62	193 / 619 / 51	175 / 630 / 28	148 / 784 / 23	209 / 520 / 41	174 / 641 / 33	185 / 523 / 60	198 / 644 / 48	166 / 652 / 27	145 / 802 / 22	200 / 544 / 39	173 / 663 / 31	180 / 548 / 57	201 / 666 / 46	
	3	153 / 704 / 24	126 / 878 / 20	169 / 636 / 33	138 / 786 / 27	142 / 676 / 46	140 / 824 / 37	148 / 749 / 24	125 / 926 / 19	164 / 678 / 32	138 / 833 / 26	134 / 700 / 43	146 / 871 / 36	139 / 767 / 22	121 / 935 / 18	156 / 700 / 30	135 / 848 / 24	132 / 741 / 42	151 / 916 / 34	
	10	1	273 / 515 / 34	222 / 639 / 28	342 / 412 / 65	275 / 510 / 53	240 / 448 / 89	222 / 549 / 71	262 / 542 / 33	216 / 665 / 27	325 / 431 / 62	264 / 526 / 49	232 / 475 / 86	224 / 574 / 68	250 / 567 / 31	212 / 686 / 25	308 / 448 / 59	263 / 550 / 47	222 / 490 / 81	230 / 612 / 66
	2	233 / 604 / 29	188 / 738 / 24	275 / 494 / 53	224 / 616 / 43	214 / 497 / 79	202 / 619 / 65	222 / 630 / 28	187 / 784 / 23	264 / 520 / 50	219 / 641 / 41	205 / 523 / 76	203 / 644 / 62	211 / 652 / 27	182 / 802 / 22	252 / 544 / 48	215 / 663 / 39	199 / 548 / 73	202 / 666 / 58	
	3	194 / 704 / 24	159 / 878 / 20	213 / 636 / 41	174 / 786 / 33	157 / 676 / 58	147 / 824 / 47	188 / 749 / 24	158 / 926 / 19	208 / 678 / 40	173 / 833 / 32	149 / 700 / 55	149 / 871 / 46	176 / 767 / 22	151 / 935 / 18	196 / 700 / 38	167 / 848 / 30	146 / 741 / 54	152 / 916 / 44	
5	1	170 / 589 / 30	165 / 725 / 24	214 / 471 / 43	207 / 585 / 35	205 / 512 / 51	234 / 634 / 41	162 / 609 / 29	165 / 740 / 23	206 / 492 / 42	211 / 605 / 34	210 / 533 / 49	237 / 652 / 39							
	2	146 / 690 / 26	140 / 843 / 21	174 / 567 / 35	169 / 702 / 29	184 / 569 / 46	210 / 704 / 37	138 / 707 / 24	144 / 881 / 20	166 / 586 / 34	175 / 739 / 28	187 / 589 / 43	212 / 719 / 35							
	3	122 / 807 / 22	116 / 975 / 17	138 / 740 / 28	130 / 889 / 22	137 / 781 / 34	156 / 958 / 28	118 / 845 / 21	119 / 1012 / 17	130 / 755 / 26	134 / 927 / 22	137 / 793 / 32	161 / 998 / 27							
	5	1	188 / 589 / 30	173 / 725 / 24	235 / 471 / 46	216 / 585 / 37	205 / 512 / 61	234 / 634 / 50	180 / 609 / 29	170 / 740 / 23	226 / 492 / 44	216 / 605 / 36	210 / 533 / 58	237 / 652 / 47						
	2	162 / 690 / 26	147 / 843 / 21	191 / 567 / 37	176 / 702 / 30	184 / 569 / 55	210 / 704 / 44	153 / 707 / 24	149 / 881 / 20	182 / 586 / 36	179 / 739 / 30	187 / 589 / 52	212 / 719 / 42							
	3	135 / 807 / 22	122 / 975 / 17	151 / 740 / 30	136 / 889 / 24	137 / 781 / 41	156 / 958 / 33	130 / 845 / 21	122 / 1012 / 17	142 / 755 / 28	137 / 927 / 23	137 / 793 / 38	161 / 998 / 32							
	10	1	239 / 589 / 30	213 / 725 / 24	297 / 471 / 57	266 / 585 / 46	222 / 512 / 78	234 / 634 / 63	228 / 609 / 29	208 / 740 / 23	286 / 492 / 55	264 / 605 / 44	223 / 533 / 74	237 / 652 / 60						
	2	205 / 690 / 26	182 / 843 / 21	241 / 567 / 46	217 / 702 / 38	199 / 569 / 70	210 / 704 / 57	194 / 707 / 24	182 / 881 / 20	230 / 586 / 44	219 / 739 / 37	199 / 589 / 66	212 / 719 / 54							
	3	171 / 807 / 22	151 / 975 / 17	191 / 740 / 37	167 / 889 / 29	148 / 781 / 52	156 / 958 / 42	165 / 845 / 21	150 / 1012 / 17	180 / 755 / 34	167 / 927 / 28	146 / 793 / 49	161 / 998 / 41							
10	1	158 / 642 / 28	170 / 774 / 22	198 / 512 / 40	213 / 623 / 32	213 / 551 / 47	247 / 685 / 38	162 / 609 / 29	165 / 740 / 23	206 / 492 / 42	211 / 605 / 34	210 / 533 / 49	237 / 652 / 39							
	2	134 / 741 / 24	148 / 917 / 19	162 / 618 / 33	175 / 751 / 26	194 / 621 / 42	219 / 753 / 34	138 / 707 / 24	144 / 881 / 20	166 / 586 / 34	175 / 739 / 28	187 / 589 / 43	212 / 719 / 35							
	3	114 / 881 / 20	126 / 1092 / 17	125 / 790 / 26	137 / 962 / 21	141 / 828 / 31	165 / 1034 / 26	118 / 845 / 21	119 / 1012 / 17	130 / 755 / 26	134 / 927 / 22	137 / 793 / 32	161 / 998 / 27							
	5	1	175 / 642 / 28	172 / 774 / 22	218 / 512 / 42	215 / 623 / 34	213 / 551 / 56	247 / 685 / 46	180 / 609 / 29	170 / 740 / 23	226 / 492 / 44	216 / 605 / 36	210 / 533 / 58	237 / 652 / 47						
	2	148 / 741 / 24	150 / 917 / 19	178 / 618 / 35	176 / 751 / 28	194 / 621 / 51	219 / 753 / 41	153 / 707 / 24	149 / 881 / 20	182 / 586 / 36	179 / 739 / 30	187 / 589 / 52	212 / 719 / 42							
	3	126 / 881 / 20	128 / 1092 / 17	138 / 790 / 27	138 / 962 / 22	141 / 828 / 37	165 / 1034 / 31	130 / 845 / 21	122 / 1012 / 17	142 / 755 / 28	137 / 927 / 23	137 / 793 / 38	161 / 998 / 32							
	10	1	222 / 642 / 28	210 / 774 / 22	275 / 512 / 53	260 / 623 / 42	223 / 551 / 71	247 / 685 / 58	228 / 609 / 29	208 / 740 / 23	286 / 492 / 55	264 / 605 / 44	223 / 533 / 74	237 / 652 / 60						
	2	188 / 741 / 24	183 / 917 / 19	224 / 618 / 43	214 / 751 / 34	203 / 621 / 65	219 / 753 / 52	194 / 707 / 24	182 / 881 / 20	230 / 586 / 44	219 / 739 / 37	199 / 589 / 66	212 / 719 / 54							
	3	159 / 881 / 20	156 / 1092 / 17	174 / 790 / 33	167 / 962 / 27	147 / 828 / 47	165 / 1034 / 39	165 / 845 / 21	150 / 1012 / 17	180 / 755 / 34	167 / 927 / 28	146 / 793 / 49	161 / 998 / 41							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																			
	140						150						160							
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge													
0	1	156 / 656 / 27	175 / 807 / 22	197 / 530 / 39	221 / 654 / 31	222 / 581 / 46	256 / 718 / 37	164 / 716 / 25	183 / 867 / 20	201 / 561 / 35	228 / 694 / 29	232 / 623 / 42	265 / 756 / 34	166 / 747 / 23	190 / 918 / 19	212 / 611 / 34	241 / 747 / 27	240 / 658 / 39	279 / 808 / 32	
	2	135 / 774 / 23	151 / 951 / 19	159 / 633 / 31	180 / 784 / 26	196 / 636 / 40	227 / 786 / 33	141 / 836 / 22	157 / 1010 / 17	168 / 692 / 30	189 / 844 / 24	209 / 694 / 38	240 / 846 / 31	146 / 890 / 20	161 / 1055 / 16	171 / 724 / 27	197 / 896 / 22	214 / 726 / 35	251 / 898 / 29	
	3	114 / 915 / 19	128 / 1125 / 16	126 / 823 / 25	140 / 995 / 20	144 / 861 / 30	168 / 1066 / 25	117 / 975 / 18	131 / 1175 / 15	131 / 884 / 23	144 / 1048 / 18	151 / 919 / 28	174 / 1119 / 23	120 / 1022 / 17	139 / 1272 / 14	135 / 936 / 22	153 / 1140 / 18	156 / 967 / 26	186 / 1214 / 21	
	5	1	170 / 656 / 27	175 / 807 / 22	214 / 530 / 41	221 / 654 / 33	222 / 581 / 55	256 / 718 / 44	174 / 716 / 25	183 / 867 / 20	211 / 561 / 37	228 / 694 / 30	232 / 623 / 51	265 / 756 / 41	171 / 747 / 23	190 / 918 / 19	217 / 611 / 36	241 / 747 / 29	240 / 658 / 47	279 / 808 / 38
	2	147 / 774 / 23	151 / 951 / 19	173 / 633 / 33	180 / 784 / 27	196 / 636 / 48	227 / 786 / 39	149 / 836 / 22	157 / 1010 / 17	177 / 692 / 31	189 / 844 / 25	209 / 694 / 46	240 / 846 / 37	150 / 890 / 20	161 / 1055 / 16	175 / 724 / 29	197 / 896 / 24	214 / 726 / 42	251 / 898 / 34	
	3	124 / 915 / 19	128 / 1125 / 16	137 / 823 / 26	140 / 995 / 21	144 / 861 / 36	168 / 1066 / 29	124 / 975 / 18	131 / 1175 / 15	138 / 884 / 24	144 / 1048 / 19	151 / 919 / 33	174 / 1119 / 27	123 / 1022 / 17	139 / 1272 / 14	138 / 936 / 23	153 / 1140 / 18	156 / 967 / 31	186 / 1214 / 26	
	10	1	215 / 656 / 27	210 / 807 / 22	269 / 530 / 50	263 / 654 / 41	227 / 581 / 70	256 / 718 / 57	216 / 716 / 25	212 / 867 / 20	261 / 561 / 46	261 / 694 / 38	232 / 623 / 65	265 / 756 / 52	209 / 747 / 23	211 / 918 / 19	265 / 611 / 44	266 / 747 / 36	240 / 658 / 60	279 / 808 / 49
	2	186 / 774 / 23	182 / 951 / 19	217 / 633 / 41	215 / 784 / 33	201 / 636 / 62	227 / 786 / 50	185 / 836 / 22	181 / 1010 / 17	219 / 692 / 39	217 / 844 / 31	209 / 694 / 58	240 / 846 / 47	183 / 890 / 20	179 / 1055 / 16	213 / 724 / 36	217 / 896 / 29	214 / 726 / 54	251 / 898 / 44	
	3	157 / 915 / 19	154 / 1125 / 16	172 / 823 / 32	167 / 995 / 26	148 / 861 / 46	168 / 1066 / 37	154 / 975 / 18	151 / 1175 / 15	170 / 884 / 30	165 / 1048 / 24	151 / 919 / 42	174 / 1119 / 34	151 / 1022 / 17	155 / 1272 / 14	168 / 936 / 28	169 / 1140 / 23	156 / 967 / 39	186 / 1214 / 33	
5	1	172 / 793 / 22	203 / 998 / 18	218 / 642 / 31	251 / 795 / 26	252 / 705 / 37	291 / 853 / 30	183 / 861 / 21	207 / 1031 / 17	227 / 685 / 30	260 / 836 / 24	263 / 748 / 35	311 / 924 / 29	ASCE Group Zone	Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3
	2	149 / 935 / 19	171 / 1139 / 15	178 / 770 / 26	203 / 939 / 21	223 / 772 / 33	259 / 941 / 27	152 / 969 / 17	180 / 1217 / 15	189 / 838 / 25	215 / 1012 / 20	231 / 812 / 31	277 / 1014 / 26					1 = 1		
	3	126 / 1105 / 16	146 / 1362 / 13	138 / 977 / 20	162 / 1227 / 17	166 / 1048 / 25	197 / 1303 / 20	133 / 1184 / 15	153 / 1443 / 12	145 / 1052 / 19	171 / 1309 / 16	175 / 1125 / 24	208 / 1385 / 19					2 = 2' / 2		
	5	1	173 / 793 / 22	203 / 998 / 18	218 / 642 / 33	251 / 795 / 27	252 / 705 / 44	291 / 853 / 36	183 / 861 / 21	207 / 1031 / 17	227 / 685 / 31	260 / 836 / 25	263 / 748 / 42				311 / 924 / 34	3 = 3' / 3		
	2	150 / 935 / 19	171 / 1139 / 15	178 / 770 / 27	203 / 939 / 22	223 / 772 / 39	259 / 941 / 32	152 / 969 / 17	180 / 1217 / 15	189 / 838 / 26	215 / 1012 / 21	231 / 812 / 37	277 / 1014 / 31				1 = 1			
	3	127 / 1105 / 16	146 / 1362 / 13	138 / 977 / 21	162 / 1227 / 18	166 / 1048 / 29	197 / 1303 / 24	133 / 1184 / 15	153 / 1443 / 12	145 / 1052 / 20	171 / 1309 / 17	175 / 1125 / 28	208 / 1385 / 23				2 = 2			
	10	1	209 / 793 / 22	219 / 998 / 18	261 / 642 / 41	268 / 795 / 33	252 / 705 / 57	291 / 853 / 46	214 / 861 / 21	216 / 1031 / 17	263 / 685 / 39	270 / 836 / 31	263 / 748 / 54				311 / 924 / 44	3 = 3		
	2	181 / 935 / 19	184 / 1139 / 15	213 / 770 / 33	217 / 939 / 27	223 / 772 / 50	259 / 941 / 41	177 / 969 / 17	188 / 1217 / 15	219 / 838 / 32	224 / 1012 / 26	231 / 812 / 47	277 / 1014 / 39							
	3	153 / 1105 / 16	158 / 1362 / 13	165 / 977 / 26	173 / 1227 / 22	166 / 1048 / 37	197 / 1303 / 31	155 / 1184 / 15	160 / 1443 / 12	168 / 1052 / 25	177 / 1309 / 21	175 / 1125 / 36	208 / 1385 / 29							
10	1	187 / 895 / 19	218 / 1100 / 16	235 / 723 / 28	267 / 869 / 22	272 / 784 / 33	319 / 955 / 27	197 / 957 / 19	228 / 1165 / 15	242 / 756 / 26	282 / 928 / 22	280 / 814 / 31	337 / 1017 / 26	10 - 30	Panal Angle	Mono Slope	0 - 3	1 = 1	2 = 2	3 = 3
	2	159 / 1036 / 17	188 / 1289 / 14	194 / 873 / 23	228 / 1082 / 19	246 / 875 / 30	293 / 1084 / 25	167 / 1100 / 16	196 / 1355 / 13	197 / 900 / 22	228 / 1096 / 18	251 / 902 / 28	295 / 1097 / 23					1 = 1		
	3	132 / 1195 / 14	159 / 1514 / 12	152 / 1122 / 18	178 / 1382 / 15	176 / 1141 / 21	217 / 1458 / 18	136 / 1256 / 13	159 / 1188 / 18	185 / 1448 / 14	183 / 1202 / 20	225 / 1522 / 17	2 = 2							
	5	1	187 / 895 / 19	218 / 1100 / 16	235 / 723 / 30	267 / 869 / 24	272 / 784 / 39	319 / 955 / 32	197 / 957 / 19	228 / 1165 / 15	242 / 756 / 28	282 / 928 / 23	280 / 814 / 37				337 / 1017 / 31	3 = 3		
	2	159 / 1036 / 17	188 / 1289 / 14	194 / 873 / 24	228 / 1082 / 20	246 / 875 / 36	293 / 1084 / 29	167 / 1100 / 16	196 / 1355 / 13	197 / 900 / 23	228 / 1096 / 18	251 / 902 / 33	295 / 1097 / 27							
	3	132 / 1195 / 14	159 / 1514 / 12	152 / 1122 / 19	178 / 1382 / 16	176 / 1141 / 26	217 / 1458 / 22	136 / 1256 / 13	159 / 1188 / 18	185 / 1448 / 15	183 / 1202 / 24	225 / 1522 / 21								
	10	1	212 / 895 / 19	222 / 1100 / 16	264 / 723 / 37	270 / 869 / 29	272 / 784 / 50	319 / 955 / 41	217 / 957 / 19	228 / 1165 / 15	264 / 756 / 34	282 / 928 / 28	280 / 814 / 47				337 / 1017 / 39			
	2	181 / 1036 / 17	192 / 1289 / 14	217 / 873 / 30	230 / 1082 / 25	246 / 875 / 46	293 / 1084 / 37	183 / 1100 / 16	196 / 1355 / 13	214 / 900 / 28	228 / 1096 / 23	251 / 902 / 42	295 / 1097 / 34							
	3	149 / 1195 / 14	161 / 1514 / 12	171 / 1122 / 24	180 / 1382 / 20	176 / 1141 / 33	217 / 1458 / 28	150 / 1256 / 13	173 / 1188 / 23	185 / 1448 / 19	183 / 1202 / 31	225 / 1522 / 26								

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105																					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
Ground Snow	15	1	331 / 515 / 35	269 / 639 / 29	413 / 412 / 78	332 / 510 / 63	274 / 448 / 108	249 / 549 / 87	317 / 542 / 34	260 / 665 / 27	393 / 431 / 74	318 / 526 / 59	264 / 475 / 104	249 / 574 / 83	303 / 567 / 33	254 / 686 / 26	373 / 448 / 70	314 / 550 / 56	252 / 490 / 98	255 / 612 / 81																
		2	283 / 604 / 30	227 / 738 / 25	332 / 494 / 63	271 / 616 / 51	244 / 497 / 96	226 / 619 / 79	269 / 630 / 29	225 / 784 / 24	318 / 520 / 60	263 / 641 / 49	234 / 523 / 93	226 / 644 / 75	255 / 652 / 27	218 / 802 / 22	305 / 544 / 58	257 / 663 / 46	227 / 548 / 89	224 / 666 / 71																
		3	234 / 704 / 25	193 / 878 / 21	258 / 636 / 49	210 / 786 / 40	179 / 676 / 71	164 / 824 / 57	227 / 749 / 25	190 / 926 / 20	251 / 678 / 47	208 / 833 / 39	169 / 700 / 67	166 / 871 / 55	214 / 767 / 23	181 / 935 / 19	237 / 700 / 45	200 / 848 / 36	166 / 741 / 65	168 / 916 / 53																
	20	1	388 / 515 / 38	316 / 639 / 31	484 / 412 / 90	389 / 510 / 73	307 / 448 / 130	276 / 549 / 104	372 / 542 / 37	305 / 665 / 30	461 / 431 / 86	372 / 526 / 68	296 / 475 / 125	275 / 574 / 99	356 / 567 / 35	296 / 686 / 28	437 / 448 / 82	365 / 550 / 65	282 / 490 / 118	280 / 612 / 97																
		2	332 / 604 / 33	267 / 738 / 27	389 / 494 / 73	318 / 616 / 59	274 / 497 / 116	251 / 619 / 95	316 / 630 / 31	263 / 784 / 26	373 / 520 / 70	307 / 641 / 57	263 / 523 / 111	249 / 644 / 90	299 / 652 / 30	254 / 802 / 24	358 / 544 / 67	299 / 663 / 54	254 / 548 / 106	246 / 666 / 85																
		3	275 / 704 / 27	227 / 878 / 23	302 / 636 / 57	246 / 786 / 46	201 / 676 / 85	182 / 824 / 69	267 / 749 / 27	222 / 926 / 22	294 / 678 / 55	243 / 833 / 45	190 / 700 / 80	183 / 871 / 66	251 / 767 / 25	211 / 935 / 20	278 / 700 / 52	233 / 848 / 42	186 / 741 / 78	185 / 916 / 64																
	25	1	388 / 515 / 38	316 / 639 / 31	484 / 412 / 90	389 / 510 / 73	341 / 448 / 156	302 / 549 / 125	372 / 542 / 37	305 / 665 / 30	461 / 431 / 86	372 / 526 / 68	328 / 475 / 150	300 / 574 / 119	356 / 567 / 35	296 / 686 / 28	437 / 448 / 82	365 / 550 / 65	313 / 490 / 141	305 / 612 / 116																
		2	332 / 604 / 33	267 / 738 / 27	389 / 494 / 73	318 / 616 / 59	303 / 497 / 139	275 / 619 / 113	316 / 630 / 31	263 / 784 / 26	373 / 520 / 70	307 / 641 / 57	291 / 523 / 133	272 / 644 / 108	299 / 652 / 30	254 / 802 / 24	358 / 544 / 67	299 / 663 / 54	281 / 548 / 127	268 / 666 / 102																
		3	275 / 704 / 27	227 / 878 / 23	302 / 636 / 57	246 / 786 / 46	223 / 676 / 102	199 / 824 / 82	267 / 749 / 27	222 / 926 / 22	294 / 678 / 55	243 / 833 / 45	211 / 700 / 96	200 / 871 / 79	251 / 767 / 25	211 / 935 / 20	278 / 700 / 52	233 / 848 / 42	207 / 741 / 94	201 / 916 / 77																
15	110	1	289 / 589 / 31	254 / 725 / 25	359 / 471 / 68	317 / 585 / 55	252 / 512 / 94	255 / 634 / 77	276 / 609 / 30	247 / 740 / 24	346 / 492 / 65	312 / 605 / 52	251 / 533 / 91	253 / 652 / 73	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
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3	207 / 807 / 22	180 / 975 / 18	231 / 740 / 44	199 / 889 / 35	168 / 781 / 63	170 / 958 / 51	200 / 845 / 22	178 / 1012 / 17	217 / 755 / 41	198 / 927 / 33	164 / 793 / 59	171 / 998 / 49																								
20	1	340 / 589 / 34	295 / 725 / 27	421 / 471 / 79	367 / 585 / 64	281 / 512 / 113	278 / 634 / 92	324 / 609 / 32	285 / 740 / 26	405 / 492 / 76	359 / 605 / 61	279 / 533 / 109	276 / 652 / 87	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3	
	ASCE Group Zone																																			
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2	291 / 690 / 29	252 / 843 / 23	342 / 567 / 64	299 / 702 / 52	252 / 569 / 102	250 / 704 / 83	275 / 707 / 27	250 / 881 / 23	326 / 586 / 61	298 / 739 / 51	248 / 589 / 97	246 / 719 / 78																								
3	243 / 807 / 24	208 / 975 / 19	270 / 740 / 51	230 / 889 / 40	187 / 781 / 76	186 / 958 / 62	235 / 845 / 23	205 / 1012 / 19	254 / 755 / 48	228 / 927 / 39	182 / 793 / 71	187 / 998 / 59																								
25	1	340 / 589 / 34	295 / 725 / 27	421 / 471 / 79	367 / 585 / 64	310 / 512 / 136	302 / 634 / 110	324 / 609 / 32	285 / 740 / 26	405 / 492 / 76	359 / 605 / 61	307 / 533 / 130	298 / 652 / 105	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3	
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2	291 / 690 / 29	252 / 843 / 23	342 / 567 / 64	299 / 702 / 52	278 / 569 / 122	271 / 704 / 99	275 / 707 / 27	250 / 881 / 23	326 / 586 / 61	298 / 739 / 51	273 / 589 / 116	266 / 719 / 94																								
3	243 / 807 / 24	208 / 975 / 19	270 / 740 / 51	230 / 889 / 40	207 / 781 / 91	202 / 958 / 74	235 / 845 / 23	205 / 1012 / 19	254 / 755 / 48	228 / 927 / 39	200 / 793 / 85	202 / 998 / 71																								
15	120	1	269 / 642 / 29	247 / 774 / 23	332 / 512 / 63	306 / 623 / 50	249 / 551 / 87	258 / 685 / 71	276 / 609 / 30	247 / 740 / 24	346 / 492 / 65	312 / 605 / 52	251 / 533 / 91	253 / 652 / 73	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
		ASCE Group Zone																																		
		Panal Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																		
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2	227 / 741 / 25	215 / 917 / 20	271 / 618 / 51	251 / 751 / 41	227 / 621 / 79	230 / 753 / 63	234 / 707 / 25	216 / 881 / 21	278 / 586 / 52	258 / 739 / 44	224 / 589 / 81	226 / 719 / 65																								
3	193 / 881 / 21	183 / 1092 / 17	210 / 790 / 40	196 / 962 / 32	165 / 828 / 57	172 / 1034 / 47	200 / 845 / 22	178 / 1012 / 17	217 / 755 / 41	198 / 927 / 33	164 / 793 / 59	171 / 998 / 49																								
20	1	316 / 642 / 31	284 / 774 / 25	389 / 512 / 73	352 / 623 / 58	276 / 551 / 104	280 / 685 / 85	324 / 609 / 32	285 / 740 / 26	405 / 492 / 76	359 / 605 / 61	279 / 533 / 109	276 / 652 / 87	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3	
	ASCE Group Zone																																			
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3	227 / 881 / 23	211 / 1092 / 19	246 / 790 / 46	226 / 962 / 37	182 / 828 / 69	187 / 1034 / 57	235 / 845 / 23	205 / 1012 / 19	254 / 755 / 48	228 / 927 / 39	182 / 793 / 71	187 / 998 / 59																								
25	1	316 / 642 / 31	284 / 774 / 25	389 / 512 / 73	352 / 623 / 58	303 / 551 / 125	302 / 685 / 102	324 / 609 / 32	285 / 740 / 26	405 / 492 / 76	359 / 605 / 61	307 / 533 / 130	298 / 652 / 105	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3	
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3	227 / 881 / 23	211 / 1092 / 19	246 / 790 / 46	226 / 962 / 37	200 / 828 / 82	201 / 1034 / 68	235 / 845 / 23	205 / 1012 / 19	254 / 755 / 48	228 / 927 / 39	200 / 793 / 85	202 / 998 / 71																								

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		140						150						160																				
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
15	1	259 / 656 / 27	246 / 807 / 22	324 / 530 / 60	308 / 654 / 49	254 / 581 / 85	263 / 718 / 69	258 / 716 / 26	245 / 867 / 21	312 / 561 / 55	302 / 694 / 45	255 / 623 / 79	265 / 756 / 63	248 / 747 / 24	243 / 918 / 19	313 / 611 / 52	304 / 747 / 42	255 / 658 / 73	279 / 808 / 59																
	2	224 / 774 / 24	214 / 951 / 19	262 / 633 / 49	251 / 784 / 40	224 / 636 / 75	233 / 786 / 61	221 / 836 / 22	210 / 1010 / 18	261 / 692 / 46	251 / 844 / 37	230 / 694 / 71	240 / 846 / 57	217 / 890 / 21	205 / 1055 / 17	252 / 724 / 42	249 / 896 / 35	227 / 726 / 65	251 / 898 / 53																
	3	189 / 915 / 20	181 / 1125 / 17	207 / 823 / 39	195 / 995 / 31	165 / 861 / 55	173 / 1066 / 46	184 / 975 / 19	175 / 1175 / 15	203 / 884 / 36	190 / 1048 / 28	166 / 919 / 51	174 / 1119 / 42	178 / 1022 / 17	177 / 1272 / 14	199 / 936 / 33	194 / 1140 / 27	165 / 967 / 47	186 / 1214 / 40																
	1	304 / 656 / 30	283 / 807 / 24	379 / 530 / 70	352 / 654 / 57	280 / 581 / 102	284 / 718 / 83	300 / 716 / 28	279 / 867 / 23	362 / 561 / 64	343 / 694 / 52	279 / 623 / 95	283 / 756 / 76	286 / 747 / 26	274 / 918 / 21	361 / 611 / 61	343 / 747 / 49	277 / 658 / 87	288 / 808 / 71																
	2	263 / 774 / 26	245 / 951 / 21	306 / 633 / 57	287 / 784 / 46	247 / 636 / 90	252 / 786 / 73	257 / 836 / 24	239 / 1010 / 19	303 / 692 / 54	284 / 844 / 43	251 / 694 / 85	256 / 846 / 69	251 / 890 / 23	232 / 1055 / 18	290 / 724 / 49	280 / 896 / 40	247 / 726 / 78	259 / 898 / 64																
	3	222 / 915 / 22	207 / 1125 / 18	242 / 823 / 45	223 / 995 / 36	182 / 861 / 66	187 / 1066 / 55	214 / 975 / 20	199 / 1175 / 16	236 / 884 / 42	216 / 1048 / 33	182 / 919 / 62	186 / 1119 / 50	206 / 1022 / 19	200 / 1272 / 16	229 / 936 / 39	218 / 1140 / 31	180 / 967 / 57	192 / 1214 / 48																
	1	304 / 656 / 30	283 / 807 / 24	379 / 530 / 70	352 / 654 / 57	306 / 581 / 122	306 / 718 / 99	300 / 716 / 28	279 / 867 / 23	362 / 561 / 64	343 / 694 / 52	304 / 623 / 113	302 / 756 / 91	286 / 747 / 26	274 / 918 / 21	361 / 611 / 61	343 / 747 / 49	300 / 658 / 105	306 / 808 / 85																
	2	263 / 774 / 26	245 / 951 / 21	306 / 633 / 57	287 / 784 / 46	270 / 636 / 108	271 / 786 / 88	257 / 836 / 24	239 / 1010 / 19	303 / 692 / 54	284 / 844 / 43	273 / 694 / 102	274 / 846 / 82	251 / 890 / 23	232 / 1055 / 18	290 / 724 / 49	280 / 896 / 40	267 / 726 / 94	276 / 898 / 77																
	3	222 / 915 / 22	207 / 1125 / 18	242 / 823 / 45	223 / 995 / 36	199 / 861 / 79	201 / 1066 / 65	214 / 975 / 20	199 / 1175 / 16	236 / 884 / 42	216 / 1048 / 33	198 / 919 / 74	199 / 1119 / 60	206 / 1022 / 19	200 / 1272 / 16	229 / 936 / 39	218 / 1140 / 31	195 / 967 / 68	204 / 1214 / 57																
20	1	245 / 793 / 22	249 / 998 / 19	305 / 642 / 49	305 / 795 / 40	260 / 705 / 69	291 / 853 / 55	249 / 861 / 22	244 / 1031 / 17	305 / 685 / 46	304 / 836 / 37	264 / 748 / 65	311 / 924 / 53	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panal Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panal Angle	Mono Slope																																	
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2	212 / 935 / 19	209 / 1139 / 16	249 / 770 / 40	246 / 939 / 32	230 / 772 / 61	259 / 941 / 49	206 / 969 / 18	212 / 1217 / 15	254 / 838 / 39	252 / 1012 / 31	232 / 812 / 57	277 / 1014 / 47																							
3	180 / 1105 / 17	179 / 1362 / 14	193 / 977 / 31	197 / 1227 / 26	171 / 1048 / 46	197 / 1303 / 38	180 / 1184 / 16	180 / 1443 / 13	195 / 1052 / 30	199 / 1309 / 25	176 / 1125 / 44	208 / 1385 / 36																							
1	281 / 793 / 24	279 / 998 / 20	350 / 642 / 57	341 / 795 / 46	281 / 705 / 83	292 / 853 / 66	284 / 861 / 23	271 / 1031 / 19	347 / 685 / 54	338 / 836 / 43	284 / 748 / 78	311 / 924 / 64																							
2	243 / 935 / 21	234 / 1139 / 17	285 / 770 / 46	275 / 939 / 37	249 / 772 / 73	261 / 941 / 59	235 / 969 / 19	236 / 1217 / 16	289 / 838 / 45	280 / 1012 / 36	250 / 812 / 69	277 / 1014 / 57																							
3	206 / 1105 / 18	201 / 1362 / 15	221 / 977 / 36	220 / 1227 / 30	185 / 1048 / 55	198 / 1303 / 45	206 / 1184 / 17	201 / 1443 / 14	222 / 1052 / 34	221 / 1309 / 29	190 / 1125 / 52	208 / 1385 / 43																							
1	281 / 793 / 24	279 / 998 / 20	350 / 642 / 57	341 / 795 / 46	303 / 705 / 99	309 / 853 / 79	284 / 861 / 23	271 / 1031 / 19	347 / 685 / 54	338 / 836 / 43	304 / 748 / 94	321 / 924 / 77																							
2	243 / 935 / 21	234 / 1139 / 17	285 / 770 / 46	275 / 939 / 37	268 / 772 / 88	276 / 941 / 71	235 / 969 / 19	236 / 1217 / 16	289 / 838 / 45	280 / 1012 / 36	268 / 812 / 82	286 / 1014 / 68																							
3	206 / 1105 / 18	201 / 1362 / 15	221 / 977 / 36	220 / 1227 / 30	199 / 1048 / 65	210 / 1303 / 54	206 / 1184 / 17	201 / 1443 / 14	222 / 1052 / 34	221 / 1309 / 29	203 / 1125 / 63	214 / 1385 / 51																							
25	1	244 / 895 / 20	248 / 1100 / 17	304 / 723 / 44	301 / 869 / 35	272 / 784 / 61	319 / 955 / 49	248 / 957 / 19	252 / 1165 / 16	301 / 756 / 41	309 / 928 / 33	280 / 814 / 57	337 / 1017 / 47	<p>Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="background-color: #d9ead3;">x ≥ 72"</td> <td style="background-color: #d9ead3;">64" to 71"</td> <td style="background-color: #d9ead3;">48" to 63"</td> <td style="background-color: #d9ead3;">x ≤ 47"</td> </tr> </table> <p>Notation (ASCE 7-22) a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the eedges shall not include any overhang distances. B=Horizontal dimension of building measured normal to wind direction, in ft(m). h=Mean roof height, in ft(m). θ=Angle of roof from horizontal, in degrees</p>						x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"												
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	2	208 / 1036 / 17	214 / 1289 / 14	250 / 873 / 36	257 / 1082 / 30	246 / 875 / 55	293 / 1084 / 46	210 / 1100 / 17	216 / 1355 / 14	245 / 900 / 33	250 / 1096 / 27	251 / 902 / 51	295 / 1097 / 42																						
	3	172 / 1195 / 14	181 / 1514 / 12	197 / 1122 / 28	201 / 1382 / 23	176 / 1141 / 40	217 / 1458 / 34	172 / 1256 / 14		198 / 1188 / 27	202 / 1448 / 22	183 / 1202 / 38	225 / 1522 / 32																						
	1	277 / 895 / 22	275 / 1100 / 18	343 / 723 / 51	333 / 869 / 40	286 / 784 / 73	319 / 955 / 59	279 / 957 / 21	277 / 1165 / 17	339 / 756 / 48	339 / 928 / 39	286 / 814 / 69	337 / 1017 / 57																						
	2	236 / 1036 / 19	237 / 1289 / 16	283 / 873 / 42	284 / 1082 / 34	258 / 875 / 66	293 / 1084 / 55	236 / 1100 / 18	238 / 1355 / 15	275 / 900 / 39	274 / 1096 / 31	257 / 902 / 62	295 / 1097 / 50																						
	3	195 / 1195 / 16	200 / 1514 / 13	222 / 1122 / 33	222 / 1382 / 27	185 / 1141 / 48	217 / 1458 / 40	193 / 1256 / 15		222 / 1188 / 31	222 / 1448 / 26	188 / 1202 / 45	225 / 1522 / 38																						
	1	277 / 895 / 22	275 / 1100 / 18	343 / 723 / 51	333 / 869 / 40	305 / 784 / 88	320 / 955 / 71	279 / 957 / 21	277 / 1165 / 17	339 / 756 / 48	339 / 928 / 39	304 / 814 / 82	337 / 1017 / 68																						
	2	236 / 1036 / 19	237 / 1289 / 16	283 / 873 / 42	284 / 1082 / 34	275 / 875 / 79	295 / 1084 / 65	236 / 1100 / 18	238 / 1355 / 15	275 / 900 / 39	274 / 1096 / 31	272 / 902 / 74	295 / 1097 / 60																						
3	195 / 1195 / 16	200 / 1514 / 13	222 / 1122 / 33	222 / 1382 / 27	197 / 1141 / 57	218 / 1458 / 48	193 / 1256 / 15		222 / 1188 / 31	222 / 1448 / 26	199 / 1202 / 54	225 / 1522 / 46																							

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																			
	95						100						105							
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	390 / 515 / 39	317 / 639 / 31	487 / 412 / 91	391 / 510 / 73	374 / 448 / 181	329 / 549 / 145	374 / 542 / 37	306 / 665 / 30	463 / 431 / 86	374 / 526 / 69	360 / 475 / 175	326 / 574 / 138	358 / 567 / 35	297 / 686 / 28	439 / 448 / 82	367 / 550 / 66	343 / 490 / 165	330 / 612 / 135	
	2	333 / 604 / 33	268 / 738 / 27	391 / 494 / 73	319 / 616 / 60	333 / 497 / 161	299 / 619 / 132	317 / 630 / 31	265 / 784 / 26	375 / 520 / 70	309 / 641 / 57	320 / 523 / 155	295 / 644 / 125	301 / 652 / 30	255 / 802 / 24	359 / 544 / 67	300 / 663 / 54	309 / 548 / 148	290 / 666 / 119	
	3	277 / 704 / 27	228 / 878 / 23	303 / 636 / 57	248 / 786 / 46	245 / 676 / 119	217 / 824 / 96	268 / 749 / 27	223 / 926 / 22	295 / 678 / 55	244 / 833 / 45	231 / 700 / 112	217 / 871 / 92	252 / 767 / 25	212 / 935 / 20	279 / 700 / 52	234 / 848 / 42	227 / 741 / 109	217 / 916 / 89	
	35	1	429 / 515 / 41	349 / 639 / 33	535 / 412 / 99	430 / 510 / 80	407 / 448 / 207	356 / 549 / 166	411 / 542 / 39	336 / 665 / 31	508 / 431 / 94	410 / 526 / 75	392 / 475 / 199	351 / 574 / 158	393 / 567 / 37	325 / 686 / 30	482 / 448 / 90	401 / 550 / 72	373 / 490 / 188	355 / 612 / 154
		2	366 / 604 / 35	295 / 738 / 28	430 / 494 / 80	351 / 616 / 65	363 / 497 / 184	323 / 619 / 151	349 / 630 / 33	291 / 784 / 27	412 / 520 / 77	339 / 641 / 62	348 / 523 / 177	318 / 644 / 143	331 / 652 / 31	279 / 802 / 26	395 / 544 / 73	329 / 663 / 59	336 / 548 / 169	312 / 666 / 136
		3	304 / 704 / 29	250 / 878 / 24	333 / 636 / 62	272 / 786 / 51	267 / 676 / 136	235 / 824 / 109	295 / 749 / 28	245 / 926 / 23	324 / 678 / 60	267 / 833 / 49	252 / 700 / 128	234 / 871 / 106	277 / 767 / 26	233 / 935 / 21	307 / 700 / 57	256 / 848 / 46	247 / 741 / 124	234 / 916 / 102
	40	1	468 / 515 / 43	380 / 639 / 35	573 / 405 / 106	468 / 510 / 87	441 / 448 / 233	382 / 549 / 186	448 / 542 / 41	366 / 665 / 33	554 / 431 / 102	446 / 526 / 81	425 / 475 / 224	377 / 574 / 178	429 / 567 / 39	354 / 686 / 31	525 / 448 / 97	436 / 550 / 78	404 / 490 / 212	380 / 612 / 174
		2	400 / 604 / 37	322 / 738 / 29	468 / 494 / 87	382 / 616 / 71	393 / 497 / 207	348 / 619 / 169	380 / 630 / 35	316 / 784 / 29	449 / 520 / 83	368 / 641 / 67	377 / 523 / 199	341 / 644 / 161	361 / 652 / 33	303 / 802 / 27	430 / 544 / 80	357 / 663 / 64	363 / 548 / 190	334 / 666 / 152
		3	331 / 704 / 30	273 / 878 / 25	363 / 636 / 67	296 / 786 / 55	289 / 676 / 152	252 / 824 / 123	322 / 749 / 29	267 / 926 / 24	354 / 678 / 66	291 / 833 / 53	273 / 700 / 144	251 / 871 / 119	302 / 767 / 28	253 / 935 / 22	334 / 700 / 62	278 / 848 / 50	267 / 741 / 140	250 / 916 / 114
30	Wind Speed [mph]																			
	110						115													
	1	341 / 589 / 34	296 / 725 / 27	423 / 471 / 79	368 / 585 / 64	339 / 512 / 158	326 / 634 / 129	325 / 609 / 32	287 / 740 / 26	407 / 492 / 76	361 / 605 / 61	335 / 533 / 152	321 / 652 / 122							
	2	293 / 690 / 29	253 / 843 / 24	343 / 567 / 64	300 / 702 / 52	304 / 569 / 142	292 / 704 / 115	277 / 707 / 27	251 / 881 / 23	327 / 586 / 61	299 / 739 / 51	298 / 589 / 135	286 / 719 / 109							
	3	244 / 807 / 24	209 / 975 / 20	272 / 740 / 51	232 / 889 / 40	226 / 781 / 106	217 / 958 / 86	236 / 845 / 24	206 / 1012 / 19	256 / 755 / 48	229 / 927 / 39	218 / 793 / 99	217 / 998 / 83							
	35	1	375 / 589 / 36	324 / 725 / 29	465 / 471 / 86	402 / 585 / 70	368 / 512 / 181	349 / 634 / 147	357 / 609 / 34	312 / 740 / 27	447 / 492 / 83	393 / 605 / 67	362 / 533 / 173	343 / 652 / 139						
		2	322 / 690 / 31	276 / 843 / 25	377 / 567 / 70	327 / 702 / 57	330 / 569 / 162	314 / 704 / 132	304 / 707 / 29	273 / 881 / 24	360 / 586 / 67	326 / 739 / 56	323 / 589 / 154	306 / 719 / 124						
		3	268 / 807 / 26	229 / 975 / 21	298 / 740 / 56	253 / 889 / 44	246 / 781 / 121	233 / 958 / 98	259 / 845 / 25	225 / 1012 / 20	281 / 755 / 52	249 / 927 / 43	237 / 793 / 113	232 / 998 / 94						
	40	1	409 / 589 / 37	351 / 725 / 30	506 / 471 / 94	436 / 585 / 76	397 / 512 / 203	373 / 634 / 165	390 / 609 / 36	338 / 740 / 29	487 / 492 / 90	425 / 605 / 73	390 / 533 / 195	366 / 652 / 157						
2		351 / 690 / 32	300 / 843 / 26	411 / 567 / 76	355 / 702 / 62	356 / 569 / 182	335 / 704 / 148	331 / 707 / 30	296 / 881 / 25	392 / 586 / 73	353 / 739 / 60	348 / 589 / 174	326 / 719 / 140							
3		292 / 807 / 27	248 / 975 / 22	325 / 740 / 60	274 / 889 / 48	265 / 781 / 136	249 / 958 / 110	283 / 845 / 26	243 / 1012 / 21	306 / 755 / 57	270 / 927 / 46	255 / 793 / 127	247 / 998 / 106							
30	Wind Speed [mph]																			
	120						130													
	1	317 / 642 / 31	285 / 774 / 25	391 / 512 / 73	353 / 623 / 58	330 / 551 / 145	324 / 685 / 119	325 / 609 / 32	287 / 740 / 26	407 / 492 / 76	361 / 605 / 61	335 / 533 / 152	321 / 652 / 122							
	2	268 / 741 / 27	248 / 917 / 22	319 / 618 / 60	290 / 751 / 48	300 / 621 / 132	288 / 753 / 106	277 / 707 / 27	251 / 881 / 23	327 / 586 / 61	299 / 739 / 51	298 / 589 / 135	286 / 719 / 109							
	3	228 / 881 / 23	212 / 1092 / 19	248 / 790 / 46	226 / 962 / 38	217 / 828 / 96	216 / 1034 / 79	236 / 845 / 24	206 / 1012 / 19	256 / 755 / 48	229 / 927 / 39	218 / 793 / 99	217 / 998 / 83							
	35	1	349 / 642 / 33	310 / 774 / 26	430 / 512 / 80	384 / 623 / 64	356 / 551 / 166	346 / 685 / 136	357 / 609 / 34	312 / 740 / 27	447 / 492 / 83	393 / 605 / 67	362 / 533 / 173	343 / 652 / 139						
		2	295 / 741 / 28	270 / 917 / 23	351 / 618 / 65	315 / 751 / 52	324 / 621 / 151	307 / 753 / 121	304 / 707 / 29	273 / 881 / 24	360 / 586 / 67	326 / 739 / 56	323 / 589 / 154	306 / 719 / 124						
		3	250 / 881 / 24	230 / 1092 / 20	272 / 790 / 51	246 / 962 / 41	235 / 828 / 109	231 / 1034 / 91	259 / 845 / 25	225 / 1012 / 20	281 / 755 / 52	249 / 927 / 43	237 / 793 / 113	232 / 998 / 94						
	40	1	380 / 642 / 35	335 / 774 / 28	468 / 512 / 87	414 / 623 / 69	383 / 551 / 186	368 / 685 / 152	390 / 609 / 36	338 / 740 / 29	487 / 492 / 90	425 / 605 / 73	390 / 533 / 195	366 / 652 / 157						
2		322 / 741 / 29	292 / 917 / 24	382 / 618 / 71	340 / 751 / 57	348 / 621 / 169	327 / 753 / 136	331 / 707 / 30	296 / 881 / 25	392 / 586 / 73	353 / 739 / 60	348 / 589 / 174	326 / 719 / 140							
3		273 / 881 / 25	249 / 1092 / 21	296 / 790 / 55	266 / 962 / 44	253 / 828 / 123	245 / 1034 / 102	283 / 845 / 26	243 / 1012 / 21	306 / 755 / 57	270 / 927 / 46	255 / 793 / 127	247 / 998 / 106							

ASCE Group Zone

Panel Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]																																		
	140						150						160																						
	0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30																		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																										
30	1	305 / 656 / 30	284 / 807 / 24	380 / 530 / 70	354 / 654 / 57	332 / 581 / 142	327 / 718 / 115	301 / 716 / 28	280 / 867 / 23	363 / 561 / 64	345 / 694 / 52	328 / 623 / 132	322 / 756 / 106	288 / 747 / 26	275 / 918 / 21	362 / 611 / 61	344 / 747 / 49	322 / 658 / 122	325 / 808 / 99																
	2	264 / 774 / 26	246 / 951 / 21	308 / 633 / 57	289 / 784 / 46	293 / 636 / 125	289 / 786 / 102	258 / 836 / 24	240 / 1010 / 20	304 / 692 / 54	286 / 844 / 43	295 / 694 / 119	292 / 846 / 96	252 / 890 / 23	233 / 1055 / 18	292 / 724 / 49	281 / 896 / 40	287 / 726 / 109	292 / 898 / 89																
	3	223 / 915 / 22	208 / 1125 / 18	243 / 823 / 45	224 / 995 / 36	216 / 861 / 92	215 / 1066 / 76	215 / 975 / 20	200 / 1175 / 16	237 / 884 / 42	217 / 1048 / 33	213 / 919 / 86	211 / 1119 / 69	207 / 1022 / 19	201 / 1272 / 16	230 / 936 / 39	219 / 1140 / 32	209 / 967 / 79	217 / 1214 / 66																
	35	1	335 / 656 / 31	308 / 807 / 26	417 / 530 / 77	383 / 654 / 62	358 / 581 / 162	348 / 718 / 132	329 / 716 / 30	302 / 867 / 24	397 / 561 / 70	372 / 694 / 57	352 / 623 / 151	341 / 756 / 121	313 / 747 / 27	296 / 918 / 22	394 / 611 / 67	370 / 747 / 54	345 / 658 / 139	343 / 808 / 113															
		2	290 / 774 / 27	267 / 951 / 22	337 / 633 / 62	313 / 784 / 51	316 / 636 / 143	308 / 786 / 117	282 / 836 / 26	259 / 1010 / 21	333 / 692 / 59	308 / 844 / 47	317 / 694 / 136	309 / 846 / 109	274 / 890 / 24	250 / 1055 / 19	318 / 724 / 54	303 / 896 / 44	307 / 726 / 124	309 / 898 / 102															
		3	244 / 915 / 23	226 / 1125 / 19	266 / 823 / 49	242 / 995 / 39	233 / 861 / 106	229 / 1066 / 87	235 / 975 / 21	216 / 1175 / 17	259 / 884 / 46	234 / 1048 / 36	229 / 919 / 98	224 / 1119 / 79	225 / 1022 / 20	216 / 1272 / 16	250 / 936 / 43	235 / 1140 / 34	224 / 967 / 91	229 / 1214 / 76															
	40	1	365 / 656 / 33	332 / 807 / 27	454 / 530 / 83	413 / 654 / 67	384 / 581 / 182	369 / 718 / 148	358 / 716 / 31	325 / 867 / 25	431 / 561 / 76	400 / 694 / 62	376 / 623 / 169	361 / 756 / 136	339 / 747 / 29	317 / 918 / 23	427 / 611 / 73	396 / 747 / 58	367 / 658 / 157	361 / 808 / 127															
		2	315 / 774 / 29	288 / 951 / 23	367 / 633 / 67	337 / 784 / 55	339 / 636 / 161	327 / 786 / 131	307 / 836 / 27	279 / 1010 / 22	361 / 692 / 64	331 / 844 / 51	339 / 694 / 152	327 / 846 / 123	297 / 890 / 25	268 / 1055 / 20	343 / 724 / 58	324 / 896 / 48	328 / 726 / 140	325 / 898 / 114															
		3	266 / 915 / 24	244 / 1125 / 20	290 / 823 / 53	261 / 995 / 43	250 / 861 / 119	243 / 1066 / 98	256 / 975 / 22	232 / 1175 / 18	281 / 884 / 50	251 / 1048 / 39	245 / 919 / 110	237 / 1119 / 89	244 / 1022 / 21	232 / 1272 / 17	271 / 936 / 46	252 / 1140 / 37	238 / 967 / 102	241 / 1214 / 85															
30	Wind Speed [mph]																																		
	170						180																												
	1	282 / 793 / 24	280 / 998 / 20	351 / 642 / 57	342 / 795 / 46	324 / 705 / 115	326 / 853 / 92	285 / 861 / 24	272 / 1031 / 19	348 / 685 / 54	339 / 836 / 43	324 / 748 / 109	338 / 924 / 89	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panel Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 3</td> <td>1 = 1' / 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">3 - 10</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2' / 2</td> </tr> <tr> <td>3 = 3' / 3</td> </tr> <tr> <td rowspan="3">10 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>						ASCE Group Zone		Panel Angle	Mono Slope	0 - 3	1 = 1' / 1	2 = 2	3 = 3	3 - 10	1 = 1	2 = 2' / 2	3 = 3' / 3	10 - 30	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																		
	Panel Angle	Mono Slope																																	
	0 - 3	1 = 1' / 1																																	
		2 = 2																																	
		3 = 3																																	
	3 - 10	1 = 1																																	
2 = 2' / 2																																			
3 = 3' / 3																																			
10 - 30	1 = 1																																		
	2 = 2																																		
	3 = 3																																		
2	244 / 935 / 21	235 / 1139 / 17	287 / 770 / 46	276 / 939 / 38	287 / 772 / 102	291 / 941 / 83	236 / 969 / 20	237 / 1217 / 16	290 / 838 / 45	280 / 1012 / 36	285 / 812 / 96	300 / 1014 / 79																							
3	207 / 1105 / 18	201 / 1362 / 15	222 / 977 / 36	221 / 1227 / 30	213 / 1048 / 76	221 / 1303 / 63	207 / 1184 / 17	201 / 1443 / 14	223 / 1052 / 35	222 / 1309 / 29	216 / 1125 / 73	225 / 1385 / 60																							
35	1	306 / 793 / 26	300 / 998 / 21	381 / 642 / 62	366 / 795 / 51	345 / 705 / 132	343 / 853 / 106	308 / 861 / 25	291 / 1031 / 20	377 / 685 / 59	362 / 836 / 47	344 / 748 / 124							354 / 924 / 102																
	2	265 / 935 / 22	252 / 1139 / 18	311 / 770 / 51	296 / 939 / 41	306 / 772 / 117	306 / 941 / 94	255 / 969 / 21	253 / 1217 / 17	314 / 838 / 49	299 / 1012 / 39	303 / 812 / 109							315 / 1014 / 91																
	3	225 / 1105 / 19	216 / 1362 / 16	241 / 977 / 39	237 / 1227 / 33	227 / 1048 / 87	233 / 1303 / 72	223 / 1184 / 18	215 / 1443 / 15	241 / 1052 / 38	237 / 1309 / 31	230 / 1125 / 83							236 / 1385 / 68																
40	1	330 / 793 / 27	320 / 998 / 22	411 / 642 / 67	391 / 795 / 55	366 / 705 / 148	360 / 853 / 119	332 / 861 / 26	309 / 1031 / 21	405 / 685 / 64	384 / 836 / 51	364 / 748 / 140							370 / 924 / 114																
	2	286 / 935 / 23	269 / 1139 / 19	335 / 770 / 55	315 / 939 / 44	325 / 772 / 131	321 / 941 / 106	275 / 969 / 22	269 / 1217 / 18	337 / 838 / 53	318 / 1012 / 43	320 / 812 / 123							329 / 1014 / 102																
	3	242 / 1105 / 20	230 / 1362 / 16	260 / 977 / 43	252 / 1227 / 36	241 / 1048 / 98	244 / 1303 / 81	240 / 1184 / 19	229 / 1443 / 15	259 / 1052 / 41	252 / 1309 / 34	243 / 1125 / 93							247 / 1385 / 76																
30	Wind Speed [mph]																																		
	190						200																												
	1	278 / 895 / 22	275 / 1100 / 18	345 / 723 / 51	334 / 869 / 40	324 / 784 / 102	336 / 955 / 83	280 / 957 / 21	278 / 1165 / 17	340 / 756 / 48	340 / 928 / 39	321 / 814 / 96	345 / 1017 / 79																						
	2	237 / 1036 / 19	238 / 1289 / 16	284 / 873 / 42	285 / 1082 / 35	292 / 875 / 92	309 / 1084 / 76	237 / 1100 / 18	238 / 1355 / 15	276 / 900 / 39	275 / 1096 / 32	288 / 902 / 86	302 / 1097 / 69																						
	3	196 / 1195 / 16	200 / 1514 / 13	223 / 1122 / 33	223 / 1382 / 27	209 / 1141 / 66	228 / 1458 / 56	194 / 1256 / 15		223 / 1188 / 32	223 / 1448 / 26	211 / 1202 / 63	230 / 1522 / 53																						
	35	1	300 / 895 / 23	293 / 1100 / 19	371 / 723 / 56	355 / 869 / 44	343 / 784 / 117	351 / 955 / 94	301 / 957 / 22	295 / 1165 / 18	365 / 756 / 52	361 / 928 / 43	339 / 814 / 109							360 / 1017 / 91															
		2	255 / 1036 / 20	253 / 1289 / 16	306 / 873 / 46	303 / 1082 / 38	309 / 875 / 106	323 / 1084 / 87	255 / 1100 / 19	253 / 1355 / 16	297 / 900 / 43	292 / 1096 / 34	304 / 902 / 98							315 / 1097 / 79															
		3	211 / 1195 / 16	213 / 1514 / 14	240 / 1122 / 36	237 / 1382 / 30	221 / 1141 / 76	239 / 1458 / 64	209 / 1256 / 16		240 / 1188 / 34	236 / 1448 / 28	222 / 1202 / 72							240 / 1522 / 61															
	40	1	321 / 895 / 24	311 / 1100 / 20	398 / 723 / 60	376 / 869 / 48	361 / 784 / 131	366 / 955 / 106	322 / 957 / 23	312 / 1165 / 19	390 / 756 / 57	381 / 928 / 46	357 / 814 / 123							374 / 1017 / 102															
2		274 / 1036 / 21	269 / 1289 / 17	328 / 873 / 50	321 / 1082 / 41	326 / 875 / 119	337 / 1084 / 98	272 / 1100 / 20	268 / 1355 / 16	317 / 900 / 46	308 / 1096 / 37	320 / 902 / 110	328 / 1097 / 89																						
3		226 / 1195 / 17	226 / 1514 / 15	258 / 1122 / 39	251 / 1382 / 32	233 / 1141 / 85	249 / 1458 / 72	223 / 1256 / 16		256 / 1188 / 37	249 / 1448 / 30	234 / 1202 / 81	250 / 1522 / 68																						

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
Ground Snow	45	1	512 / 515 / 97	416 / 639 / 79	602 / 392 / 166	509 / 510 / 140	474 / 448 / 265	409 / 549 / 212	490 / 542 / 93	396 / 665 / 75	602 / 431 / 166	482 / 526 / 132	457 / 475 / 255	402 / 574 / 202	469 / 567 / 89	382 / 686 / 71	571 / 448 / 157	471 / 550 / 126	434 / 490 / 241	405 / 612 / 197
		2	437 / 604 / 83	352 / 738 / 67	509 / 494 / 140	415 / 616 / 115	422 / 497 / 236	372 / 619 / 193	416 / 630 / 79	342 / 784 / 65	488 / 520 / 135	398 / 641 / 109	405 / 523 / 226	364 / 644 / 183	394 / 652 / 75	327 / 802 / 61	467 / 544 / 129	385 / 663 / 103	391 / 548 / 217	355 / 666 / 173
		3	363 / 704 / 69	299 / 878 / 57	395 / 636 / 109	322 / 786 / 89	310 / 676 / 173	270 / 824 / 140	352 / 749 / 67	289 / 926 / 55	384 / 678 / 106	314 / 833 / 86	293 / 700 / 164	268 / 871 / 135	331 / 767 / 63	273 / 935 / 51	363 / 700 / 100	300 / 848 / 80	287 / 741 / 159	267 / 916 / 130
	50	1	563 / 515 / 104	458 / 639 / 85	640 / 378 / 174	560 / 510 / 152	507 / 448 / 288	436 / 549 / 231	540 / 542 / 100	434 / 665 / 81	640 / 416 / 174	526 / 526 / 143	489 / 475 / 278	428 / 574 / 220	516 / 567 / 96	411 / 686 / 76	628 / 448 / 171	505 / 550 / 137	464 / 490 / 262	430 / 612 / 215
		2	481 / 604 / 89	387 / 738 / 72	560 / 494 / 152	457 / 616 / 124	452 / 497 / 257	396 / 619 / 210	458 / 630 / 85	376 / 784 / 70	537 / 520 / 146	434 / 641 / 118	434 / 523 / 247	387 / 644 / 199	434 / 652 / 81	352 / 802 / 65	514 / 544 / 140	413 / 663 / 112	418 / 548 / 236	377 / 666 / 189
		3	399 / 704 / 74	329 / 878 / 61	434 / 636 / 118	354 / 786 / 97	332 / 676 / 189	287 / 824 / 152	387 / 749 / 72	317 / 926 / 59	423 / 678 / 115	343 / 833 / 93	314 / 700 / 178	285 / 871 / 147	364 / 767 / 68	294 / 935 / 55	400 / 700 / 109	322 / 848 / 87	307 / 741 / 173	283 / 916 / 142
	60	1	667 / 515 / 118	542 / 639 / 96	716 / 358 / 191	662 / 510 / 176	581 / 448 / 336	489 / 549 / 269	639 / 542 / 113	514 / 665 / 91	716 / 394 / 191	622 / 526 / 166	559 / 475 / 324	479 / 574 / 257	611 / 567 / 109	486 / 686 / 86	716 / 431 / 191	595 / 550 / 158	528 / 490 / 305	479 / 612 / 251
		2	569 / 604 / 101	458 / 738 / 82	662 / 494 / 176	541 / 616 / 144	517 / 497 / 299	445 / 619 / 244	542 / 630 / 96	445 / 784 / 79	635 / 520 / 169	514 / 641 / 137	496 / 523 / 287	433 / 644 / 232	514 / 652 / 91	417 / 802 / 74	608 / 544 / 162	487 / 663 / 130	475 / 548 / 275	421 / 666 / 220
		3	472 / 704 / 84	389 / 878 / 69	514 / 636 / 137	419 / 786 / 112	380 / 676 / 220	323 / 824 / 177	458 / 749 / 82	375 / 926 / 67	500 / 678 / 133	406 / 833 / 108	359 / 700 / 208	319 / 871 / 171	431 / 767 / 77	347 / 935 / 62	473 / 700 / 126	379 / 848 / 101	349 / 741 / 202	316 / 916 / 165
ASCE Group Zone	Wind Speed [mph]		110						115											
	45	1	448 / 589 / 85	379 / 725 / 69	550 / 471 / 152	470 / 585 / 123	426 / 512 / 231	397 / 634 / 188	426 / 609 / 81	364 / 740 / 65	529 / 492 / 146	458 / 605 / 118	418 / 533 / 221	388 / 652 / 178						
		2	384 / 690 / 73	323 / 843 / 59	446 / 567 / 123	382 / 702 / 100	382 / 569 / 207	356 / 704 / 169	363 / 707 / 69	319 / 881 / 57	426 / 586 / 118	379 / 739 / 98	373 / 589 / 197	346 / 719 / 159						
		3	320 / 807 / 61	267 / 975 / 49	353 / 740 / 98	295 / 889 / 78	284 / 781 / 154	265 / 958 / 125	309 / 845 / 59	262 / 1012 / 47	332 / 755 / 92	290 / 927 / 75	273 / 793 / 145	262 / 998 / 121						
	50	1	493 / 589 / 91	406 / 725 / 74	606 / 471 / 165	503 / 585 / 134	456 / 512 / 252	420 / 634 / 205	469 / 609 / 87	390 / 740 / 70	583 / 492 / 159	490 / 605 / 128	446 / 533 / 241	411 / 652 / 194						
		2	423 / 690 / 78	346 / 843 / 63	491 / 567 / 134	410 / 702 / 109	408 / 569 / 226	377 / 704 / 184	399 / 707 / 74	341 / 881 / 61	469 / 586 / 128	406 / 739 / 106	398 / 589 / 215	366 / 719 / 173						
		3	352 / 807 / 65	287 / 975 / 52	389 / 740 / 106	316 / 889 / 84	304 / 781 / 168	280 / 958 / 137	341 / 845 / 63	280 / 1012 / 50	366 / 755 / 100	311 / 927 / 81	291 / 793 / 158	278 / 998 / 131						
	60	1	583 / 589 / 104	472 / 725 / 84	716 / 471 / 191	581 / 585 / 155	514 / 512 / 293	468 / 634 / 238	556 / 609 / 99	445 / 740 / 79	689 / 492 / 184	554 / 605 / 148	502 / 533 / 281	455 / 652 / 226						
		2	500 / 690 / 89	403 / 843 / 72	581 / 567 / 155	473 / 702 / 126	460 / 569 / 263	420 / 704 / 214	472 / 707 / 84	389 / 881 / 69	554 / 586 / 148	460 / 739 / 123	448 / 589 / 251	406 / 719 / 202						
3		417 / 807 / 74	334 / 975 / 59	460 / 740 / 123	365 / 889 / 97	343 / 781 / 196	312 / 958 / 159	403 / 845 / 72	320 / 1012 / 57	433 / 755 / 115	352 / 927 / 94	328 / 793 / 183	308 / 998 / 153							
ASCE Group Zone	Wind Speed [mph]		120						130											
	45	1	416 / 642 / 79	360 / 774 / 63	509 / 512 / 140	445 / 623 / 112	410 / 551 / 212	389 / 685 / 173	426 / 609 / 81	364 / 740 / 65	529 / 492 / 146	458 / 605 / 118	418 / 533 / 221	388 / 652 / 178						
		2	352 / 741 / 67	314 / 917 / 55	415 / 618 / 115	365 / 751 / 92	373 / 621 / 193	346 / 753 / 154	363 / 707 / 69	319 / 881 / 57	426 / 586 / 118	379 / 739 / 98	373 / 589 / 197	346 / 719 / 159						
		3	299 / 881 / 57	267 / 1092 / 47	322 / 790 / 89	285 / 962 / 72	270 / 828 / 140	260 / 1034 / 116	309 / 845 / 59	262 / 1012 / 47	332 / 755 / 92	290 / 927 / 75	273 / 793 / 145	262 / 998 / 121						
	50	1	458 / 642 / 85	385 / 774 / 68	560 / 512 / 152	475 / 623 / 121	436 / 551 / 231	411 / 685 / 189	469 / 609 / 87	390 / 740 / 70	583 / 492 / 159	490 / 605 / 128	446 / 533 / 241	411 / 652 / 194						
		2	387 / 741 / 72	336 / 917 / 59	457 / 618 / 124	390 / 751 / 100	397 / 621 / 210	366 / 753 / 168	399 / 707 / 74	341 / 881 / 61	469 / 586 / 128	406 / 739 / 106	398 / 589 / 215	366 / 719 / 173						
		3	329 / 881 / 61	286 / 1092 / 50	354 / 790 / 97	305 / 962 / 78	288 / 828 / 152	274 / 1034 / 126	341 / 845 / 63	280 / 1012 / 50	366 / 755 / 100	311 / 927 / 81	291 / 793 / 158	278 / 998 / 131						
	60	1	542 / 642 / 96	435 / 774 / 77	662 / 512 / 176	537 / 623 / 140	490 / 551 / 269	455 / 685 / 220	556 / 609 / 99	445 / 740 / 79	689 / 492 / 184	554 / 605 / 148	502 / 533 / 281	455 / 652 / 226						
		2	458 / 741 / 82	379 / 917 / 67	541 / 618 / 144	440 / 751 / 115	445 / 621 / 244	404 / 753 / 196	472 / 707 / 84	389 / 881 / 69	554 / 586 / 148	460 / 739 / 123	448 / 589 / 251	406 / 719 / 202						
3		389 / 881 / 69	323 / 1092 / 57	419 / 790 / 112	344 / 962 / 90	323 / 828 / 177	303 / 1034 / 147	403 / 845 / 72	320 / 1012 / 57	433 / 755 / 115	352 / 927 / 94	328 / 793 / 183	308 / 998 / 153							

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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						92.5in x 45.9in						Load: Up / Down / Side , lbs						
Wind Speed [mph]		140						150						160						
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	45	1	395 / 656 / 75	356 / 807 / 61	491 / 530 / 135	443 / 654 / 109	410 / 581 / 207	390 / 718 / 169	386 / 716 / 71	348 / 867 / 57	465 / 561 / 123	427 / 694 / 100	401 / 623 / 193	380 / 756 / 154	365 / 747 / 65	338 / 918 / 53	459 / 611 / 118	422 / 747 / 95	390 / 658 / 178	379 / 808 / 145
2		341 / 774 / 65	309 / 951 / 53	397 / 633 / 109	362 / 784 / 89	363 / 636 / 183	346 / 786 / 149	331 / 836 / 61	298 / 1010 / 49	389 / 692 / 103	354 / 844 / 83	361 / 694 / 173	344 / 846 / 140	319 / 890 / 57	286 / 1055 / 45	369 / 724 / 95	345 / 896 / 78	348 / 726 / 159	341 / 898 / 130	
3		288 / 915 / 55	261 / 1125 / 45	314 / 823 / 86	280 / 995 / 69	267 / 861 / 135	257 / 1066 / 111	276 / 975 / 51	248 / 1175 / 41	303 / 884 / 80	269 / 1048 / 63	261 / 919 / 125	250 / 1119 / 101	262 / 1022 / 47	247 / 1272 / 39	291 / 936 / 75	268 / 1140 / 60	253 / 967 / 116	253 / 1214 / 97	
50		1	434 / 656 / 81	381 / 807 / 65	537 / 530 / 146	473 / 654 / 118	436 / 581 / 226	412 / 718 / 184	414 / 716 / 76	370 / 867 / 61	498 / 561 / 134	454 / 694 / 109	425 / 623 / 210	399 / 756 / 168	391 / 747 / 70	359 / 918 / 57	491 / 611 / 128	447 / 747 / 103	412 / 658 / 194	397 / 808 / 158
		2	376 / 774 / 70	330 / 951 / 57	434 / 633 / 118	386 / 784 / 97	386 / 636 / 199	365 / 786 / 163	355 / 836 / 65	317 / 1010 / 52	417 / 692 / 112	377 / 844 / 90	383 / 694 / 189	362 / 846 / 152	342 / 890 / 61	304 / 1055 / 48	395 / 724 / 103	366 / 896 / 84	368 / 726 / 173	358 / 898 / 142
		3	317 / 915 / 59	279 / 1125 / 48	343 / 823 / 93	299 / 995 / 75	284 / 861 / 147	271 / 1066 / 121	296 / 975 / 55	265 / 1175 / 44	325 / 884 / 87	286 / 1048 / 69	276 / 919 / 137	262 / 1119 / 110	281 / 1022 / 50	262 / 1272 / 42	312 / 936 / 81	285 / 1140 / 66	267 / 967 / 126	265 / 1214 / 105
60		1	514 / 656 / 91	429 / 807 / 74	635 / 530 / 169	533 / 654 / 137	489 / 581 / 263	454 / 718 / 214	486 / 716 / 86	415 / 867 / 69	581 / 561 / 155	509 / 694 / 126	474 / 623 / 244	438 / 756 / 196	445 / 747 / 79	401 / 918 / 64	555 / 611 / 148	499 / 747 / 119	457 / 658 / 226	434 / 808 / 183
		2	445 / 774 / 79	372 / 951 / 64	514 / 633 / 137	435 / 784 / 112	432 / 636 / 232	402 / 786 / 190	417 / 836 / 74	356 / 1010 / 59	487 / 692 / 130	422 / 844 / 105	426 / 694 / 220	397 / 846 / 177	389 / 890 / 69	339 / 1055 / 55	447 / 724 / 119	409 / 896 / 97	408 / 726 / 202	391 / 898 / 165
		3	375 / 915 / 67	315 / 1125 / 55	406 / 823 / 108	337 / 995 / 87	318 / 861 / 171	299 / 1066 / 141	347 / 975 / 62	297 / 1175 / 50	379 / 884 / 101	320 / 1048 / 79	308 / 919 / 159	288 / 1119 / 129	320 / 1022 / 57	293 / 1272 / 47	352 / 936 / 94	318 / 1140 / 76	297 / 967 / 147	289 / 1214 / 122
Wind Speed [mph]		170						180												
45	1	354 / 793 / 61	340 / 998 / 51	441 / 642 / 109	415 / 795 / 89	388 / 705 / 169	377 / 853 / 135	355 / 861 / 59	328 / 1031 / 47	433 / 685 / 103	407 / 836 / 83	385 / 748 / 159	387 / 924 / 130							
	2	307 / 935 / 53	286 / 1139 / 43	360 / 770 / 89	335 / 939 / 72	343 / 772 / 149	337 / 941 / 121	294 / 969 / 49	285 / 1217 / 41	361 / 838 / 86	337 / 1012 / 69	338 / 812 / 140	344 / 1014 / 116							
	3	260 / 1105 / 45	245 / 1362 / 37	279 / 977 / 69	268 / 1227 / 58	255 / 1048 / 111	256 / 1303 / 92	257 / 1184 / 43	242 / 1443 / 35	277 / 1052 / 66	267 / 1309 / 55	257 / 1125 / 106	258 / 1385 / 87							
	50	1	379 / 793 / 65	360 / 998 / 55	471 / 642 / 118	439 / 795 / 97	409 / 705 / 184	394 / 853 / 147	379 / 861 / 63	346 / 1031 / 50	461 / 685 / 112	430 / 836 / 90	405 / 748 / 173	403 / 924 / 142						
		2	328 / 935 / 57	303 / 1139 / 46	384 / 770 / 97	354 / 939 / 78	362 / 772 / 163	352 / 941 / 131	313 / 969 / 52	301 / 1217 / 44	385 / 838 / 93	356 / 1012 / 75	356 / 812 / 152	358 / 1014 / 126						
		3	278 / 1105 / 48	260 / 1362 / 39	297 / 977 / 75	284 / 1227 / 62	269 / 1048 / 121	267 / 1303 / 100	274 / 1184 / 46	256 / 1443 / 37	295 / 1052 / 72	282 / 1309 / 59	270 / 1125 / 116	269 / 1385 / 95						
	60	1	427 / 793 / 74	401 / 998 / 62	530 / 642 / 137	488 / 795 / 112	451 / 705 / 214	428 / 853 / 171	425 / 861 / 72	384 / 1031 / 57	518 / 685 / 130	475 / 836 / 105	445 / 748 / 202	436 / 924 / 165						
		2	370 / 935 / 64	337 / 1139 / 52	433 / 770 / 112	394 / 939 / 90	400 / 772 / 190	382 / 941 / 153	352 / 969 / 59	334 / 1217 / 50	432 / 838 / 108	394 / 1012 / 87	391 / 812 / 177	388 / 1014 / 147						
		3	313 / 1105 / 55	289 / 1362 / 45	335 / 977 / 87	315 / 1227 / 72	297 / 1048 / 141	290 / 1303 / 116	308 / 1184 / 52	284 / 1443 / 42	331 / 1052 / 83	312 / 1309 / 69	297 / 1125 / 135	291 / 1385 / 110						
Wind Speed [mph]		190						200												
45	1	343 / 895 / 55	329 / 1100 / 45	425 / 723 / 98	398 / 869 / 78	380 / 784 / 149	381 / 955 / 121	343 / 957 / 53	329 / 1165 / 43	415 / 756 / 92	402 / 928 / 75	374 / 814 / 140	389 / 1017 / 116							
	2	292 / 1036 / 47	284 / 1289 / 39	350 / 873 / 80	339 / 1082 / 66	343 / 875 / 135	351 / 1084 / 111	290 / 1100 / 45	282 / 1355 / 37	337 / 900 / 75	325 / 1096 / 60	336 / 902 / 125	340 / 1097 / 101							
	3	242 / 1195 / 39	239 / 1514 / 33	275 / 1122 / 63	265 / 1382 / 52	245 / 1141 / 97	259 / 1458 / 82	238 / 1256 / 37		273 / 1188 / 60	263 / 1448 / 49	245 / 1202 / 92	259 / 1522 / 77							
	50	1	365 / 895 / 59	346 / 1100 / 48	451 / 723 / 106	419 / 869 / 84	399 / 784 / 163	396 / 955 / 131	364 / 957 / 57	346 / 1165 / 46	440 / 756 / 100	422 / 928 / 81	392 / 814 / 152	404 / 1017 / 126						
		2	311 / 1036 / 50	299 / 1289 / 42	372 / 873 / 87	357 / 1082 / 72	360 / 875 / 147	365 / 1084 / 121	308 / 1100 / 48	297 / 1355 / 39	358 / 900 / 81	341 / 1096 / 66	351 / 902 / 137	353 / 1097 / 110						
		3	257 / 1195 / 42	252 / 1514 / 35	292 / 1122 / 69	279 / 1382 / 56	258 / 1141 / 105	270 / 1458 / 89	252 / 1256 / 39		289 / 1188 / 66	276 / 1448 / 53	257 / 1202 / 100	269 / 1522 / 84						
	60	1	408 / 895 / 67	382 / 1100 / 55	505 / 723 / 123	461 / 869 / 97	437 / 784 / 190	427 / 955 / 153	406 / 957 / 64	380 / 1165 / 52	490 / 756 / 115	463 / 928 / 94	427 / 814 / 177	433 / 1017 / 147						
		2	348 / 1036 / 57	330 / 1289 / 47	416 / 873 / 101	393 / 1082 / 83	394 / 875 / 171	392 / 1084 / 141	344 / 1100 / 55	326 / 1355 / 45	399 / 900 / 94	374 / 1096 / 76	383 / 902 / 159	379 / 1097 / 129						
		3	288 / 1195 / 47	278 / 1514 / 40	327 / 1122 / 79	308 / 1382 / 65	282 / 1141 / 122	290 / 1458 / 104	281 / 1256 / 45		322 / 1188 / 76	303 / 1448 / 62	280 / 1202 / 116	289 / 1522 / 98						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs													
Wind Speed [mph]		95				100				105									
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	1	770 / 515 / 132	626 / 639 / 108	781 / 338 / 204	765 / 510 / 200	670 / 448 / 387	543 / 549 / 310	738 / 542 / 127	594 / 665 / 102	781 / 372 / 204	718 / 526 / 188	645 / 475 / 373	530 / 574 / 296	706 / 567 / 121	562 / 686 / 97	781 / 407 / 204	687 / 550 / 180	609 / 490 / 352	529 / 612 / 288
Wind Speed [mph]		110				115													
Exposure Category : D	70	1	674 / 589 / 116	545 / 725 / 94	781 / 444 / 204	671 / 585 / 176	584 / 512 / 338	515 / 634 / 274	642 / 609 / 110	513 / 740 / 88	781 / 483 / 204	640 / 605 / 168	560 / 533 / 324	500 / 652 / 260					
	2	578 / 690 / 99	465 / 843 / 80	671 / 567 / 176	547 / 702 / 143	524 / 569 / 303	462 / 704 / 246	545 / 707 / 94	449 / 881 / 77	640 / 586 / 168	531 / 739 / 139	499 / 589 / 288	446 / 719 / 232						
ASCE Group Zone			Panal Angle		Mono Slope														
			0 - 3		1 = 1' / 1														
		2 = 2																	
		3 = 3																	
		3 - 10		1 = 1															
		2 = 2' / 2																	
		3 = 3' / 3																	
		10 - 30		1 = 1															
		2 = 2																	
		3 = 3																	
Wind Speed [mph]		120				130													
Exposure Category : D	70	1	626 / 642 / 108	497 / 774 / 86	765 / 512 / 200	609 / 623 / 160	543 / 551 / 310	499 / 685 / 253	642 / 609 / 110	513 / 740 / 88	781 / 483 / 204	640 / 605 / 168	560 / 533 / 324	500 / 652 / 260					
	2	529 / 741 / 91	433 / 917 / 75	625 / 618 / 164	500 / 751 / 131	494 / 621 / 281	443 / 753 / 225	545 / 707 / 94	449 / 881 / 77	640 / 586 / 168	531 / 739 / 139	499 / 589 / 288	446 / 719 / 232						
ASCE Group Zone			Panal Angle		Mono Slope														
			0 - 3		1 = 1' / 1														
		2 = 2																	
		3 = 3																	
		3 - 10		1 = 1															
		2 = 2' / 2																	
		3 = 3' / 3																	
		10 - 30		1 = 1															
		2 = 2																	
		3 = 3																	
Wind Speed [mph]		130				130													
Exposure Category : D	70	1	626 / 642 / 108	497 / 774 / 86	765 / 512 / 200	609 / 623 / 160	543 / 551 / 310	499 / 685 / 253	642 / 609 / 110	513 / 740 / 88	781 / 483 / 204	640 / 605 / 168	560 / 533 / 324	500 / 652 / 260					
	2	529 / 741 / 91	433 / 917 / 75	625 / 618 / 164	500 / 751 / 131	494 / 621 / 281	443 / 753 / 225	545 / 707 / 94	449 / 881 / 77	640 / 586 / 168	531 / 739 / 139	499 / 589 / 288	446 / 719 / 232						
ASCE Group Zone			Panal Angle		Mono Slope														
			0 - 3		1 = 1' / 1														
		2 = 2																	
		3 = 3																	
		3 - 10		1 = 1															
		2 = 2' / 2																	
		3 = 3' / 3																	
		10 - 30		1 = 1															
		2 = 2																	
		3 = 3																	
Wind Speed [mph]		140				140													
Exposure Category : D	70	1	626 / 642 / 108	497 / 774 / 86	765 / 512 / 200	609 / 623 / 160	543 / 551 / 310	499 / 685 / 253	642 / 609 / 110	513 / 740 / 88	781 / 483 / 204	640 / 605 / 168	560 / 533 / 324	500 / 652 / 260					
	2	529 / 741 / 91	433 / 917 / 75	625 / 618 / 164	500 / 751 / 131	494 / 621 / 281	443 / 753 / 225	545 / 707 / 94	449 / 881 / 77	640 / 586 / 168	531 / 739 / 139	499 / 589 / 288	446 / 719 / 232						
ASCE Group Zone			Panal Angle		Mono Slope														
			0 - 3		1 = 1' / 1														
		2 = 2																	
		3 = 3																	
		3 - 10		1 = 1															
		2 = 2' / 2																	
		3 = 3' / 3																	
		10 - 30		1 = 1															
		2 = 2																	
		3 = 3																	

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof		30-60ft						92.5in x 45.9in						Load: Up / Down / Side , lbs					
Wind Speed [mph]		140						150						160					
Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	594 / 656 / 102	481 / 807 / 83	734 / 530 / 192	593 / 654 / 155	541 / 581 / 303	497 / 718 / 246	562 / 716 / 97	461 / 867 / 77	671 / 561 / 176	564 / 694 / 143	522 / 623 / 281	477 / 756 / 225	513 / 747 / 88	443 / 918 / 72	640 / 611 / 168	551 / 747 / 135	502 / 658 / 260
2		513 / 774 / 88	417 / 951 / 72	593 / 633 / 155	484 / 784 / 127	478 / 636 / 267	440 / 786 / 218	481 / 836 / 83	395 / 1010 / 66	562 / 692 / 147	468 / 844 / 119	470 / 694 / 253	432 / 846 / 204	449 / 890 / 77	375 / 1055 / 61	515 / 724 / 135	451 / 896 / 111	448 / 726 / 232	423 / 898 / 190
3		433 / 915 / 75	353 / 1125 / 61	469 / 823 / 123	375 / 995 / 98	352 / 861 / 197	327 / 1066 / 162	401 / 975 / 69	329 / 1175 / 55	437 / 884 / 115	355 / 1048 / 90	340 / 919 / 183	313 / 1119 / 148	369 / 1022 / 64	324 / 1272 / 53	406 / 936 / 107	351 / 1140 / 86	326 / 967 / 169	314 / 1214 / 141
80	1	673 / 656 / 113	546 / 807 / 92	832 / 530 / 215	673 / 654 / 174	593 / 581 / 343	539 / 718 / 279	637 / 716 / 107	510 / 867 / 86	761 / 561 / 197	620 / 694 / 160	571 / 623 / 319	516 / 756 / 255	582 / 747 / 98	485 / 918 / 80	726 / 611 / 188	603 / 747 / 151	547 / 658 / 295	507 / 808 / 239
	2	582 / 774 / 98	473 / 951 / 80	673 / 633 / 174	549 / 784 / 142	524 / 636 / 303	478 / 786 / 247	546 / 836 / 92	437 / 1010 / 73	638 / 692 / 165	514 / 844 / 133	514 / 694 / 287	468 / 846 / 231	510 / 890 / 86	410 / 1055 / 67	584 / 724 / 151	493 / 896 / 124	488 / 726 / 263	456 / 898 / 215
	3	491 / 915 / 83	400 / 1125 / 67	531 / 823 / 138	425 / 995 / 110	386 / 861 / 223	355 / 1066 / 184	455 / 975 / 76	364 / 1175 / 61	496 / 884 / 128	390 / 1048 / 101	371 / 919 / 207	339 / 1119 / 168	419 / 1022 / 70	354 / 1272 / 58	461 / 936 / 119	384 / 1140 / 96	355 / 967 / 192	338 / 1214 / 160
90	1	753 / 656 / 124	611 / 807 / 100	871 / 497 / 223	752 / 654 / 193	663 / 581 / 383	582 / 718 / 312	712 / 716 / 117	570 / 867 / 94	851 / 561 / 218	693 / 694 / 178	619 / 623 / 356	555 / 756 / 285	651 / 747 / 107	529 / 918 / 87	812 / 611 / 208	655 / 747 / 167	592 / 658 / 330	543 / 808 / 267
	2	651 / 774 / 107	529 / 951 / 87	752 / 633 / 193	614 / 784 / 157	586 / 636 / 338	515 / 786 / 276	611 / 836 / 100	489 / 1010 / 80	713 / 692 / 183	574 / 844 / 147	557 / 694 / 321	503 / 846 / 258	570 / 890 / 94	448 / 1055 / 74	654 / 724 / 167	536 / 896 / 137	528 / 726 / 294	489 / 898 / 241
	3	550 / 915 / 90	448 / 1125 / 74	594 / 823 / 152	475 / 995 / 122	432 / 861 / 250	382 / 1066 / 205	509 / 975 / 84	407 / 1175 / 67	555 / 884 / 142	436 / 1048 / 112	403 / 919 / 232	364 / 1119 / 187	468 / 1022 / 77	387 / 1272 / 64	515 / 936 / 132	417 / 1140 / 107	384 / 967 / 214	362 / 1214 / 178
Wind Speed [mph]		170						180											
70	1	481 / 793 / 83	441 / 998 / 69	593 / 642 / 155	537 / 795 / 127	494 / 705 / 246	462 / 853 / 197	472 / 861 / 80	421 / 1031 / 64	574 / 685 / 147	521 / 836 / 119	485 / 748 / 232	469 / 924 / 190						
	2	417 / 935 / 72	371 / 1139 / 58	484 / 770 / 127	433 / 939 / 102	437 / 772 / 218	412 / 941 / 176	391 / 969 / 66	366 / 1217 / 55	479 / 838 / 123	431 / 1012 / 98	426 / 812 / 204	417 / 1014 / 169						
	3	353 / 1105 / 61	318 / 1362 / 50	375 / 977 / 98	346 / 1227 / 82	325 / 1048 / 162	314 / 1303 / 134	342 / 1184 / 58	311 / 1443 / 47	367 / 1052 / 94	341 / 1309 / 78	323 / 1125 / 155	313 / 1385 / 127						
80	1	546 / 793 / 92	481 / 998 / 76	673 / 642 / 174	585 / 795 / 142	536 / 705 / 279	496 / 853 / 223	528 / 861 / 89	458 / 1031 / 70	638 / 685 / 165	566 / 836 / 133	525 / 748 / 263	502 / 924 / 215						
	2	473 / 935 / 80	404 / 1139 / 64	549 / 770 / 142	472 / 939 / 115	475 / 772 / 247	443 / 941 / 199	437 / 969 / 73	398 / 1217 / 61	531 / 838 / 138	469 / 1012 / 110	461 / 812 / 231	446 / 1014 / 192						
	3	400 / 1105 / 67	347 / 1362 / 55	425 / 977 / 110	378 / 1227 / 92	353 / 1048 / 184	337 / 1303 / 152	382 / 1184 / 64	339 / 1443 / 52	407 / 1052 / 106	371 / 1309 / 87	350 / 1125 / 176	335 / 1385 / 144						
90	1	611 / 793 / 100	522 / 998 / 84	752 / 642 / 193	634 / 795 / 157	579 / 705 / 312	530 / 853 / 250	590 / 861 / 97	495 / 1031 / 77	713 / 685 / 183	612 / 836 / 147	565 / 748 / 294	534 / 924 / 241						
	2	529 / 935 / 87	438 / 1139 / 70	614 / 770 / 157	511 / 939 / 127	513 / 772 / 276	473 / 941 / 223	489 / 969 / 80	430 / 1217 / 67	594 / 838 / 152	507 / 1012 / 122	496 / 812 / 258	475 / 1014 / 214						
	3	448 / 1105 / 74	376 / 1362 / 60	475 / 977 / 122	409 / 1227 / 102	381 / 1048 / 205	360 / 1303 / 169	428 / 1184 / 70	366 / 1443 / 57	456 / 1052 / 117	401 / 1309 / 97	377 / 1125 / 196	356 / 1385 / 161						
Wind Speed [mph]		190						200											
70	1	452 / 895 / 75	418 / 1100 / 61	558 / 723 / 139	504 / 869 / 111	474 / 784 / 218	457 / 955 / 176	448 / 957 / 72	414 / 1165 / 58	541 / 756 / 131	504 / 928 / 107	462 / 814 / 204	462 / 1017 / 169						
	2	385 / 1036 / 64	361 / 1289 / 53	460 / 873 / 115	429 / 1082 / 94	428 / 875 / 197	420 / 1084 / 162	379 / 1100 / 61	355 / 1355 / 50	439 / 900 / 107	407 / 1096 / 86	415 / 902 / 183	404 / 1097 / 148						
	3	318 / 1195 / 53	304 / 1514 / 44	361 / 1122 / 90	336 / 1382 / 74	306 / 1141 / 141	311 / 1458 / 120	310 / 1256 / 50		355 / 1188 / 86	330 / 1448 / 70	303 / 1202 / 134	308 / 1522 / 113						
80	1	496 / 895 / 83	453 / 1100 / 67	611 / 723 / 156	546 / 869 / 124	512 / 784 / 247	487 / 955 / 199	490 / 957 / 80	448 / 1165 / 64	591 / 756 / 147	545 / 928 / 119	498 / 814 / 231	491 / 1017 / 192						
	2	422 / 1036 / 70	391 / 1289 / 58	504 / 873 / 128	465 / 1082 / 106	462 / 875 / 223	448 / 1084 / 184	415 / 1100 / 67	384 / 1355 / 55	480 / 900 / 119	440 / 1096 / 96	446 / 902 / 207	430 / 1097 / 168						
	3	349 / 1195 / 58	330 / 1514 / 49	396 / 1122 / 101	364 / 1382 / 83	330 / 1141 / 160	332 / 1458 / 136	339 / 1256 / 55		388 / 1188 / 96	356 / 1448 / 78	326 / 1202 / 152	327 / 1522 / 128						
90	1	550 / 895 / 90	489 / 1100 / 74	673 / 723 / 172	588 / 869 / 137	550 / 784 / 276	518 / 955 / 223	532 / 957 / 87	482 / 1165 / 70	641 / 756 / 162	585 / 928 / 132	533 / 814 / 258	520 / 1017 / 214						
	2	468 / 1036 / 77	422 / 1289 / 64	555 / 873 / 142	501 / 1082 / 117	496 / 875 / 250	476 / 1084 / 205	450 / 1100 / 74	413 / 1355 / 60	521 / 900 / 132	473 / 1096 / 107	478 / 902 / 232	455 / 1097 / 187						
	3	387 / 1195 / 64	355 / 1514 / 54	436 / 1122 / 112	392 / 1382 / 92	355 / 1141 / 178	352 / 1458 / 152	368 / 1256 / 60		421 / 1188 / 107	383 / 1448 / 86	349 / 1202 / 169	347 / 1522 / 143						

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ASCE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Exposure Category : D	Wind Speed [mph]		95						100						105					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	922 / 222 / 149	877 / 639 / 142	920 / 284 / 234	920 / 437 / 234	818 / 391 / 472	749 / 549 / 433	922 / 245 / 149	832 / 665 / 135	920 / 312 / 234	920 / 480 / 234	818 / 430 / 472	715 / 574 / 413	922 / 269 / 149	788 / 686 / 127	920 / 342 / 234	920 / 525 / 234	818 / 470 / 472	698 / 612 / 403	
	2	922 / 604 / 149	743 / 738 / 120	920 / 423 / 234	876 / 616 / 222	818 / 487 / 472	681 / 619 / 394	877 / 630 / 142	720 / 784 / 116	920 / 465 / 234	832 / 641 / 211	801 / 523 / 462	647 / 644 / 374	832 / 652 / 135	675 / 802 / 109	920 / 508 / 234	788 / 663 / 200	766 / 548 / 443	613 / 666 / 354	
	3	765 / 704 / 124	630 / 878 / 102	832 / 636 / 211	679 / 786 / 172	613 / 676 / 354	494 / 824 / 286	743 / 749 / 120	608 / 926 / 98	810 / 678 / 206	657 / 833 / 167	579 / 700 / 335	477 / 871 / 276	698 / 767 / 113	563 / 935 / 91	766 / 700 / 195	613 / 848 / 156	562 / 741 / 325	460 / 916 / 266	
100	1	922 / 294 / 149	765 / 725 / 124	920 / 373 / 234	920 / 571 / 234	818 / 512 / 472	664 / 634 / 384	900 / 609 / 145	720 / 740 / 116	920 / 405 / 234	898 / 605 / 228	784 / 533 / 453	635 / 652 / 364	810 / 690 / 131	653 / 843 / 106	920 / 553 / 234	766 / 702 / 195	732 / 569 / 423	596 / 704 / 344	
	2	810 / 690 / 131	653 / 843 / 106	920 / 553 / 234	766 / 702 / 195	732 / 569 / 423	596 / 704 / 344	765 / 707 / 124	630 / 881 / 102	898 / 586 / 228	744 / 739 / 189	698 / 589 / 403	567 / 719 / 325	675 / 807 / 109	540 / 975 / 87	744 / 740 / 189	591 / 889 / 150	545 / 781 / 315	443 / 958 / 256	
	3	675 / 807 / 109	540 / 975 / 87	744 / 740 / 189	591 / 889 / 150	545 / 781 / 315	443 / 958 / 256	653 / 845 / 106	518 / 1012 / 84	701 / 755 / 178	569 / 927 / 145	511 / 793 / 295	429 / 998 / 246							
100	1	877 / 642 / 142	698 / 774 / 113	920 / 439 / 234	854 / 623 / 217	749 / 551 / 433	630 / 685 / 354	900 / 609 / 145	720 / 740 / 116	920 / 405 / 234	898 / 605 / 228	784 / 533 / 453	635 / 652 / 364	743 / 741 / 120	608 / 917 / 98	876 / 618 / 222	701 / 751 / 178	681 / 621 / 394	560 / 753 / 315	
	2	743 / 741 / 120	608 / 917 / 98	876 / 618 / 222	701 / 751 / 178	681 / 621 / 394	560 / 753 / 315	765 / 707 / 124	630 / 881 / 102	898 / 586 / 228	744 / 739 / 189	698 / 589 / 403	567 / 719 / 325	630 / 881 / 102	518 / 1092 / 84	679 / 790 / 172	548 / 962 / 139	494 / 828 / 286	420 / 1034 / 236	
	3	630 / 881 / 102	518 / 1092 / 84	679 / 790 / 172	548 / 962 / 139	494 / 828 / 286	420 / 1034 / 236	653 / 845 / 106	518 / 1012 / 84	701 / 755 / 178	569 / 927 / 145	511 / 793 / 295	429 / 998 / 246							

ASCE Group Zone

Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Enclosed Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Ground Snow	Wind Speed [mph]		140						150						160					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	832 / 656 / 135	675 / 807 / 109	920 / 474 / 234	832 / 654 / 211	732 / 581 / 423	624 / 718 / 344	788 / 716 / 127	630 / 867 / 102	920 / 548 / 234	766 / 694 / 195	681 / 623 / 394	594 / 756 / 315	720 / 747 / 116	585 / 918 / 95	898 / 611 / 228	723 / 747 / 184	637 / 658 / 364	580 / 808 / 295	
	2	720 / 774 / 116	585 / 951 / 95	832 / 633 / 211	679 / 784 / 172	647 / 636 / 374	553 / 786 / 305	675 / 836 / 109	540 / 1010 / 87	788 / 692 / 200	635 / 844 / 161	613 / 694 / 354	538 / 846 / 286	630 / 890 / 102	495 / 1055 / 80	723 / 724 / 184	591 / 896 / 150	568 / 726 / 325	522 / 898 / 266	
	3	608 / 915 / 98	495 / 1125 / 80	657 / 823 / 167	526 / 995 / 134	477 / 861 / 276	410 / 1066 / 227	563 / 975 / 91	450 / 1175 / 73	613 / 884 / 156	482 / 1048 / 123	443 / 919 / 256	390 / 1119 / 207	518 / 1022 / 84	428 / 1272 / 69	569 / 936 / 145	460 / 1140 / 117	413 / 967 / 236	387 / 1214 / 197	

Ground Snow	Wind Speed [mph]		170						180					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	675 / 793 / 109	563 / 998 / 91	832 / 642 / 211	683 / 795 / 172	621 / 705 / 344	564 / 853 / 276	653 / 861 / 106	532 / 1031 / 84	788 / 685 / 200	658 / 836 / 161	605 / 748 / 325	567 / 924 / 266	
	2	585 / 935 / 95	473 / 1139 / 77	679 / 770 / 172	551 / 939 / 139	550 / 772 / 305	503 / 941 / 246	540 / 969 / 87	463 / 1217 / 73	657 / 838 / 167	544 / 1012 / 134	532 / 812 / 286	504 / 1014 / 236	
	3	495 / 1105 / 80	405 / 1362 / 66	526 / 977 / 134	441 / 1227 / 111	408 / 1048 / 227	383 / 1303 / 187	473 / 1184 / 77	393 / 1443 / 62	504 / 1052 / 128	431 / 1309 / 106	403 / 1125 / 217	378 / 1385 / 177	

Ground Snow	Wind Speed [mph]		190						200					
	Panal Angle		0 - 3		3 - 10		10 - 30		0 - 3		3 - 10		10 - 30	
	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	608 / 895 / 98	524 / 1100 / 80	744 / 723 / 189	631 / 869 / 150	587 / 784 / 305	548 / 955 / 246	585 / 957 / 95	515 / 1165 / 77	701 / 756 / 178	626 / 928 / 145	568 / 814 / 286	549 / 1017 / 236	
	2	518 / 1036 / 84	453 / 1289 / 69	613 / 873 / 156	537 / 1082 / 128	530 / 875 / 276	504 / 1084 / 227	495 / 1100 / 80	442 / 1355 / 66	569 / 900 / 145	506 / 1096 / 117	509 / 902 / 256	481 / 1097 / 207	
	3	428 / 1195 / 69	381 / 1514 / 58	482 / 1122 / 123	421 / 1382 / 100	379 / 1141 / 197	373 / 1458 / 168	405 / 1256 / 66	██████████	460 / 1188 / 117	410 / 1448 / 95	372 / 1202 / 187	366 / 1522 / 158	

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 3	1 = 1' / 1
	2 = 2
	3 = 3
3 - 10	1 = 1
	2 = 2' / 2
	3 = 3' / 3
10 - 30	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ASCE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																																																																																																																																																																																																				
Wind Speed [mph]		95								100								105																																																																																																																																																																																																																				
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																																																																																																																																																																																																														
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																																																																																																																																																																											
0	1	288 / 170 / 46	362 / 243 / 41	307 / 237 / 51	388 / 331 / 45	376 / 295 / 55	471 / 394 / 48	368 / 274 / 60	464 / 365 / 52	301 / 184 / 45	380 / 261 / 40	322 / 255 / 49	407 / 354 / 44	395 / 315 / 53	494 / 418 / 46	387 / 292 / 58	487 / 387 / 50	319 / 200 / 44	403 / 282 / 39	337 / 273 / 48	426 / 376 / 43	414 / 335 / 51	506 / 433 / 44	412 / 315 / 57	509 / 408 / 48																																																																																																																																																																																																													
	2	362 / 243 / 41	458 / 336 / 36	388 / 338 / 45	467 / 435 / 38	471 / 400 / 48	571 / 507 / 40	464 / 371 / 52	565 / 469 / 43	380 / 261 / 40	472 / 351 / 35	407 / 361 / 44	488 / 461 / 37	494 / 424 / 46	596 / 534 / 38	487 / 393 / 50	590 / 493 / 41	403 / 282 / 39	492 / 371 / 34	426 / 383 / 43	499 / 476 / 35	506 / 440 / 44	618 / 558 / 36	509 / 415 / 48	613 / 516 / 40																																																																																																																																																																																																													
	3	392 / 434 / 35	449 / 526 / 28	457 / 411 / 41	533 / 505 / 33	542 / 470 / 42	643 / 577 / 34	536 / 434 / 46	654 / 545 / 38	402 / 452 / 33	467 / 551 / 26	471 / 429 / 39	556 / 532 / 32	555 / 486 / 40	667 / 602 / 32	561 / 458 / 44	679 / 570 / 36	411 / 467 / 31	482 / 575 / 25	483 / 445 / 37	576 / 556 / 31	577 / 509 / 38	706 / 641 / 32	584 / 480 / 42	702 / 591 / 34																																																																																																																																																																																																													
5	1	299 / 170 / 46	362 / 243 / 41	308 / 237 / 59	388 / 331 / 53	376 / 295 / 68	471 / 394 / 59	368 / 274 / 68	464 / 365 / 59	307 / 184 / 45	380 / 261 / 40	322 / 255 / 57	407 / 354 / 51	395 / 315 / 66	494 / 418 / 57	387 / 292 / 66	487 / 387 / 57	319 / 200 / 44	403 / 282 / 39	337 / 273 / 56	426 / 376 / 50	414 / 335 / 64	506 / 433 / 54	412 / 315 / 65	509 / 408 / 55																																																																																																																																																																																																													
	2	362 / 243 / 41	458 / 336 / 36	388 / 338 / 53	467 / 435 / 44	471 / 400 / 59	571 / 507 / 49	464 / 371 / 59	565 / 469 / 49	380 / 261 / 40	472 / 351 / 35	407 / 361 / 51	488 / 461 / 43	494 / 424 / 57	596 / 534 / 47	487 / 393 / 57	590 / 493 / 47	403 / 282 / 39	492 / 371 / 34	426 / 383 / 50	499 / 476 / 40	506 / 440 / 54	618 / 558 / 45	509 / 415 / 55	613 / 516 / 45																																																																																																																																																																																																													
	3	392 / 434 / 35	449 / 526 / 28	457 / 411 / 48	533 / 505 / 39	542 / 470 / 52	643 / 577 / 42	536 / 434 / 52	654 / 545 / 43	402 / 452 / 33	467 / 551 / 26	471 / 429 / 46	556 / 532 / 37	555 / 486 / 49	667 / 602 / 40	561 / 458 / 50	679 / 570 / 41	411 / 467 / 31	482 / 575 / 25	483 / 445 / 43	576 / 556 / 36	577 / 509 / 47	706 / 641 / 39	584 / 480 / 48	702 / 591 / 39																																																																																																																																																																																																													
10	1	354 / 163 / 52	402 / 240 / 48	361 / 231 / 74	417 / 331 / 68	376 / 295 / 88	471 / 394 / 76	368 / 274 / 83	464 / 365 / 72	364 / 179 / 52	417 / 261 / 48	374 / 251 / 73	428 / 354 / 66	395 / 315 / 85	494 / 418 / 74	387 / 292 / 80	487 / 387 / 70	375 / 195 / 51	432 / 282 / 47	380 / 269 / 71	438 / 376 / 64	414 / 335 / 83	506 / 433 / 70	412 / 315 / 79	509 / 408 / 67																																																																																																																																																																																																													
	2	402 / 240 / 48	464 / 336 / 43	417 / 338 / 68	467 / 435 / 57	471 / 400 / 76	571 / 507 / 63	464 / 371 / 72	565 / 469 / 60	417 / 261 / 48	472 / 351 / 41	428 / 361 / 66	488 / 461 / 55	494 / 424 / 74	596 / 534 / 61	487 / 393 / 70	590 / 493 / 57	432 / 282 / 47	492 / 371 / 40	438 / 383 / 64	499 / 476 / 52	506 / 440 / 70	618 / 558 / 58	509 / 415 / 67	613 / 516 / 55																																																																																																																																																																																																													
	3	408 / 434 / 41	449 / 526 / 33	457 / 411 / 62	533 / 505 / 50	542 / 470 / 67	643 / 577 / 54	536 / 434 / 63	654 / 545 / 53	410 / 452 / 39	467 / 551 / 31	471 / 429 / 59	556 / 532 / 48	555 / 486 / 63	667 / 602 / 52	561 / 458 / 61	679 / 570 / 50	411 / 467 / 37	482 / 575 / 30	483 / 445 / 56	576 / 556 / 46	577 / 509 / 61	706 / 641 / 51	584 / 480 / 59	702 / 591 / 48																																																																																																																																																																																																													
0	1	332 / 214 / 43	420 / 299 / 38	356 / 294 / 47	451 / 404 / 42	438 / 359 / 51	526 / 455 / 42	431 / 333 / 55	530 / 428 / 47	345 / 228 / 42	443 / 321 / 38	370 / 311 / 46	461 / 417 / 40	456 / 378 / 49	545 / 474 / 40	449 / 350 / 53	549 / 447 / 45	425 / 299 / 38	512 / 390 / 32	444 / 405 / 41	517 / 498 / 33	526 / 461 / 42	639 / 580 / 35	530 / 435 / 47	634 / 536 / 38																																																																																																																																																																																																													
	2	420 / 299 / 38	512 / 390 / 32	444 / 405 / 41	517 / 498 / 33	526 / 461 / 42	639 / 580 / 35	530 / 435 / 47	634 / 536 / 38	443 / 321 / 38	530 / 408 / 31	461 / 425 / 40	534 / 518 / 32	545 / 481 / 40	657 / 599 / 33	549 / 454 / 45	668 / 567 / 37	425 / 489 / 30	508 / 610 / 25	501 / 467 / 36	595 / 578 / 29	611 / 542 / 37	725 / 661 / 40	605 / 500 / 34	740 / 626 / 34																																																																																																																																																																																																													
	3	425 / 489 / 30	508 / 610 / 25	501 / 467 / 36	595 / 578 / 29	611 / 542 / 37	725 / 661 / 40	605 / 500 / 34	740 / 626 / 34	439 / 509 / 29	521 / 629 / 24	519 / 488 / 35	611 / 597 / 28	630 / 562 / 36	761 / 696 / 29	624 / 519 / 39	757 / 642 / 32	332 / 214 / 43	420 / 299 / 38	356 / 294 / 55	451 / 404 / 49	438 / 359 / 63	526 / 455 / 52	431 / 333 / 63	530 / 428 / 53																																																																																																																																																																																																													
5	1	332 / 214 / 43	420 / 299 / 38	356 / 294 / 55	451 / 404 / 49	438 / 359 / 63	526 / 455 / 52	431 / 333 / 63	530 / 428 / 53	345 / 228 / 42	443 / 321 / 38	370 / 311 / 53	461 / 417 / 46	456 / 378 / 61	545 / 474 / 50	449 / 350 / 61	549 / 447 / 51	420 / 299 / 38	512 / 390 / 32	444 / 405 / 48	517 / 498 / 39	526 / 461 / 52	639 / 580 / 43	530 / 435 / 43	634 / 536 / 43																																																																																																																																																																																																													
	2	420 / 299 / 38	512 / 390 / 32	444 / 405 / 48	517 / 498 / 39	526 / 461 / 52	639 / 580 / 43	530 / 435 / 43	634 / 536 / 43	443 / 321 / 38	530 / 408 / 31	461 / 425 / 46	534 / 518 / 37	545 / 481 / 50	657 / 599 / 41	549 / 454 / 51	668 / 567 / 42	425 / 489 / 30	508 / 610 / 25	501 / 467 / 42	595 / 578 / 34	611 / 542 / 46	725 / 661 / 46	605 / 500 / 38	740 / 626 / 38																																																																																																																																																																																																													
	3	425 / 489 / 30	508 / 610 / 25	501 / 467 / 42	595 / 578 / 34	611 / 542 / 46	725 / 661 / 46	605 / 500 / 38	740 / 626 / 38	439 / 509 / 29	521 / 629 / 24	519 / 488 / 40	611 / 597 / 32	630 / 562 / 44	761 / 696 / 36	624 / 519 / 44	757 / 642 / 36	386 / 211 / 50	441 / 299 / 45	393 / 290 / 70	455 / 404 / 63	438 / 359 / 81	526 / 455 / 67	431 / 333 / 77	530 / 428 / 65																																																																																																																																																																																																													
10	1	386 / 211 / 50	441 / 299 / 45	393 / 290 / 70	455 / 404 / 63	438 / 359 / 81	526 / 455 / 67	431 / 333 / 77	530 / 428 / 65	392 / 224 / 49	457 / 321 / 45	405 / 311 / 69	461 / 417 / 60	456 / 378 / 79	545 / 474 / 65	449 / 350 / 74	549 / 447 / 62	441 / 299 / 45	512 / 390 / 38	447 / 405 / 62	517 / 498 / 50	526 / 461 / 67	639 / 580 / 56	530 / 435 / 65	634 / 536 / 53																																																																																																																																																																																																													
	2	441 / 299 / 45	512 / 390 / 38	447 / 405 / 62	517 / 498 / 50	526 / 461 / 67	639 / 580 / 56	530 / 435 / 65	634 / 536 / 53	457 / 321 / 45	530 / 408 / 37	461 / 425 / 60	534 / 518 / 48	545 / 481 / 65	657 / 599 / 53	549 / 454 / 62	668 / 567 / 51	425 / 489 / 36	508 / 610 / 29	501 / 467 / 54	595 / 578 / 44	611 / 542 / 60	725 / 661 / 48	605 / 500 / 56	740 / 626 / 47																																																																																																																																																																																																													
	3	425 / 489 / 36	508 / 610 / 29	501 / 467 / 54	595 / 578 / 44	611 / 542 / 60	725 / 661 / 48	605 / 500 / 56	740 / 626 / 47	439 / 509 / 34	521 / 629 / 28	519 / 488 / 52	611 / 597 / 42	630 / 562 / 57	761 / 696 / 47	624 / 519 / 54	757 / 642 / 44	0	1	363 / 244 / 41	459 / 337 / 36	389 / 333 / 45	477 / 437 / 39	472 / 396 / 48	573 / 503 / 40	466 / 367 / 52	567 / 464 / 43	345 / 228 / 42	443 / 321 / 38	370 / 311 / 46	461 / 417 / 40	456 / 378 / 49	545 / 474 / 40	449 / 350 / 53	549 / 447 / 45	459 / 337 / 36	547 / 425 / 30	468 / 437 / 38	549 / 536 / 31	573 / 510 / 40	672 / 616 / 32	567 / 471 / 43	684 / 583 / 35	2	459 / 337 / 36	547 / 425 / 30	468 / 437 / 38	549 / 536 / 31	573 / 510 / 40	672 / 616 / 32	567 / 471 / 43	684 / 583 / 35	443 / 321 / 38	530 / 408 / 31	461 / 425 / 40	534 / 518 / 32	545 / 481 / 40	657 / 599 / 33	549 / 454 / 45	668 / 567 / 37	451 / 528 / 28	531 / 645 / 22	535 / 507 / 33	625 / 614 / 27	646 / 580 / 34	774 / 710 / 28	641 / 535 / 37	792 / 674 / 31	3	451 / 528 / 28	531 / 645 / 22	535 / 507 / 33	625 / 614 / 27	646 / 580 / 34	774 / 710 / 28	641 / 535 / 37	792 / 674 / 31	439 / 509 / 29	521 / 629 / 24	519 / 488 / 35	611 / 597 / 28	630 / 562 / 36	761 / 696 / 29	624 / 519 / 39	757 / 642 / 32	363 / 244 / 41	459 / 337 / 36	389 / 333 / 53	477 / 437 / 45	472 / 396 / 59	573 / 503 / 49	466 / 367 / 59	567 / 464 / 49	5	1	363 / 244 / 41	459 / 337 / 36	389 / 333 / 53	477 / 437 / 45	472 / 396 / 59	573 / 503 / 49	466 / 367 / 59	567 / 464 / 49	345 / 228 / 42	443 / 321 / 38	370 / 311 / 53	461 / 417 / 46	456 / 378 / 61	545 / 474 / 50	449 / 350 / 61	549 / 447 / 51	459 / 337 / 36	547 / 425 / 30	468 / 437 / 44	549 / 536 / 36	573 / 510 / 49	672 / 616 / 39	567 / 471 / 49	684 / 583 / 40	2	459 / 337 / 36	547 / 425 / 30	468 / 437 / 44	549 / 536 / 36	573 / 510 / 49	672 / 616 / 39	567 / 471 / 49	684 / 583 / 40	443 / 321 / 38	530 / 408 / 31	461 / 425 / 46	534 / 518 / 37	545 / 481 / 50	657 / 599 / 41	549 / 454 / 51	668 / 567 / 42	451 / 528 / 28	531 / 645 / 22	535 / 507 / 39	625 / 614 / 31	646 / 580 / 42	774 / 710 / 34	641 / 535 / 42	792 / 674 / 35	3	451 / 528 / 28	531 / 645 / 22	535 / 507 / 39	625 / 614 / 31	646 / 580 / 42	774 / 710 / 34	641 / 535 / 42	792 / 674 / 35	439 / 509 / 29	521 / 629 / 24	519 / 488 / 40	611 / 597 / 32	630 / 562 / 44	761 / 696 / 36	624 / 519 / 44	757 / 642 / 36	403 / 241 / 48	465 / 337 / 43	418 / 333 / 68	477 / 437 / 58	472 / 396 / 76	573 / 503 / 63	466 / 367 / 72	567 / 464 / 60	10	1	403 / 241 / 48	465 / 337 / 43	418 / 333 / 68	477 / 437 / 58	472 / 396 / 76	573 / 503 / 63	466 / 367 / 72	567 / 464 / 60	392 / 224 / 49	457 / 321 / 45	405 / 311 / 69	461 / 417 / 60	456 / 378 / 79	545 / 474 / 65	449 / 350 / 74	549 / 447 / 62	465 / 337 / 43	547 / 425 / 36	468 / 437 / 57	549 / 536 / 46	573 / 510 / 63	672 / 616 / 51	567 / 471 / 60	684 / 583 / 49	2	465 / 337 / 43	547 / 425 / 36	468 / 437 / 57	549 / 536 / 46	573 / 510 / 63	672 / 616 / 51	567 / 471 / 60	684 / 583 / 49	457 / 321 / 45	530 / 408 / 37	461 / 425 / 60	534 / 518 / 48	545 / 481 / 65	657 / 599 / 53	549 / 454 / 62	668 / 567 / 51	451 / 528 / 33	531 / 645 / 26	535 / 507 / 50	625 / 614 / 40	646 / 580 / 54	774 / 710 / 44	641 / 535 / 51	792 / 674 / 43	3	451 / 528 / 33	531 / 645 / 26	535 / 507 / 50	625 / 614 / 40	646 / 580 / 54	774 / 710 / 44	641 / 535 / 51	792 / 674 / 43	439 / 509 / 34
0	1	363 / 244 / 41	459 / 337 / 36	389 / 333 / 45	477 / 437 / 39	472 / 396 / 48	573 / 503 / 40	466 / 367 / 52	567 / 464 / 43	345 / 228 / 42	443 / 321 / 38	370 / 311 / 46	461 / 417 / 40	456 / 378 / 49	545 / 474 / 40	449 / 350 / 53	549 / 447 / 45		459 / 337 / 36	547 / 425 / 30	468 / 437 / 38	549 / 536 / 31	573 / 510 / 40	672 / 616 / 32	567 / 471 / 43	684 / 583 / 35																																																																																																																																																																																																												
	2	459 / 337 / 36	547 / 425 / 30	468 / 437 / 38	549 / 536 / 31	573 / 510 / 40	672 / 616 / 32	567 / 471 / 43	684 / 583 / 35	443 / 321 / 38	530 / 408 / 31	461 / 425 / 40	534 / 518 / 32	545 / 481 / 40	657 / 599 / 33	549 / 454 / 45	668 / 567 / 37		451 / 528 / 28	531 / 645 / 22	535 / 507 / 33	625 / 614 / 27	646 / 580 / 34	774 / 710 / 28	641 / 535 / 37	792 / 674 / 31																																																																																																																																																																																																												
	3	451 / 528 / 28	531 / 645 / 22	535 / 507 / 33	625 / 614 / 27	646 / 580 / 34	774 / 710 / 28	641 / 535 / 37	792 / 674 / 31	439 / 509 / 29	521 / 629 / 24	519 / 488 / 35	611 / 597 / 28	630 / 562 / 36	761 / 696 / 29	624 / 519 / 39	757 / 642 / 32	363 / 244 / 41	459 / 337 / 36	389 / 333 / 53	477 / 437 / 45	472 / 396 / 59	573 / 503 / 49	466 / 367 / 59	567 / 464 / 49																																																																																																																																																																																																													
5	1	363 / 244 / 41	459 / 337 / 36	389 / 333 / 53	477 / 437 / 45	472 / 396 / 59	573 / 503 / 49	466 / 367 / 59	567 / 464 / 49	345 / 228 / 42	443 / 321 / 38	370 / 311 / 53	461 / 417 / 46	456 / 378 / 61	545 / 474 / 50	449 / 350 / 61	549 / 447 / 51	459 / 337 / 36	547 / 425 / 30	468 / 437 / 44	549 / 536 / 36	573 / 510 / 49	672 / 616 / 39	567 / 471 / 49	684 / 583 / 40																																																																																																																																																																																																													
	2	459 / 337 / 36	547 / 425 / 30	468 / 437 / 44	549 / 536 / 36	573 / 510 / 49	672 / 616 / 39	567 / 471 / 49	684 / 583 / 40	443 / 321 / 38	530 / 408 / 31	461 / 425 / 46	534 / 518 / 37	545 / 481 / 50	657 / 599 / 41	549 / 454 / 51	668 / 567 / 42	451 / 528 / 28	531 / 645 / 22	535 / 507 / 39	625 / 614 / 31	646 / 580 / 42	774 / 710 / 34	641 / 535 / 42	792 / 674 / 35																																																																																																																																																																																																													
	3	451 / 528 / 28	531 / 645 / 22	535 / 507 / 39	625 / 614 / 31	646 / 580 / 42	774 / 710 / 34	641 / 535 / 42	792 / 674 / 35	439 / 509 / 29	521 / 629 / 24	519 / 488 / 40	611 / 597 / 32	630 / 562 / 44	761 / 696 / 36	624 / 519 / 44	757 / 642 / 36	403 / 241 / 48	465 / 337 / 43	418 / 333 / 68	477 / 437 / 58	472 / 396 / 76	573 / 503 / 63	466 / 367 / 72	567 / 464 / 60																																																																																																																																																																																																													
10	1	403 / 241 / 48	465 / 337 / 43	418 / 333 / 68	477 / 437 / 58	472 / 396 / 76	573 / 503 / 63	466 / 367 / 72	567 / 464 / 60	392 / 224 / 49	457 / 321 / 45	405 / 311 / 69	461 / 417 / 60	456 / 378 / 79	545 / 474 / 65	449 / 350 / 74	549 / 447 / 62	465 / 337 / 43	547 / 425 / 36	468 / 437 / 57	549 / 536 / 46	573 / 510 / 63	672 / 616 / 51	567 / 471 / 60	684 / 583 / 49																																																																																																																																																																																																													
	2	465 / 337 / 43	547 / 425 / 36	468 / 437 / 57	549 / 536 / 46	573 / 510 / 63	672 / 616 / 51	567 / 471 / 60	684 / 583 / 49	457 / 321 / 45	530 / 408 / 37	461 / 425 / 60	534 / 518 / 48	545 / 481 / 65	657 / 599 / 53	549 / 454 / 62	668 / 567 / 51	451 / 528 / 33	531 / 645 / 26	535 / 507 / 50	625 / 614 / 40	646 / 580 / 54	774 / 710 / 44	641 / 535 / 51	792 / 674 / 43																																																																																																																																																																																																													
	3	451 / 528 / 33	531 / 645 / 26	535 / 507 / 50	625 / 614 / 40	646 / 580 / 54	774 / 710 / 44	641 / 535 / 51	792 / 674 / 43	439 / 509 / 34	521																																																																																																																																																																																																																											

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	376 / 257 / 40	475 / 353 / 35	403 / 349 / 44	492 / 455 / 37	488 / 413 / 46	589 / 520 / 38	482 / 382 / 50	583 / 480 / 41	411 / 291 / 39	502 / 381 / 33	442 / 393 / 43	518 / 487 / 35	516 / 444 / 43	629 / 561 / 36	520 / 418 / 47	624 / 518 / 39	440 / 319 / 37	535 / 413 / 31	465 / 422 / 40	539 / 514 / 32	550 / 479 / 40	663 / 597 / 33	544 / 443 / 44	658 / 551 / 36	
	2	475 / 353 / 35	574 / 450 / 29	483 / 455 / 37	575 / 565 / 30	589 / 527 / 38	702 / 646 / 31	583 / 487 / 41	716 / 612 / 34	502 / 381 / 33	600 / 477 / 27	508 / 487 / 34	610 / 607 / 28	629 / 569 / 36	739 / 685 / 28	624 / 526 / 39	756 / 651 / 32	535 / 413 / 31	648 / 521 / 26	539 / 523 / 32	640 / 642 / 26	663 / 605 / 33	790 / 737 / 27	658 / 559 / 36	810 / 701 / 30	
	3	472 / 557 / 27	553 / 676 / 22	549 / 525 / 32	653 / 645 / 26	676 / 610 / 33	806 / 742 / 27	671 / 563 / 36	826 / 705 / 30	489 / 585 / 25	596 / 735 / 21	586 / 567 / 30	686 / 684 / 24	716 / 651 / 31	866 / 802 / 25	711 / 600 / 34	862 / 739 / 27	525 / 636 / 24	615 / 764 / 19	617 / 603 / 28	733 / 735 / 23	747 / 684 / 28	919 / 855 / 24	764 / 649 / 32	916 / 788 / 26	
5	1	376 / 257 / 40	475 / 353 / 35	403 / 349 / 51	492 / 455 / 43	488 / 413 / 57	589 / 520 / 47	482 / 382 / 57	583 / 480 / 47	411 / 291 / 39	502 / 381 / 33	442 / 393 / 50	518 / 487 / 40	516 / 444 / 53	629 / 561 / 44	520 / 418 / 54	624 / 518 / 44	440 / 319 / 37	535 / 413 / 31	465 / 422 / 46	539 / 514 / 37	550 / 479 / 50	663 / 597 / 41	544 / 443 / 50	658 / 551 / 41	
	2	475 / 353 / 35	574 / 450 / 29	483 / 455 / 43	575 / 565 / 35	589 / 527 / 47	702 / 646 / 38	583 / 487 / 47	716 / 612 / 39	502 / 381 / 33	600 / 477 / 27	508 / 487 / 39	610 / 607 / 32	629 / 569 / 44	739 / 685 / 35	624 / 526 / 44	756 / 651 / 36	535 / 413 / 31	648 / 521 / 26	539 / 523 / 37	640 / 642 / 30	663 / 605 / 41	790 / 737 / 33	658 / 559 / 41	810 / 701 / 34	
	3	472 / 557 / 27	553 / 676 / 22	549 / 525 / 37	653 / 645 / 30	676 / 610 / 41	806 / 742 / 33	671 / 563 / 41	826 / 705 / 34	489 / 585 / 25	596 / 735 / 21	586 / 567 / 35	686 / 684 / 28	716 / 651 / 38	866 / 802 / 31	711 / 600 / 38	862 / 739 / 31	525 / 636 / 24	615 / 764 / 19	617 / 603 / 32	733 / 735 / 26	747 / 684 / 35	919 / 855 / 29	764 / 649 / 36	916 / 788 / 29	
10	1	414 / 257 / 48	475 / 353 / 42	424 / 349 / 66	492 / 455 / 56	488 / 413 / 74	589 / 520 / 61	482 / 382 / 70	583 / 480 / 57	437 / 291 / 46	502 / 381 / 39	450 / 393 / 64	518 / 487 / 52	516 / 444 / 69	629 / 561 / 57	520 / 418 / 66	624 / 518 / 54	453 / 319 / 44	535 / 413 / 37	465 / 422 / 60	539 / 514 / 48	550 / 479 / 65	663 / 597 / 53	544 / 443 / 61	658 / 551 / 50	
	2	475 / 353 / 42	574 / 450 / 35	483 / 455 / 55	575 / 565 / 45	589 / 527 / 61	702 / 646 / 49	583 / 487 / 57	716 / 612 / 48	502 / 381 / 39	600 / 477 / 32	508 / 487 / 51	610 / 607 / 42	629 / 569 / 57	739 / 685 / 45	624 / 526 / 54	756 / 651 / 44	535 / 413 / 37	648 / 521 / 31	539 / 523 / 48	640 / 642 / 39	663 / 605 / 53	790 / 737 / 43	658 / 559 / 50	810 / 701 / 42	
	3	472 / 557 / 32	553 / 676 / 26	549 / 525 / 48	653 / 645 / 39	676 / 610 / 53	806 / 742 / 43	671 / 563 / 50	826 / 705 / 42	489 / 585 / 29	596 / 735 / 24	586 / 567 / 45	686 / 684 / 36	716 / 651 / 49	866 / 802 / 40	711 / 600 / 47	862 / 739 / 38	525 / 636 / 28	615 / 764 / 22	617 / 603 / 42	733 / 735 / 34	747 / 684 / 45	919 / 855 / 38	764 / 649 / 44	916 / 788 / 36	
0	1	467 / 346 / 35	564 / 442 / 29	484 / 447 / 37	578 / 558 / 31	579 / 511 / 38	709 / 643 / 32	586 / 482 / 42	704 / 593 / 34	492 / 371 / 34	590 / 467 / 28	509 / 476 / 35	601 / 586 / 29	618 / 550 / 36	731 / 667 / 29	613 / 508 / 40	747 / 632 / 33	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	564 / 442 / 29	677 / 549 / 24	565 / 555 / 30	681 / 689 / 25	690 / 635 / 31	835 / 783 / 25	704 / 602 / 34	858 / 746 / 28	590 / 467 / 28	717 / 587 / 23	601 / 596 / 29	718 / 731 / 23	731 / 676 / 29	874 / 822 / 24	747 / 641 / 33	900 / 785 / 27									
	3	544 / 664 / 22	669 / 837 / 18	642 / 633 / 26	775 / 781 / 21	792 / 729 / 27	964 / 900 / 22	813 / 693 / 30	996 / 860 / 25	573 / 705 / 21	698 / 877 / 17	679 / 674 / 25	810 / 821 / 20	832 / 770 / 25	999 / 936 / 20	855 / 732 / 28	1036 / 896 / 23									
5	1	467 / 346 / 35	564 / 442 / 29	484 / 447 / 43	578 / 558 / 36	579 / 511 / 47	709 / 643 / 39	586 / 482 / 48	704 / 593 / 39	492 / 371 / 34	590 / 467 / 28	509 / 476 / 41	601 / 586 / 33	618 / 550 / 45	731 / 667 / 36	613 / 508 / 45	747 / 632 / 37	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	564 / 442 / 29	677 / 549 / 24	565 / 555 / 35	681 / 689 / 29	690 / 635 / 38	835 / 783 / 31	704 / 602 / 39	858 / 746 / 32	590 / 467 / 28	717 / 587 / 23	601 / 596 / 31	718 / 731 / 27	731 / 676 / 36	874 / 822 / 29	747 / 641 / 37	900 / 785 / 30									
	3	544 / 664 / 22	669 / 837 / 18	642 / 633 / 30	775 / 781 / 25	792 / 729 / 33	964 / 900 / 27	813 / 693 / 34	996 / 860 / 28	573 / 705 / 21	698 / 877 / 17	679 / 674 / 29	810 / 821 / 23	832 / 770 / 31	999 / 936 / 25	855 / 732 / 32	1036 / 896 / 26									
10	1	467 / 346 / 42	564 / 442 / 35	484 / 447 / 56	578 / 558 / 46	579 / 511 / 61	709 / 643 / 51	586 / 482 / 59	704 / 593 / 48	492 / 371 / 40	590 / 467 / 33	509 / 476 / 53	601 / 586 / 43	618 / 550 / 58	731 / 667 / 47	613 / 508 / 55	747 / 632 / 45	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	564 / 442 / 35	677 / 549 / 29	565 / 555 / 45	681 / 689 / 37	690 / 635 / 49	835 / 783 / 40	704 / 602 / 48	858 / 746 / 39	590 / 467 / 33	717 / 587 / 27	601 / 596 / 43	718 / 731 / 35	731 / 676 / 47	874 / 822 / 38	747 / 641 / 45	900 / 785 / 37									
	3	544 / 664 / 26	669 / 837 / 22	642 / 633 / 39	775 / 781 / 32	792 / 729 / 43	964 / 900 / 35	813 / 693 / 42	996 / 860 / 34	573 / 705 / 24	698 / 877 / 20	679 / 674 / 37	810 / 821 / 30	832 / 770 / 40	999 / 936 / 33	855 / 732 / 39	1036 / 896 / 32									
0	1	515 / 394 / 32	625 / 500 / 26	530 / 502 / 33	635 / 624 / 27	640 / 574 / 34	766 / 703 / 28	650 / 542 / 38	785 / 667 / 31	545 / 422 / 31	658 / 531 / 25	548 / 525 / 31	665 / 658 / 26	673 / 607 / 32	822 / 758 / 27	685 / 574 / 36	818 / 698 / 29	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	625 / 500 / 26	754 / 621 / 22	619 / 619 / 27	751 / 768 / 22	766 / 713 / 28	938 / 886 / 23	785 / 677 / 31	968 / 846 / 26	658 / 531 / 25	786 / 652 / 21	648 / 652 / 25	777 / 799 / 21	797 / 745 / 26	963 / 912 / 21	818 / 709 / 29	997 / 874 / 24									
	3	598 / 741 / 19	720 / 909 / 16	712 / 711 / 23	869 / 885 / 19	895 / 831 / 24	1066 / 1002 / 20	892 / 766 / 27	1108 / 961 / 22	640 / 797 / 19	765 / 969 / 15	740 / 743 / 22	892 / 911 / 18	924 / 861 / 23	1131 / 1065 / 19	953 / 821 / 26	1128 / 980 / 20									
5	1	515 / 394 / 32	625 / 500 / 26	530 / 502 / 39	635 / 624 / 32	640 / 574 / 42	766 / 703 / 34	650 / 542 / 43	785 / 667 / 35	545 / 422 / 31	658 / 531 / 25	548 / 525 / 36	665 / 658 / 30	673 / 607 / 40	822 / 758 / 33	685 / 574 / 41	818 / 698 / 33	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	625 / 500 / 26	754 / 621 / 22	619 / 619 / 31	751 / 768 / 25	766 / 713 / 34	938 / 886 / 28	785 / 677 / 35	968 / 846 / 29	658 / 531 / 25	786 / 652 / 21	648 / 652 / 29	777 / 799 / 24	797 / 745 / 32	963 / 912 / 26	818 / 709 / 33	997 / 874 / 27									
	3	598 / 741 / 19	720 / 909 / 16	712 / 711 / 27	869 / 885 / 22	895 / 831 / 30	1066 / 1002 / 24	892 / 766 / 30	1108 / 961 / 25	640 / 797 / 19	765 / 969 / 15	740 / 743 / 25	892 / 911 / 21	924 / 861 / 28	1131 / 1065 / 23	953 / 821 / 29	1128 / 980 / 23									
10	1	515 / 394 / 38	625 / 500 / 31	530 / 502 / 50	635 / 624 / 41	640 / 574 / 54	766 / 703 / 44	650 / 542 / 53	785 / 667 / 43	545 / 422 / 36	658 / 531 / 30	548 / 525 / 47	665 / 658 / 39	673 / 607 / 52	822 / 758 / 43	685 / 574 / 50	818 / 698 / 40	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	625 / 500 / 31	754 / 621 / 26	619 / 619 / 40	751 / 768 / 33	766 / 713 / 44	938 / 886 / 36	785 / 677 / 43	968 / 846 / 36	658 / 531 / 30	786 / 652 / 24	648 / 652 / 38	777 / 799 / 31	797 / 745 / 42	963 / 912 / 34	818 / 709 / 40	997 / 874 / 33									
	3	598 / 741 / 23	720 / 909 / 19	712 / 711 / 35	869 / 885 / 29	895 / 831 / 39	1066 / 1002 / 31	892 / 766 / 37	1108 / 961 / 31	640 / 797 / 22	765 / 969 / 18	740 / 743 / 33	892 / 911 / 27	924 / 861 / 36	1131 / 1065 / 30	953 / 821 / 36	1128 / 980 / 28									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	403 / 157 / 59	449 / 233 / 55	406 / 221 / 87	460 / 322 / 81	398 / 295 / 108	471 / 394 / 94	368 / 274 / 97	464 / 365 / 85	412 / 172 / 58	463 / 253 / 54	417 / 241 / 86	475 / 349 / 79	409 / 315 / 105	494 / 418 / 91	387 / 292 / 95	487 / 387 / 82	421 / 187 / 57	477 / 274 / 53	427 / 261 / 84	491 / 376 / 78	420 / 335 / 102	506 / 433 / 86	412 / 315 / 93	509 / 408 / 79
	2	449 / 233 / 55	510 / 330 / 50	460 / 328 / 81	503 / 435 / 70	471 / 400 / 94	571 / 507 / 78	464 / 371 / 85	565 / 469 / 70	463 / 253 / 54	520 / 351 / 48	475 / 355 / 79	514 / 461 / 67	494 / 424 / 91	596 / 534 / 75	487 / 393 / 82	590 / 493 / 68	477 / 274 / 53	530 / 371 / 46	491 / 383 / 78	513 / 476 / 63	506 / 440 / 86	618 / 558 / 72	509 / 415 / 79	613 / 516 / 65
	3	460 / 434 / 48	469 / 526 / 38	509 / 411 / 76	533 / 505 / 61	542 / 470 / 83	643 / 577 / 67	536 / 434 / 75	654 / 545 / 62	460 / 452 / 46	476 / 551 / 37	511 / 429 / 72	556 / 532 / 58	555 / 486 / 78	667 / 602 / 64	561 / 458 / 72	679 / 570 / 59	457 / 467 / 43	482 / 575 / 35	512 / 445 / 68	576 / 556 / 56	577 / 509 / 75	706 / 641 / 62	584 / 480 / 69	702 / 591 / 56
20	1	447 / 150 / 64	493 / 226 / 61	446 / 212 / 98	499 / 312 / 93	427 / 290 / 132	484 / 394 / 116	368 / 274 / 114	464 / 365 / 99	454 / 164 / 63	505 / 245 / 60	455 / 230 / 97	513 / 338 / 91	443 / 315 / 130	497 / 418 / 112	387 / 292 / 110	487 / 387 / 95	462 / 179 / 62	517 / 265 / 59	471 / 253 / 97	519 / 358 / 88	453 / 335 / 126	506 / 433 / 106	412 / 315 / 109	509 / 408 / 92
	2	493 / 226 / 61	545 / 319 / 55	499 / 318 / 93	550 / 435 / 82	484 / 400 / 116	571 / 507 / 96	464 / 371 / 99	565 / 469 / 82	505 / 245 / 60	553 / 339 / 53	513 / 344 / 91	560 / 461 / 79	497 / 424 / 112	596 / 534 / 92	487 / 393 / 95	590 / 493 / 79	517 / 265 / 59	570 / 365 / 52	519 / 365 / 88	557 / 476 / 75	506 / 440 / 106	618 / 558 / 89	509 / 415 / 92	613 / 516 / 75
	3	512 / 434 / 55	510 / 526 / 44	533 / 391 / 85	575 / 505 / 72	542 / 470 / 102	643 / 577 / 83	536 / 434 / 87	654 / 545 / 72	509 / 452 / 52	516 / 551 / 42	551 / 422 / 84	585 / 532 / 69	555 / 486 / 96	667 / 602 / 79	561 / 458 / 84	679 / 570 / 69	504 / 467 / 49	520 / 575 / 40	559 / 445 / 81	593 / 556 / 66	577 / 509 / 92	706 / 641 / 77	584 / 480 / 80	702 / 591 / 65
25	1	447 / 150 / 64	493 / 226 / 61	446 / 212 / 98	499 / 312 / 93	455 / 286 / 156	515 / 394 / 139	368 / 274 / 133	464 / 365 / 116	454 / 164 / 63	505 / 245 / 60	455 / 230 / 97	513 / 338 / 91	463 / 305 / 151	527 / 418 / 135	387 / 292 / 129	487 / 387 / 112	462 / 179 / 62	517 / 265 / 59	471 / 253 / 97	519 / 358 / 88	478 / 329 / 149	528 / 433 / 128	412 / 315 / 127	509 / 408 / 108
	2	493 / 226 / 61	545 / 319 / 55	499 / 318 / 93	550 / 435 / 82	515 / 400 / 139	571 / 507 / 116	464 / 371 / 116	565 / 469 / 96	505 / 245 / 60	553 / 339 / 53	513 / 344 / 91	560 / 461 / 79	527 / 424 / 135	596 / 534 / 111	487 / 393 / 112	590 / 493 / 92	517 / 265 / 59	570 / 365 / 52	519 / 365 / 88	557 / 476 / 75	528 / 440 / 106	618 / 558 / 106	509 / 415 / 108	613 / 516 / 88
	3	512 / 434 / 55	510 / 526 / 44	533 / 391 / 85	575 / 505 / 72	549 / 470 / 123	643 / 577 / 99	536 / 434 / 102	654 / 545 / 84	509 / 452 / 52	516 / 551 / 42	551 / 422 / 84	585 / 532 / 69	555 / 486 / 116	667 / 602 / 95	561 / 458 / 98	679 / 570 / 80	504 / 467 / 49	520 / 575 / 40	559 / 445 / 81	593 / 556 / 66	577 / 509 / 111	706 / 641 / 92	584 / 480 / 94	702 / 591 / 77
15	1	431 / 202 / 56	491 / 295 / 52	438 / 281 / 83	499 / 397 / 76	438 / 359 / 100	526 / 455 / 83	431 / 333 / 90	530 / 428 / 76	440 / 218 / 55	497 / 311 / 51	450 / 302 / 82	507 / 417 / 73	456 / 378 / 97	545 / 474 / 80	449 / 350 / 88	549 / 447 / 73								
	2	491 / 295 / 52	539 / 390 / 45	499 / 405 / 76	522 / 498 / 61	526 / 461 / 83	639 / 580 / 69	530 / 435 / 76	634 / 536 / 62	497 / 311 / 51	547 / 408 / 43	507 / 425 / 73	534 / 518 / 58	545 / 481 / 80	657 / 599 / 65	549 / 454 / 73	668 / 567 / 60								
	3	463 / 489 / 42	508 / 610 / 34	521 / 467 / 66	595 / 578 / 54	611 / 542 / 73	725 / 661 / 59	605 / 500 / 66	740 / 626 / 55	467 / 509 / 40	521 / 629 / 32	528 / 488 / 63	611 / 597 / 51	630 / 562 / 70	761 / 696 / 58	624 / 519 / 63	757 / 642 / 52								
20	1	470 / 193 / 61	521 / 281 / 57	481 / 273 / 96	533 / 384 / 87	469 / 359 / 124	526 / 455 / 102	431 / 333 / 105	530 / 428 / 89	485 / 211 / 61	534 / 300 / 56	490 / 293 / 94	538 / 403 / 84	478 / 378 / 120	545 / 474 / 98	449 / 350 / 102	549 / 447 / 85								
	2	521 / 281 / 57	576 / 383 / 50	533 / 391 / 87	563 / 498 / 72	526 / 461 / 102	639 / 580 / 85	530 / 435 / 89	634 / 536 / 72	534 / 300 / 56	593 / 408 / 49	538 / 411 / 84	569 / 518 / 69	545 / 481 / 98	657 / 599 / 81	549 / 454 / 85	668 / 567 / 70								
	3	507 / 489 / 47	536 / 610 / 39	566 / 467 / 78	600 / 578 / 63	611 / 542 / 90	725 / 661 / 73	605 / 500 / 77	740 / 626 / 64	510 / 509 / 46	537 / 629 / 37	572 / 488 / 75	611 / 597 / 60	630 / 562 / 87	761 / 696 / 71	624 / 519 / 74	757 / 642 / 60								
25	1	470 / 193 / 61	521 / 281 / 57	481 / 273 / 96	533 / 384 / 87	494 / 354 / 146	537 / 455 / 123	431 / 333 / 123	530 / 428 / 104	485 / 211 / 61	534 / 300 / 56	490 / 293 / 94	538 / 403 / 84	509 / 378 / 144	546 / 474 / 118	449 / 350 / 120	549 / 447 / 100								
	2	521 / 281 / 57	576 / 383 / 50	533 / 391 / 87	563 / 498 / 72	537 / 461 / 123	639 / 580 / 102	530 / 435 / 104	634 / 536 / 84	534 / 300 / 56	593 / 408 / 49	538 / 411 / 84	569 / 518 / 69	546 / 481 / 118	657 / 599 / 97	549 / 454 / 100	668 / 567 / 82								
	3	507 / 489 / 47	536 / 610 / 39	566 / 467 / 78	600 / 578 / 63	611 / 542 / 109	725 / 661 / 88	605 / 500 / 90	740 / 626 / 75	510 / 509 / 46	537 / 629 / 37	572 / 488 / 75	611 / 597 / 60	630 / 562 / 104	761 / 696 / 85	624 / 519 / 86	757 / 642 / 71								
15	1	450 / 234 / 55	511 / 332 / 50	461 / 323 / 81	513 / 437 / 71	472 / 396 / 94	573 / 503 / 78	466 / 367 / 85	567 / 464 / 70	440 / 218 / 55	497 / 311 / 51	450 / 302 / 82	507 / 417 / 73	456 / 378 / 97	545 / 474 / 80	449 / 350 / 88	549 / 447 / 73								
	2	511 / 332 / 50	554 / 425 / 42	504 / 437 / 70	549 / 536 / 56	573 / 510 / 78	672 / 616 / 62	567 / 471 / 70	684 / 583 / 58	497 / 311 / 51	547 / 408 / 43	507 / 425 / 73	534 / 518 / 58	545 / 481 / 80	657 / 599 / 65	549 / 454 / 73	668 / 567 / 60								
	3	470 / 528 / 38	531 / 645 / 31	535 / 507 / 61	625 / 614 / 49	646 / 580 / 67	774 / 710 / 54	641 / 535 / 60	792 / 674 / 50	467 / 509 / 40	521 / 629 / 32	528 / 488 / 63	611 / 597 / 51	630 / 562 / 70	761 / 696 / 58	624 / 519 / 63	757 / 642 / 52								
20	1	494 / 227 / 61	546 / 321 / 55	500 / 313 / 93	552 / 429 / 82	486 / 396 / 116	573 / 503 / 96	466 / 367 / 99	567 / 464 / 82	485 / 211 / 61	534 / 300 / 56	490 / 293 / 94	538 / 403 / 84	478 / 378 / 120	545 / 474 / 98	449 / 350 / 102	549 / 447 / 85								
	2	546 / 321 / 55	598 / 425 / 47	552 / 437 / 82	573 / 536 / 66	573 / 510 / 96	672 / 616 / 77	567 / 471 / 82	684 / 583 / 67	534 / 300 / 56	593 / 408 / 49	538 / 411 / 84	569 / 518 / 69	545 / 481 / 98	657 / 599 / 81	549 / 454 / 85	668 / 567 / 70								
	3	511 / 528 / 44	537 / 645 / 35	577 / 507 / 72	625 / 614 / 58	646 / 580 / 83	774 / 710 / 67	641 / 535 / 70	792 / 674 / 59	510 / 509 / 46	537 / 629 / 37	572 / 488 / 75	611 / 597 / 60	630 / 562 / 87	761 / 696 / 71	624 / 519 / 74	757 / 642 / 60								
25	1	494 / 227 / 61	546 / 321 / 55	500 / 313 / 93	552 / 429 / 82	516 / 396 / 139	573 / 503 / 116	466 / 367 / 116	567 / 464 / 96	485 / 211 / 61	534 / 300 / 56	490 / 293 / 94	538 / 403 / 84	509 / 378 / 144	546 / 474 / 118	449 / 350 / 120	549 / 447 / 100								
	2	546 / 321 / 55	598 / 425 / 47	552 / 437 / 82	573 / 536 / 66	573 / 510 / 116	672 / 616 / 92	567 / 471 / 96	684 / 583 / 79	534 / 300 / 56	593 / 408 / 49	538 / 411 / 84	569 / 518 / 69	546 / 481 / 118	657 / 599 / 97	549 / 454 / 100	668 / 567 / 82								
	3	511 / 528 / 44	537 / 645 / 35	577 / 507 / 72	625 / 614 / 58	646 / 580 / 99	774 / 710 / 81	641 / 535 / 82	792 / 674 / 69	510 / 509 / 46	537 / 629 / 37	572 / 488 / 75	611 / 597 / 60	630 / 562 / 104	761 / 696 / 85	624 / 519 / 86	757 / 642 / 71								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																																																																																																																																																																																																																																																																																																																																																																																																							
Wind Speed [mph]		140																150																160																																																																																																																																																																																																																																																																																																																																																																																																							
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																																																																																																																																																																																																																																																																																																																																																																																											
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																																																																																																																																																																																																																																																																																																																																																																													
		15	1	460 / 250 / 54	525 / 353 / 49	472 / 344 / 79	519 / 455 / 68	488 / 413 / 91	589 / 520 / 75	482 / 382 / 82	583 / 480 / 68	480 / 282 / 52	534 / 381 / 46	495 / 386 / 77	528 / 487 / 63	516 / 444 / 84	629 / 561 / 70	520 / 418 / 78	624 / 518 / 63	500 / 314 / 51	550 / 413 / 43	510 / 422 / 73	539 / 514 / 58	550 / 479 / 80	663 / 597 / 65	544 / 443 / 72	658 / 551 / 59	20	2	525 / 353 / 49	574 / 450 / 41	510 / 455 / 67	575 / 565 / 55	589 / 527 / 75	702 / 646 / 61	583 / 487 / 68	716 / 612 / 56	534 / 381 / 46	600 / 477 / 37	518 / 487 / 62	610 / 607 / 51	629 / 569 / 70	739 / 685 / 56	624 / 526 / 63	756 / 651 / 52	550 / 413 / 43	648 / 521 / 36	539 / 523 / 58	640 / 642 / 47	663 / 605 / 65	790 / 737 / 53	658 / 559 / 59	810 / 701 / 49	25	3	483 / 557 / 37	553 / 676 / 30	549 / 525 / 58	653 / 645 / 47	676 / 610 / 65	806 / 742 / 53	671 / 563 / 59	826 / 705 / 49	489 / 585 / 34	596 / 735 / 28	586 / 567 / 55	686 / 684 / 44	716 / 651 / 61	866 / 802 / 50	711 / 600 / 55	862 / 739 / 45	525 / 636 / 32	615 / 764 / 26	617 / 603 / 51	733 / 735 / 41	747 / 684 / 56	919 / 855 / 46	764 / 649 / 52	916 / 788 / 42	15	1	502 / 242 / 60	549 / 335 / 53	510 / 333 / 91	566 / 455 / 81	493 / 413 / 112	589 / 520 / 92	482 / 382 / 95	583 / 480 / 79	519 / 273 / 58	573 / 374 / 51	530 / 374 / 88	571 / 487 / 75	516 / 444 / 104	629 / 561 / 87	520 / 418 / 90	624 / 518 / 74	536 / 304 / 56	597 / 413 / 49	541 / 408 / 84	572 / 514 / 69	550 / 479 / 98	663 / 597 / 81	544 / 443 / 84	658 / 551 / 69	20	2	549 / 335 / 53	615 / 450 / 46	555 / 455 / 79	588 / 565 / 65	589 / 527 / 92	702 / 646 / 75	583 / 487 / 79	716 / 612 / 65	573 / 374 / 51	619 / 477 / 43	560 / 487 / 74	610 / 607 / 60	629 / 569 / 87	739 / 685 / 69	624 / 526 / 74	756 / 651 / 60	597 / 413 / 49	648 / 521 / 41	572 / 523 / 69	640 / 642 / 56	663 / 605 / 81	790 / 737 / 65	658 / 559 / 69	810 / 701 / 57	25	3	523 / 557 / 43	553 / 676 / 34	580 / 525 / 69	653 / 645 / 56	676 / 610 / 81	806 / 742 / 65	671 / 563 / 69	826 / 705 / 57	521 / 585 / 39	596 / 735 / 32	597 / 567 / 65	686 / 684 / 52	716 / 651 / 75	866 / 802 / 61	711 / 600 / 64	862 / 739 / 52	541 / 636 / 37	615 / 764 / 30	617 / 603 / 60	733 / 735 / 49	747 / 684 / 69	919 / 855 / 57	764 / 649 / 60	916 / 788 / 49	15	1	520 / 346 / 49	564 / 442 / 41	513 / 447 / 68	578 / 558 / 56	579 / 511 / 75	709 / 643 / 62	586 / 482 / 69	704 / 593 / 56	530 / 371 / 46	590 / 467 / 38	523 / 476 / 65	601 / 586 / 52	618 / 550 / 72	731 / 667 / 58	613 / 508 / 65	747 / 632 / 53	20	2	564 / 442 / 41	677 / 549 / 33	565 / 555 / 55	681 / 689 / 45	690 / 635 / 61	835 / 783 / 50	704 / 602 / 56	858 / 746 / 46	590 / 467 / 38	717 / 587 / 32	601 / 596 / 52	718 / 731 / 42	731 / 676 / 58	874 / 822 / 46	747 / 641 / 53	900 / 785 / 43	25	3	544 / 664 / 30	669 / 837 / 25	642 / 633 / 47	775 / 781 / 39	792 / 729 / 53	964 / 900 / 43	813 / 693 / 49	996 / 860 / 40	573 / 705 / 28	698 / 877 / 23	679 / 674 / 45	810 / 821 / 36	832 / 770 / 50	999 / 936 / 40	855 / 732 / 46	1036 / 896 / 38	15	1	553 / 334 / 54	608 / 442 / 46	560 / 447 / 81	595 / 558 / 66	579 / 511 / 92	709 / 643 / 77	586 / 482 / 80	704 / 593 / 65	570 / 365 / 52	616 / 467 / 44	568 / 476 / 77	601 / 586 / 62	618 / 550 / 89	731 / 667 / 71	613 / 508 / 75	747 / 632 / 62	20	2	608 / 442 / 46	677 / 549 / 38	582 / 555 / 65	681 / 689 / 53	690 / 635 / 75	835 / 783 / 61	704 / 602 / 65	858 / 746 / 54	616 / 467 / 44	717 / 587 / 36	601 / 596 / 62	718 / 731 / 50	731 / 676 / 71	874 / 822 / 57	747 / 641 / 62	900 / 785 / 50	25	3	544 / 664 / 34	669 / 837 / 29	642 / 633 / 56	775 / 781 / 46	792 / 729 / 65	964 / 900 / 53	813 / 693 / 57	996 / 860 / 47	573 / 705 / 32	698 / 877 / 27	679 / 674 / 53	810 / 821 / 43	832 / 770 / 61	999 / 936 / 49	855 / 732 / 54	1036 / 896 / 44	15	1	553 / 334 / 54	608 / 442 / 46	560 / 447 / 81	595 / 558 / 66	579 / 511 / 111	709 / 643 / 92	586 / 482 / 94	704 / 593 / 77	570 / 365 / 52	616 / 467 / 44	568 / 476 / 77	601 / 586 / 62	618 / 550 / 106	731 / 667 / 85	613 / 508 / 88	747 / 632 / 73	20	2	608 / 442 / 46	677 / 549 / 38	582 / 555 / 65	681 / 689 / 53	690 / 635 / 90	835 / 783 / 73	704 / 602 / 77	858 / 746 / 63	616 / 467 / 44	717 / 587 / 36	601 / 596 / 62	718 / 731 / 50	731 / 676 / 85	874 / 822 / 69	747 / 641 / 73	900 / 785 / 59	25	3	544 / 664 / 34	669 / 837 / 29	642 / 633 / 56	775 / 781 / 46	792 / 729 / 78	964 / 900 / 64	813 / 693 / 67	996 / 860 / 55	573 / 705 / 32	698 / 877 / 27	679 / 674 / 53	810 / 821 / 43	832 / 770 / 73	999 / 936 / 59	855 / 732 / 63	1036 / 896 / 51	15	1	538 / 394 / 44	625 / 500 / 37	531 / 502 / 61	635 / 624 / 50	640 / 574 / 67	766 / 703 / 54	650 / 542 / 62	785 / 667 / 50	555 / 422 / 42	658 / 531 / 35	548 / 525 / 57	665 / 658 / 47	673 / 607 / 64	822 / 758 / 53	685 / 574 / 59	818 / 698 / 48	20	2	625 / 500 / 37	754 / 621 / 30	619 / 619 / 49	751 / 768 / 40	766 / 713 / 54	938 / 886 / 45	785 / 677 / 50	968 / 846 / 42	658 / 531 / 35	786 / 652 / 28	648 / 652 / 46	777 / 799 / 38	797 / 745 / 51	963 / 912 / 42	818 / 709 / 48	997 / 874 / 39	25	3	598 / 741 / 27	720 / 909 / 22	712 / 711 / 42	869 / 885 / 35	895 / 831 / 48	1066 / 1002 / 39	892 / 766 / 43	1108 / 961 / 36	640 / 797 / 26	765 / 969 / 21	740 / 743 / 40	892 / 911 / 33	924 / 861 / 45	1131 / 1065 / 37	953 / 821 / 42	1128 / 980 / 33	15	1	586 / 394 / 50	635 / 500 / 42	573 / 502 / 72	635 / 624 / 59	640 / 574 / 83	766 / 703 / 67	650 / 542 / 72	785 / 667 / 59	601 / 422 / 48	658 / 531 / 40	576 / 525 / 68	665 / 658 / 56	673 / 607 / 79	822 / 758 / 65	685 / 574 / 69	818 / 698 / 55	20	2	635 / 500 / 42	754 / 621 / 34	619 / 619 / 58	751 / 768 / 47	766 / 713 / 67	938 / 886 / 55	785 / 677 / 59	968 / 846 / 49	658 / 531 / 40	786 / 652 / 32	648 / 652 / 55	777 / 799 / 44	797 / 745 / 63	963 / 912 / 51	818 / 709 / 55	997 / 874 / 45	25	3	598 / 741 / 31	720 / 909 / 25	712 / 711 / 50	869 / 885 / 41	895 / 831 / 59	1066 / 1002 / 47	892 / 766 / 50	1108 / 961 / 42	640 / 797 / 30	765 / 969 / 24	740 / 743 / 47	892 / 911 / 39	924 / 861 / 55	1131 / 1065 / 45
15	1		502 / 242 / 60	549 / 335 / 53	510 / 333 / 91	566 / 455 / 81	493 / 413 / 112	589 / 520 / 92	482 / 382 / 95	583 / 480 / 79	519 / 273 / 58	573 / 374 / 51	530 / 374 / 88	571 / 487 / 75	516 / 444 / 104	629 / 561 / 87	520 / 418 / 90	624 / 518 / 74	536 / 304 / 56	597 / 413 / 49	541 / 408 / 84	572 / 514 / 69	550 / 479 / 98	663 / 597 / 81	544 / 443 / 84	658 / 551 / 69	20		2	549 / 335 / 53	615 / 450 / 46	555 / 455 / 79	588 / 565 / 65	589 / 527 / 92	702 / 646 / 75	583 / 487 / 79	716 / 612 / 65	573 / 374 / 51	619 / 477 / 43	560 / 487 / 74	610 / 607 / 60	629 / 569 / 87	739 / 685 / 69	624 / 526 / 74	756 / 651 / 60	597 / 413 / 49	648 / 521 / 41	572 / 523 / 69	640 / 642 / 56	663 / 605 / 81	790 / 737 / 65	658 / 559 / 69	810 / 701 / 57		25	3	523 / 557 / 43	553 / 676 / 34	580 / 525 / 69	653 / 645 / 56	676 / 610 / 81	806 / 742 / 65	671 / 563 / 69	826 / 705 / 57	521 / 585 / 39	596 / 735 / 32	597 / 567 / 65	686 / 684 / 52	716 / 651 / 75	866 / 802 / 61	711 / 600 / 64	862 / 739 / 52	541 / 636 / 37	615 / 764 / 30	617 / 603 / 60	733 / 735 / 49	747 / 684 / 69	919 / 855 / 57	764 / 649 / 60		916 / 788 / 49	15	1	520 / 346 / 49	564 / 442 / 41	513 / 447 / 68	578 / 558 / 56	579 / 511 / 75	709 / 643 / 62	586 / 482 / 69	704 / 593 / 56	530 / 371 / 46	590 / 467 / 38	523 / 476 / 65	601 / 586 / 52	618 / 550 / 72	731 / 667 / 58	613 / 508 / 65	747 / 632 / 53	20	2	564 / 442 / 41	677 / 549 / 33	565 / 555 / 55	681 / 689 / 45		690 / 635 / 61	835 / 783 / 50	704 / 602 / 56	858 / 746 / 46	590 / 467 / 38	717 / 587 / 32	601 / 596 / 52	718 / 731 / 42	731 / 676 / 58	874 / 822 / 46	747 / 641 / 53	900 / 785 / 43	25	3	544 / 664 / 30	669 / 837 / 25	642 / 633 / 47	775 / 781 / 39	792 / 729 / 53	964 / 900 / 43	813 / 693 / 49	996 / 860 / 40	573 / 705 / 28	698 / 877 / 23	679 / 674 / 45		810 / 821 / 36	832 / 770 / 50	999 / 936 / 40	855 / 732 / 46	1036 / 896 / 38	15	1	553 / 334 / 54	608 / 442 / 46	560 / 447 / 81	595 / 558 / 66	579 / 511 / 92	709 / 643 / 77	586 / 482 / 80	704 / 593 / 65	570 / 365 / 52	616 / 467 / 44	568 / 476 / 77	601 / 586 / 62	618 / 550 / 89	731 / 667 / 71	613 / 508 / 75	747 / 632 / 62	20	2		608 / 442 / 46	677 / 549 / 38	582 / 555 / 65	681 / 689 / 53	690 / 635 / 75	835 / 783 / 61	704 / 602 / 65	858 / 746 / 54	616 / 467 / 44	717 / 587 / 36	601 / 596 / 62	718 / 731 / 50	731 / 676 / 71	874 / 822 / 57	747 / 641 / 62	900 / 785 / 50	25		3	544 / 664 / 34	669 / 837 / 29	642 / 633 / 56	775 / 781 / 46	792 / 729 / 65	964 / 900 / 53	813 / 693 / 57	996 / 860 / 47	573 / 705 / 32	698 / 877 / 27	679 / 674 / 53	810 / 821 / 43	832 / 770 / 61	999 / 936 / 49	855 / 732 / 54	1036 / 896 / 44		15	1	553 / 334 / 54	608 / 442 / 46	560 / 447 / 81	595 / 558 / 66	579 / 511 / 111	709 / 643 / 92	586 / 482 / 94	704 / 593 / 77	570 / 365 / 52	616 / 467 / 44	568 / 476 / 77	601 / 586 / 62	618 / 550 / 106	731 / 667 / 85	613 / 508 / 88		747 / 632 / 73	20	2	608 / 442 / 46	677 / 549 / 38	582 / 555 / 65	681 / 689 / 53	690 / 635 / 90	835 / 783 / 73	704 / 602 / 77	858 / 746 / 63	616 / 467 / 44	717 / 587 / 36	601 / 596 / 62	718 / 731 / 50	731 / 676 / 85	874 / 822 / 69		747 / 641 / 73	900 / 785 / 59	25	3	544 / 664 / 34	669 / 837 / 29	642 / 633 / 56	775 / 781 / 46	792 / 729 / 78	964 / 900 / 64	813 / 693 / 67	996 / 860 / 55	573 / 705 / 32	698 / 877 / 27	679 / 674 / 53	810 / 821 / 43	832 / 770 / 73		999 / 936 / 59	855 / 732 / 63	1036 / 896 / 51	15	1	538 / 394 / 44	625 / 500 / 37	531 / 502 / 61	635 / 624 / 50	640 / 574 / 67	766 / 703 / 54	650 / 542 / 62	785 / 667 / 50	555 / 422 / 42	658 / 531 / 35	548 / 525 / 57	665 / 658 / 47		673 / 607 / 64	822 / 758 / 53	685 / 574 / 59	818 / 698 / 48	20	2	625 / 500 / 37	754 / 621 / 30	619 / 619 / 49	751 / 768 / 40	766 / 713 / 54	938 / 886 / 45	785 / 677 / 50	968 / 846 / 42	658 / 531 / 35	786 / 652 / 28	648 / 652 / 46		777 / 799 / 38	797 / 745 / 51	963 / 912 / 42	818 / 709 / 48	997 / 874 / 39	25	3	598 / 741 / 27	720 / 909 / 22	712 / 711 / 42	869 / 885 / 35	895 / 831 / 48	1066 / 1002 / 39	892 / 766 / 43	1108 / 961 / 36	640 / 797 / 26	765 / 969 / 21		740 / 743 / 40	892 / 911 / 33	924 / 861 / 45	1131 / 1065 / 37	953 / 821 / 42	1128 / 980 / 33	15	1	586 / 394 / 50	635 / 500 / 42	573 / 502 / 72	635 / 624 / 59	640 / 574 / 83	766 / 703 / 67	650 / 542 / 72	785 / 667 / 59	601 / 422 / 48		658 / 531 / 40	576 / 525 / 68	665 / 658 / 56	673 / 607 / 79	822 / 758 / 65	685 / 574 / 69	818 / 698 / 55	20	2	635 / 500 / 42	754 / 621 / 34	619 / 619 / 58	751 / 768 / 47	766 / 713 / 67	938 / 886 / 55	785 / 677 / 59	968 / 846 / 49		658 / 531 / 40	786 / 652 / 32	648 / 652 / 55	777 / 799 / 44	797 / 745 / 63	963 / 912 / 51	818 / 709 / 55	997 / 874 / 45	25	3	598 / 741 / 31	720 / 909 / 25	712 / 711 / 50	869 / 885 / 41	895 / 831 / 59	1066 / 1002 / 47	892 / 766 / 50		1108 / 961 / 42	640 / 797 / 30	765 / 969 / 24	740 / 743 / 47	892 / 911 / 39	924 / 861 / 55	1131 / 1065 / 45	953 / 821 / 49	1128 / 980 / 39																																																												
	15		1	520 / 346 / 49	564 / 442 / 41	513 / 447 / 68	578 / 558 / 56	579 / 511 / 75	709 / 643 / 62	586 / 482 / 69	704 / 593 / 56	530 / 371 / 46	590 / 467 / 38	523 / 476 / 65	601 / 586 / 52	618 / 550 / 72	731 / 667 / 58	613 / 508 / 65	747 / 632 / 53	20	2	564 / 442 / 41	677 / 549 / 33	565 / 555 / 55	681 / 689 / 45	690 / 635 / 61			835 / 783 / 50	704 / 602 / 56	858 / 746 / 46	590 / 467 / 38	717 / 587 / 32	601 / 596 / 52	718 / 731 / 42	731 / 676 / 58	874 / 822 / 46	747 / 641 / 53	900 / 785 / 43	25	3	544 / 664 / 30	669 / 837 / 25	642 / 633 / 47	775 / 781 / 39	792 / 729 / 53	964 / 900 / 43	813 / 693 / 49	996 / 860 / 40	573 / 705 / 28	698 / 877 / 23	679 / 674 / 45	810 / 821 / 36			832 / 770 / 50	999 / 936 / 40	855 / 732 / 46	1036 / 896 / 38	15	1	553 / 334 / 54	608 / 442 / 46	560 / 447 / 81	595 / 558 / 66	579 / 511 / 92	709 / 643 / 77	586 / 482 / 80	704 / 593 / 65	570 / 365 / 52	616 / 467 / 44	568 / 476 / 77	601 / 586 / 62	618 / 550 / 89	731 / 667 / 71	613 / 508 / 75	747 / 632 / 62	20	2		608 / 442 / 46		677 / 549 / 38	582 / 555 / 65	681 / 689 / 53	690 / 635 / 75	835 / 783 / 61	704 / 602 / 65	858 / 746 / 54	616 / 467 / 44	717 / 587 / 36	601 / 596 / 62	718 / 731 / 50	731 / 676 / 71	874 / 822 / 57	747 / 641 / 62	900 / 785 / 50	25	3		544 / 664 / 34	669 / 837 / 29	642 / 633 / 56	775 / 781 / 46	792 / 729 / 65		964 / 900 / 53	813 / 693 / 57	996 / 860 / 47	573 / 705 / 32	698 / 877 / 27	679 / 674 / 53	810 / 821 / 43	832 / 770 / 61	999 / 936 / 49	855 / 732 / 54	1036 / 896 / 44	15		1	553 / 334 / 54	608 / 442 / 46	560 / 447 / 81	595 / 558 / 66	579 / 511 / 111	709 / 643 / 92	586 / 482 / 94	704 / 593 / 77	570 / 365 / 52	616 / 467 / 44	568 / 476 / 77		601 / 586 / 62	618 / 550 / 106	731 / 667 / 85	613 / 508 / 88	747 / 632 / 73		20	2	608 / 442 / 46	677 / 549 / 38	582 / 555 / 65	681 / 689 / 53	690 / 635 / 90	835 / 783 / 73	704 / 602 / 77	858 / 746 / 63	616 / 467 / 44	717 / 587 / 36	601 / 596 / 62	718 / 731 / 50	731 / 676 / 85	874 / 822 / 69	747 / 641 / 73		900 / 785 / 59		25	3	544 / 664 / 34	669 / 837 / 29	642 / 633 / 56	775 / 781 / 46	792 / 729 / 78	964 / 900 / 64	813 / 693 / 67	996 / 860 / 55	573 / 705 / 32	698 / 877 / 27	679 / 674 / 53	810 / 821 / 43	832 / 770 / 73	999 / 936 / 59			855 / 732 / 63	1036 / 896 / 51	15	1	538 / 394 / 44	625 / 500 / 37	531 / 502 / 61	635 / 624 / 50	640 / 574 / 67	766 / 703 / 54	650 / 542 / 62	785 / 667 / 50	555 / 422 / 42	658 / 531 / 35	548 / 525 / 57	665 / 658 / 47	673 / 607 / 64			822 / 758 / 53	685 / 574 / 59	818 / 698 / 48	20	2	625 / 500 / 37	754 / 621 / 30	619 / 619 / 49	751 / 768 / 40	766 / 713 / 54	938 / 886 / 45	785 / 677 / 50	968 / 846 / 42	658 / 531 / 35	786 / 652 / 28	648 / 652 / 46		777 / 799 / 38		797 / 745 / 51	963 / 912 / 42	818 / 709 / 48	997 / 874 / 39	25	3	598 / 741 / 27	720 / 909 / 22	712 / 711 / 42	869 / 885 / 35	895 / 831 / 48	1066 / 1002 / 39	892 / 766 / 43	1108 / 961 / 36	640 / 797 / 26		765 / 969 / 21	740 / 743 / 40		892 / 911 / 33	924 / 861 / 45	1131 / 1065 / 37	953 / 821 / 42	1128 / 980 / 33	15	1	586 / 394 / 50	635 / 500 / 42	573 / 502 / 72	635 / 624 / 59	640 / 574 / 83	766 / 703 / 67	650 / 542 / 72		785 / 667 / 59	601 / 422 / 48	658 / 531 / 40		576 / 525 / 68	665 / 658 / 56	673 / 607 / 79	822 / 758 / 65	685 / 574 / 69	818 / 698 / 55	20	2	635 / 500 / 42	754 / 621 / 34	619 / 619 / 58	751 / 768 / 47	766 / 713 / 67		938 / 886 / 55	785 / 677 / 59	968 / 846 / 49	658 / 531 / 40		786 / 652 / 32	648 / 652 / 55	777 / 799 / 44	797 / 745 / 63	963 / 912 / 51	818 / 709 / 55	997 / 874 / 45	25	3	598 / 741 / 31	720 / 909 / 25	712 / 711 / 50		869 / 885 / 41	895 / 831 / 59	1066 / 1002 / 47	892 / 766 / 50	1108 / 961 / 42		640 / 797 / 30	765 / 969 / 24	740 / 743 / 47	892 / 911 / 39	924 / 861 / 55	1131 / 1065 / 45	953 / 821 / 49	1128 / 980 / 39																																																																																																																															
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ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge															
30	1	472 / 148 / 68	515 / 222 / 64	469 / 209 / 105	520 / 307 / 99	474 / 277 / 177	536 / 388 / 160	373 / 274 / 153	464 / 365 / 133	479 / 162 / 67	527 / 241 / 63	477 / 227 / 103	533 / 332 / 97	488 / 301 / 174	546 / 411 / 155	387 / 292 / 148	487 / 387 / 128	486 / 176 / 66	530 / 257 / 61	486 / 246 / 102	537 / 352 / 94	503 / 324 / 171	556 / 433 / 149	412 / 315 / 146	509 / 408 / 124	
	2	515 / 222 / 64	563 / 314 / 58	520 / 313 / 99	566 / 427 / 88	536 / 393 / 160	588 / 507 / 135	464 / 371 / 133	565 / 469 / 110	527 / 241 / 63	569 / 333 / 56	533 / 338 / 97	584 / 461 / 86	546 / 417 / 155	600 / 534 / 130	487 / 393 / 128	590 / 493 / 106	530 / 257 / 61	585 / 358 / 55	537 / 359 / 94	580 / 476 / 81	556 / 440 / 149	618 / 558 / 124	509 / 415 / 124	613 / 516 / 101	
	3	540 / 434 / 59	532 / 526 / 47	550 / 384 / 91	597 / 505 / 78	576 / 470 / 144	643 / 577 / 116	536 / 434 / 117	654 / 545 / 97	535 / 452 / 56	537 / 551 / 45	567 / 414 / 89	606 / 532 / 75	576 / 486 / 135	667 / 602 / 111	561 / 458 / 112	679 / 570 / 92	529 / 467 / 53	540 / 575 / 43	573 / 437 / 86	614 / 556 / 72	586 / 509 / 130	706 / 641 / 108	584 / 480 / 108	702 / 591 / 88	
35	1	502 / 144 / 71	540 / 215 / 67	504 / 205 / 117	541 / 297 / 108	499 / 273 / 199	556 / 381 / 180	388 / 274 / 172	464 / 365 / 149	508 / 157 / 70	550 / 234 / 66	511 / 224 / 115	553 / 321 / 106	513 / 296 / 196	565 / 404 / 174	399 / 292 / 167	487 / 387 / 144	514 / 171 / 69	561 / 252 / 65	519 / 242 / 114	556 / 340 / 103	526 / 319 / 193	573 / 425 / 167	416 / 315 / 165	509 / 408 / 139	
	2	540 / 215 / 67	580 / 303 / 60	541 / 303 / 108	590 / 420 / 98	556 / 386 / 180	613 / 507 / 155	464 / 371 / 149	565 / 469 / 124	550 / 234 / 66	595 / 327 / 59	553 / 327 / 106	596 / 444 / 94	565 / 409 / 174	624 / 534 / 149	487 / 393 / 144	590 / 493 / 119	561 / 252 / 65	599 / 345 / 57	556 / 347 / 103	613 / 476 / 92	573 / 431 / 167	634 / 558 / 142	509 / 415 / 139	613 / 516 / 114	
	3	569 / 426 / 63	563 / 526 / 51	576 / 377 / 101	629 / 505 / 89	591 / 461 / 161	643 / 577 / 133	536 / 434 / 132	654 / 545 / 109	572 / 452 / 60	567 / 551 / 48	581 / 400 / 98	637 / 532 / 85	602 / 486 / 155	667 / 602 / 126	561 / 458 / 127	679 / 570 / 104	564 / 467 / 57	569 / 575 / 46	597 / 429 / 96	643 / 556 / 81	611 / 509 / 149	706 / 641 / 123	584 / 480 / 122	702 / 591 / 99	
40	1	530 / 139 / 122	563 / 208 / 114	529 / 199 / 166	561 / 287 / 153	523 / 269 / 226	565 / 368 / 201	402 / 274 / 192	464 / 365 / 166	543 / 155 / 122	571 / 226 / 112	535 / 217 / 164	571 / 310 / 151	536 / 291 / 223	583 / 396 / 197	413 / 292 / 186	487 / 387 / 161	548 / 168 / 120	580 / 244 / 110	550 / 238 / 164	582 / 334 / 148	539 / 308 / 215	589 / 417 / 190	430 / 315 / 183	509 / 408 / 155	
	2	563 / 208 / 114	606 / 297 / 104	561 / 292 / 153	613 / 412 / 140	565 / 373 / 201	625 / 497 / 175	464 / 371 / 166	565 / 469 / 138	571 / 226 / 112	609 / 315 / 100	571 / 316 / 151	617 / 435 / 135	583 / 402 / 197	649 / 534 / 172	487 / 393 / 161	590 / 493 / 133	580 / 244 / 110	622 / 338 / 98	582 / 340 / 148	633 / 466 / 132	589 / 423 / 190	657 / 558 / 164	509 / 415 / 155	613 / 516 / 127	
	3	587 / 411 / 106	595 / 526 / 89	591 / 364 / 143	647 / 495 / 127	606 / 452 / 183	663 / 577 / 153	536 / 434 / 147	654 / 545 / 121	599 / 443 / 104	596 / 551 / 85	605 / 392 / 140	667 / 532 / 124	627 / 486 / 179	672 / 602 / 146	561 / 458 / 141	679 / 570 / 116	599 / 467 / 100	597 / 575 / 81	619 / 421 / 137	672 / 556 / 119	635 / 509 / 172	706 / 641 / 143	584 / 480 / 135	702 / 591 / 110	
30	1	493 / 190 / 65	541 / 276 / 60	502 / 269 / 102	550 / 378 / 92	517 / 348 / 168	564 / 455 / 144	431 / 333 / 142	530 / 428 / 119	501 / 205 / 64	552 / 295 / 59	511 / 288 / 100	554 / 396 / 89	523 / 366 / 163	571 / 474 / 138	449 / 350 / 137	549 / 447 / 115									
	2	541 / 276 / 60	591 / 376 / 53	550 / 385 / 92	586 / 498 / 78	564 / 461 / 144	639 / 580 / 119	530 / 435 / 119	634 / 536 / 97	552 / 295 / 59	606 / 401 / 52	554 / 404 / 89	590 / 518 / 75	571 / 481 / 138	657 / 599 / 113	549 / 454 / 115	668 / 567 / 95									
	3	531 / 489 / 51	555 / 610 / 42	590 / 467 / 84	620 / 578 / 69	611 / 542 / 127	725 / 661 / 102	605 / 500 / 103	740 / 626 / 86	533 / 509 / 49	556 / 629 / 40	595 / 488 / 81	624 / 597 / 65	630 / 562 / 122	761 / 696 / 100	624 / 519 / 99	757 / 642 / 81									
35	1	528 / 187 / 69	561 / 267 / 63	527 / 261 / 112	567 / 365 / 101	531 / 337 / 186	591 / 455 / 164	431 / 333 / 160	530 / 428 / 134	535 / 202 / 68	571 / 285 / 62	534 / 279 / 110	579 / 389 / 99	544 / 360 / 183	597 / 474 / 158	449 / 350 / 155	549 / 447 / 129									
	2	561 / 267 / 63	614 / 369 / 56	567 / 371 / 101	617 / 498 / 89	591 / 461 / 164	642 / 580 / 136	530 / 435 / 134	634 / 536 / 109	571 / 285 / 62	628 / 393 / 55	579 / 396 / 99	620 / 518 / 85	597 / 481 / 158	657 / 599 / 130	549 / 454 / 129	668 / 567 / 107									
	3	565 / 489 / 55	583 / 610 / 45	612 / 459 / 94	647 / 578 / 78	632 / 542 / 145	725 / 661 / 117	605 / 500 / 117	740 / 626 / 96	566 / 509 / 53	583 / 629 / 43	615 / 479 / 90	650 / 597 / 74	638 / 562 / 139	761 / 696 / 114	624 / 519 / 112	757 / 642 / 91									
40	1	553 / 182 / 118	589 / 262 / 108	548 / 252 / 158	593 / 358 / 145	552 / 331 / 212	606 / 446 / 186	440 / 333 / 150	530 / 428 / 150	558 / 195 / 116	598 / 280 / 106	555 / 270 / 156	604 / 382 / 143	564 / 353 / 208	623 / 474 / 183	450 / 350 / 172	549 / 447 / 144									
	2	589 / 262 / 108	636 / 361 / 97	593 / 365 / 145	649 / 498 / 129	606 / 452 / 186	664 / 580 / 157	530 / 435 / 150	634 / 536 / 121	598 / 280 / 106	649 / 385 / 95	604 / 389 / 143	650 / 518 / 124	623 / 481 / 183	669 / 599 / 150	549 / 454 / 144	668 / 567 / 119									
	3	599 / 489 / 97	611 / 610 / 79	621 / 441 / 132	675 / 578 / 114	656 / 542 / 168	725 / 661 / 135	605 / 500 / 130	740 / 626 / 107	598 / 509 / 93	609 / 629 / 75	635 / 469 / 129	677 / 597 / 108	661 / 562 / 161	761 / 696 / 132	624 / 519 / 124	757 / 642 / 102									
30	1	516 / 223 / 64	564 / 315 / 58	521 / 308 / 99	567 / 421 / 88	537 / 389 / 160	590 / 503 / 135	466 / 367 / 133	567 / 464 / 110	501 / 205 / 64	552 / 295 / 59	511 / 288 / 100	554 / 396 / 89	523 / 366 / 163	571 / 474 / 138	449 / 350 / 137	549 / 447 / 115									
	2	564 / 315 / 58	622 / 425 / 51	567 / 429 / 88	593 / 536 / 72	590 / 510 / 135	672 / 616 / 108	567 / 471 / 110	684 / 583 / 90	552 / 295 / 59	606 / 401 / 52	554 / 404 / 89	590 / 518 / 75	571 / 481 / 138	657 / 599 / 113	549 / 454 / 115	668 / 567 / 95									
	3	534 / 528 / 47	555 / 645 / 38	599 / 507 / 78	626 / 614 / 62	646 / 580 / 116	774 / 710 / 94	641 / 535 / 95	792 / 674 / 79	533 / 509 / 49	556 / 629 / 40	595 / 488 / 81	624 / 597 / 65	630 / 562 / 122	761 / 696 / 100	624 / 519 / 99	757 / 642 / 81									
35	1	541 / 216 / 67	582 / 304 / 60	542 / 298 / 108	591 / 414 / 98	548 / 376 / 177	615 / 503 / 155	466 / 367 / 149	567 / 464 / 124	535 / 202 / 68	571 / 285 / 62	534 / 279 / 110	579 / 389 / 99	544 / 360 / 183	597 / 474 / 158	449 / 350 / 155	549 / 447 / 129									
	2	582 / 304 / 60	643 / 417 / 54	591 / 421 / 98	622 / 536 / 81	615 / 510 / 155	672 / 616 / 123	567 / 471 / 124	684 / 583 / 102	571 / 285 / 62	628 / 393 / 55	579 / 396 / 99	620 / 518 / 85	597 / 481 / 158	657 / 599 / 130	549 / 454 / 129	668 / 567 / 107									
	3	565 / 528 / 51	580 / 645 / 41	630 / 507 / 89	651 / 614 / 71	646 / 580 / 133	774 / 710 / 108	641 / 535 / 107	792 / 674 / 89	566 / 509 / 53	583 / 629 / 43	615 / 479 / 90	650 / 597 / 74	638 / 562 / 139	761 / 696 / 114	624 / 519 / 112	757 / 642 / 91									
40	1	563 / 209 / 114	608 / 298 / 104	562 / 288 / 153	603 / 399 / 137	567 / 369 / 201	627 / 492 / 175	466 / 367 / 166	567 / 464 / 138	558 / 195 / 116	598 / 280 / 106	555 / 270 / 156	604 / 382 / 143	564 / 353 / 208	623 / 474 / 183	450 / 350 / 172	549 / 447 / 144									
	2	608 / 298 / 104	663 / 408 / 93	603 / 406 / 137	651 / 536 / 119	627 / 499 / 175	672 / 616 / 143	567 / 471 / 138	684 / 583 / 113	598 / 280 / 106	649 / 385 / 95	604 / 389 / 143	650 / 518 / 124	623 / 481 / 183	669 / 599 / 150	549 / 454 / 144	668 / 567 / 119									
	3	596 / 528 / 89	605 / 645 / 72	648 / 497 / 127	676 / 614 / 103	665 / 580 / 153	774 / 710 / 124	641 / 535 / 119	792 / 674 / 99	598 / 509 / 93	609 / 629 / 75	635 / 469 / 129	677 / 597 / 108	661 / 562 / 161	761 / 696 / 132	624 / 519 / 124	757 / 642 / 102									

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																																
Wind Speed [mph]		140																150																160																																
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																				
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																						
		30	1	524 / 238 / 63	565 / 329 / 56	530 / 328 / 97	580 / 447 / 86	542 / 406 / 155	595 / 520 / 130	482 / 382 / 128	583 / 480 / 106	540 / 268 / 61	588 / 367 / 54	539 / 362 / 92	594 / 487 / 81	560 / 444 / 146	629 / 561 / 122	520 / 418 / 121	624 / 518 / 99	555 / 299 / 59	610 / 405 / 52	557 / 400 / 89	594 / 514 / 75	575 / 479 / 138	663 / 597 / 113	544 / 443 / 112	658 / 551 / 92	610 / 405 / 52	668 / 521 / 44	594 / 523 / 75	640 / 642 / 61	663 / 605 / 113	790 / 737 / 91	658 / 559 / 92	810 / 701 / 77	541 / 585 / 42	596 / 735 / 35	617 / 567 / 70	686 / 684 / 56	716 / 651 / 105	866 / 802 / 86	711 / 600 / 86	862 / 739 / 70	560 / 636 / 40	615 / 764 / 32	628 / 603 / 65	733 / 735 / 53	747 / 684 / 97	919 / 855 / 80	764 / 649 / 81	916 / 788 / 65															
2	565 / 329 / 56		625 / 440 / 49	580 / 455 / 86	609 / 565 / 70	595 / 527 / 130	702 / 646 / 105	583 / 487 / 106	716 / 612 / 88	588 / 367 / 54	641 / 477 / 46	583 / 487 / 80	623 / 607 / 65	629 / 569 / 122	739 / 685 / 97	624 / 526 / 99	756 / 651 / 81	610 / 405 / 52	668 / 521 / 44	594 / 523 / 75	640 / 642 / 61	663 / 605 / 113	790 / 737 / 91	658 / 559 / 92	810 / 701 / 77	541 / 585 / 42	596 / 735 / 35	617 / 567 / 70	686 / 684 / 56	716 / 651 / 105	866 / 802 / 86	711 / 600 / 86	862 / 739 / 70	560 / 636 / 40	615 / 764 / 32	628 / 603 / 65	733 / 735 / 53	747 / 684 / 97	919 / 855 / 80	764 / 649 / 81	916 / 788 / 65																									
3	545 / 557 / 46		568 / 676 / 37	602 / 525 / 75	653 / 645 / 61	676 / 610 / 113	806 / 742 / 91	671 / 563 / 92	826 / 705 / 77	541 / 585 / 42	596 / 735 / 35	617 / 567 / 70	686 / 684 / 56	716 / 651 / 105	866 / 802 / 86	711 / 600 / 86	862 / 739 / 70	560 / 636 / 40	615 / 764 / 32	628 / 603 / 65	733 / 735 / 53	747 / 684 / 97	919 / 855 / 80	764 / 649 / 81	916 / 788 / 65	541 / 585 / 42	596 / 735 / 35	617 / 567 / 70	686 / 684 / 56	716 / 651 / 105	866 / 802 / 86	711 / 600 / 86	862 / 739 / 70	560 / 636 / 40	615 / 764 / 32	628 / 603 / 65	733 / 735 / 53	747 / 684 / 97	919 / 855 / 80	764 / 649 / 81	916 / 788 / 65																									
35	1		548 / 230 / 66	592 / 323 / 59	550 / 317 / 106	603 / 438 / 96	561 / 399 / 174	619 / 520 / 149	482 / 382 / 144	583 / 480 / 119	561 / 259 / 64	612 / 360 / 57	566 / 355 / 103	615 / 478 / 90	587 / 444 / 167	638 / 561 / 139	520 / 418 / 137	624 / 518 / 112	574 / 288 / 62	632 / 397 / 55	582 / 393 / 99	624 / 514 / 85	601 / 479 / 158	663 / 597 / 130	544 / 443 / 127	658 / 551 / 104	612 / 360 / 57	671 / 477 / 50	615 / 487 / 90	650 / 607 / 74	638 / 569 / 139	739 / 685 / 111	624 / 526 / 112	756 / 651 / 91	632 / 397 / 55	698 / 521 / 47	624 / 523 / 85	658 / 642 / 69	663 / 605 / 130	790 / 737 / 104	658 / 559 / 104	810 / 701 / 86	569 / 223 / 112	617 / 317 / 102	568 / 306 / 151	613 / 422 / 135	579 / 391 / 197	643 / 520 / 172	482 / 382 / 161	583 / 480 / 133	580 / 250 / 108	635 / 353 / 98	582 / 343 / 145	634 / 468 / 129	603 / 436 / 190	660 / 561 / 161	520 / 418 / 152	624 / 518 / 124	601 / 283 / 106	653 / 389 / 95	595 / 379 / 140	654 / 514 / 124	614 / 470 / 179	673 / 597 / 150	544 / 443 / 141	658 / 551 / 116
	2		592 / 323 / 59	644 / 431 / 52	603 / 447 / 96	637 / 565 / 80	619 / 527 / 149	702 / 646 / 120	583 / 487 / 119	716 / 612 / 99	612 / 360 / 57	671 / 477 / 50	615 / 487 / 90	650 / 607 / 74	638 / 569 / 139	739 / 685 / 111	624 / 526 / 112	756 / 651 / 91	632 / 397 / 55	698 / 521 / 47	624 / 523 / 85	658 / 642 / 69	663 / 605 / 130	790 / 737 / 104	658 / 559 / 104	810 / 701 / 86	569 / 223 / 112	617 / 317 / 102	568 / 306 / 151	613 / 422 / 135	579 / 391 / 197	643 / 520 / 172	482 / 382 / 161	583 / 480 / 133	580 / 250 / 108	635 / 353 / 98	582 / 343 / 145	634 / 468 / 129	603 / 436 / 190	660 / 561 / 161	520 / 418 / 152	624 / 518 / 124	601 / 283 / 106	653 / 389 / 95	595 / 379 / 140	654 / 514 / 124	614 / 470 / 179	673 / 597 / 150	544 / 443 / 141	658 / 551 / 116																
	3		576 / 557 / 50	592 / 676 / 40	632 / 525 / 85	667 / 645 / 69	676 / 610 / 130	806 / 742 / 104	671 / 563 / 104	826 / 705 / 86	569 / 585 / 45	615 / 735 / 38	645 / 567 / 80	686 / 684 / 63	716 / 651 / 120	866 / 802 / 98	711 / 600 / 96	862 / 739 / 79	586 / 636 / 43	615 / 764 / 34	655 / 603 / 74	733 / 735 / 60	747 / 684 / 111	919 / 855 / 92	764 / 649 / 91	916 / 788 / 74	569 / 223 / 112	617 / 317 / 102	568 / 306 / 151	613 / 422 / 135	579 / 391 / 197	643 / 520 / 172	482 / 382 / 161	583 / 480 / 133	580 / 250 / 108	635 / 353 / 98	582 / 343 / 145	634 / 468 / 129	603 / 436 / 190	660 / 561 / 161	520 / 418 / 152	624 / 518 / 124	601 / 283 / 106	653 / 389 / 95	595 / 379 / 140	654 / 514 / 124	614 / 470 / 179	673 / 597 / 150	544 / 443 / 141	658 / 551 / 116																
40	1		569 / 223 / 112	617 / 317 / 102	568 / 306 / 151	613 / 422 / 135	579 / 391 / 197	643 / 520 / 172	482 / 382 / 161	583 / 480 / 133	580 / 250 / 108	635 / 353 / 98	582 / 343 / 145	634 / 468 / 129	603 / 436 / 190	660 / 561 / 161	520 / 418 / 152	624 / 518 / 124	601 / 283 / 106	653 / 389 / 95	595 / 379 / 140	654 / 514 / 124	614 / 470 / 179	673 / 597 / 150	544 / 443 / 141	658 / 551 / 116	617 / 317 / 102	676 / 431 / 91	613 / 430 / 135	665 / 565 / 116	643 / 527 / 172	702 / 646 / 139	583 / 487 / 133	716 / 612 / 110	635 / 353 / 98	686 / 466 / 85	634 / 477 / 129	676 / 607 / 108	660 / 569 / 128	739 / 685 / 124	624 / 526 / 102	756 / 651 / 102	653 / 389 / 95	710 / 509 / 81	654 / 523 / 124	682 / 642 / 101	673 / 605 / 150	790 / 737 / 121	658 / 559 / 116	810 / 701 / 96																
	2		617 / 317 / 102	676 / 431 / 91	613 / 430 / 135	665 / 565 / 116	643 / 527 / 172	702 / 646 / 139	583 / 487 / 133	716 / 612 / 110	635 / 353 / 98	686 / 466 / 85	634 / 477 / 129	676 / 607 / 108	660 / 569 / 128	739 / 685 / 124	624 / 526 / 102	756 / 651 / 102	653 / 389 / 95	710 / 509 / 81	654 / 523 / 124	682 / 642 / 101	673 / 605 / 150	790 / 737 / 121	658 / 559 / 116	810 / 701 / 96	597 / 585 / 79	638 / 735 / 66	673 / 567 / 116	701 / 684 / 93	716 / 651 / 139	866 / 802 / 113	711 / 600 / 107	862 / 739 / 88	613 / 636 / 75	635 / 764 / 60	681 / 603 / 108	733 / 735 / 87	747 / 684 / 128	919 / 855 / 106	764 / 649 / 102	916 / 788 / 82																								
	3		606 / 557 / 87	617 / 676 / 70	662 / 525 / 124	692 / 645 / 101	683 / 610 / 150	806 / 742 / 121	671 / 563 / 116	826 / 705 / 96	597 / 585 / 79	638 / 735 / 66	673 / 567 / 116	701 / 684 / 93	716 / 651 / 139	866 / 802 / 113	711 / 600 / 107	862 / 739 / 88	613 / 636 / 75	635 / 764 / 60	681 / 603 / 108	733 / 735 / 87	747 / 684 / 128	919 / 855 / 106	764 / 649 / 102	916 / 788 / 82																																								
30	1	571 / 329 / 57	631 / 442 / 50	574 / 439 / 86	615 / 558 / 72	588 / 511 / 130	709 / 643 / 108	586 / 482 / 108	704 / 593 / 88	585 / 358 / 55	638 / 467 / 47	591 / 476 / 83	621 / 586 / 67	618 / 550 / 124	731 / 667 / 100	613 / 508 / 101	747 / 632 / 83	631 / 442 / 50	677 / 549 / 41	602 / 555 / 70	681 / 689 / 58	690 / 635 / 105	835 / 783 / 86	704 / 602 / 88	858 / 746 / 72	571 / 329 / 57	631 / 442 / 50	574 / 439 / 86	615 / 558 / 72	588 / 511 / 130	709 / 643 / 108	586 / 482 / 108	704 / 593 / 88	585 / 358 / 55	638 / 467 / 47	591 / 476 / 83	621 / 586 / 67	618 / 550 / 124	731 / 667 / 100	613 / 508 / 101	747 / 632 / 83																									
	2	631 / 442 / 50	677 / 549 / 41	602 / 555 / 70	681 / 689 / 58	690 / 635 / 105	835 / 783 / 86	704 / 602 / 88	858 / 746 / 72	638 / 467 / 47	717 / 587 / 39	621 / 596 / 67	718 / 731 / 54	731 / 676 / 100	874 / 822 / 80	747 / 641 / 83	900 / 785 / 68	631 / 442 / 50	677 / 549 / 41	602 / 555 / 70	681 / 689 / 58	690 / 635 / 105	835 / 783 / 86	704 / 602 / 88	858 / 746 / 72	574 / 705 / 35	698 / 877 / 29	679 / 674 / 58	810 / 821 / 46	832 / 770 / 86	999 / 936 / 69	855 / 732 / 72	1036 / 896 / 59	631 / 442 / 50	677 / 549 / 41	602 / 555 / 70	681 / 689 / 58	690 / 635 / 105	835 / 783 / 86	704 / 602 / 88	858 / 746 / 72	574 / 705 / 35	698 / 877 / 29	679 / 674 / 58	810 / 821 / 46	832 / 770 / 86	999 / 936 / 69	855 / 732 / 72	1036 / 896 / 59																	
	3	561 / 664 / 37	669 / 837 / 31	642 / 633 / 61	775 / 781 / 50	792 / 729 / 91	964 / 900 / 75	813 / 693 / 77	996 / 860 / 63	574 / 705 / 35	698 / 877 / 29	679 / 674 / 58	810 / 821 / 46	832 / 770 / 86	999 / 936 / 69	855 / 732 / 72	1036 / 896 / 59	561 / 664 / 37	669 / 837 / 31	642 / 633 / 61	775 / 781 / 50	792 / 729 / 91	964 / 900 / 75	813 / 693 / 77	996 / 860 / 63	574 / 705 / 35	698 / 877 / 29	679 / 674 / 58	810 / 821 / 46	832 / 770 / 86	999 / 936 / 69	855 / 732 / 72	1036 / 896 / 59	561 / 664 / 37	669 / 837 / 31	642 / 633 / 61	775 / 781 / 50	792 / 729 / 91	964 / 900 / 75	813 / 693 / 77	996 / 860 / 63																									
35	1	587 / 317 / 59	651 / 433 / 53	598 / 431 / 96	644 / 558 / 81	612 / 511 / 149	709 / 643 / 123	586 / 482 / 122	704 / 593 / 99	599 / 345 / 57	669 / 467 / 51	613 / 467 / 92	648 / 586 / 76	634 / 550 / 142	731 / 667 / 114	613 / 508 / 114	747 / 632 / 94	587 / 317 / 59	651 / 433 / 53	598 / 431 / 96	644 / 558 / 81	612 / 511 / 149	709 / 643 / 123	586 / 482 / 122	704 / 593 / 99	599 / 345 / 57	669 / 467 / 51	613 / 467 / 92	648 / 586 / 76	634 / 550 / 142	731 / 667 / 114	613 / 508 / 114	747 / 632 / 94	587 / 317 / 59	651 / 433 / 53	598 / 431 / 96	644 / 558 / 81	612 / 511 / 149	709 / 643 / 123	586 / 482 / 122	704 / 593 / 99																									
	2	651 / 433 / 53	704 / 549 / 44	630 / 555 / 80	681 / 689 / 65	690 / 635 / 120	835 / 783 / 98	704 / 602 / 99	858 / 746 / 81	669 / 467 / 51	725 / 587 / 42	648 / 596 / 76	718 / 731 / 62	731 / 676 / 114	874 / 822 / 92	747 / 641 / 94	900 / 785 / 76	651 / 433 / 53	704 / 549 / 44	630 / 555 / 80	681 / 689 / 65	690 / 635 / 120	835 / 783 / 98	704 / 602 / 99	858 / 746 / 81	597 / 705 / 38	698 / 877 / 31	679 / 674 / 65	810 / 821 / 53	832 / 770 / 98	999 / 936 / 79	855 / 732 / 81	1036 / 896 / 66	651 / 433 / 53	704 / 549 / 44	630 / 555 / 80	681 / 689 / 65	690 / 635 / 120	835 / 783 / 98	704 / 602 / 99	858 / 746 / 81																									
	3	585 / 664 / 40	669 / 837 / 33	659 / 633 / 69	775 / 781 / 56	792 / 729 / 104	964 / 900 / 86	813 / 693 / 86	996 / 860 / 71	597 / 705 / 38	698 / 877 / 31	679 / 674 / 65	810 / 821 / 53	8																																																				

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge															
45	1	563 / 137 / 131	582 / 201 / 120	560 / 196 / 180	588 / 282 / 165	547 / 264 / 245	583 / 361 / 217	417 / 274 / 211	470 / 365 / 183	567 / 150 / 129	590 / 218 / 118	566 / 213 / 177	597 / 305 / 162	549 / 281 / 237	599 / 389 / 213	427 / 292 / 205	487 / 387 / 177	571 / 163 / 127	597 / 235 / 116	571 / 230 / 174	607 / 328 / 160	560 / 303 / 233	604 / 409 / 205	444 / 315 / 202	509 / 408 / 171	
	2	582 / 201 / 120	619 / 286 / 110	588 / 287 / 165	623 / 396 / 148	583 / 366 / 217	650 / 497 / 193	470 / 371 / 183	565 / 469 / 152	590 / 218 / 118	631 / 309 / 108	597 / 311 / 162	637 / 427 / 145	599 / 395 / 213	659 / 522 / 185	487 / 393 / 177	590 / 493 / 146	597 / 235 / 116	644 / 331 / 106	607 / 334 / 160	652 / 457 / 142	604 / 415 / 205	680 / 558 / 181	509 / 415 / 171	613 / 516 / 140	
	3	613 / 404 / 114	626 / 526 / 97	614 / 357 / 154	664 / 485 / 136	632 / 452 / 201	685 / 577 / 169	536 / 434 / 162	654 / 545 / 134	623 / 435 / 112	626 / 551 / 93	627 / 385 / 151	682 / 520 / 134	639 / 476 / 193	693 / 602 / 161	561 / 458 / 155	679 / 570 / 128	635 / 467 / 110	625 / 575 / 89	640 / 413 / 148	701 / 556 / 131	659 / 509 / 189	717 / 641 / 157	584 / 480 / 149	702 / 591 / 121	
	50	1	586 / 133 / 138	610 / 197 / 128	581 / 190 / 190	602 / 272 / 174	559 / 256 / 259	600 / 354 / 233	425 / 270 / 227	483 / 365 / 200	588 / 145 / 135	616 / 214 / 126	585 / 206 / 187	611 / 294 / 171	569 / 277 / 255	615 / 382 / 228	441 / 292 / 224	495 / 387 / 194	591 / 157 / 133	623 / 231 / 124	590 / 223 / 183	619 / 316 / 168	580 / 298 / 250	630 / 409 / 224	458 / 315 / 221	509 / 408 / 187
		2	610 / 197 / 128	642 / 281 / 117	602 / 277 / 174	643 / 389 / 158	600 / 359 / 233	661 / 487 / 206	483 / 371 / 200	565 / 469 / 166	616 / 214 / 126	653 / 303 / 115	611 / 300 / 171	656 / 418 / 155	615 / 387 / 228	682 / 522 / 202	495 / 393 / 194	590 / 493 / 160	623 / 231 / 124	664 / 325 / 112	619 / 322 / 168	669 / 448 / 152	630 / 415 / 224	688 / 545 / 193	509 / 415 / 187	613 / 516 / 153
		3	637 / 396 / 122	657 / 526 / 106	636 / 350 / 164	679 / 474 / 146	644 / 443 / 215	706 / 577 / 184	536 / 434 / 177	654 / 545 / 146	647 / 427 / 119	656 / 551 / 101	647 / 377 / 161	696 / 509 / 142	650 / 466 / 206	714 / 602 / 176	561 / 458 / 170	679 / 570 / 139	644 / 449 / 115	654 / 575 / 96	659 / 405 / 158	713 / 543 / 139	669 / 498 / 202	738 / 641 / 171	584 / 480 / 163	702 / 591 / 133
	60	1	659 / 126 / 151	649 / 187 / 141	627 / 180 / 210	649 / 262 / 195	599 / 247 / 293	630 / 341 / 263	447 / 266 / 262	508 / 365 / 234	648 / 137 / 149	653 / 203 / 138	627 / 196 / 206	655 / 283 / 192	608 / 267 / 288	643 / 367 / 257	463 / 288 / 258	520 / 387 / 226	636 / 149 / 146	657 / 218 / 136	630 / 211 / 203	661 / 304 / 188	605 / 282 / 278	656 / 393 / 252	478 / 310 / 254	531 / 408 / 218
		2	649 / 187 / 141	683 / 270 / 130	649 / 267 / 195	679 / 373 / 177	630 / 346 / 263	695 / 476 / 237	508 / 371 / 234	565 / 469 / 195	653 / 203 / 138	692 / 291 / 128	655 / 289 / 192	690 / 401 / 173	643 / 372 / 257	698 / 500 / 227	520 / 393 / 226	590 / 493 / 187	657 / 218 / 136	701 / 312 / 125	661 / 310 / 188	701 / 429 / 169	656 / 399 / 252	717 / 533 / 221	531 / 415 / 218	613 / 516 / 179
		3	669 / 374 / 133	719 / 526 / 122	675 / 337 / 184	722 / 464 / 166	667 / 425 / 242	732 / 564 / 211	543 / 434 / 206	654 / 545 / 171	676 / 402 / 130	716 / 551 / 117	685 / 363 / 180	737 / 498 / 162	684 / 456 / 237	755 / 602 / 206	561 / 458 / 199	679 / 570 / 163	683 / 431 / 128	711 / 575 / 112	695 / 389 / 177	752 / 531 / 158	701 / 487 / 232	778 / 641 / 201	584 / 480 / 191	702 / 591 / 155
45	1	575 / 176 / 125	605 / 253 / 114	577 / 248 / 171	605 / 345 / 154	572 / 325 / 229	620 / 437 / 201	454 / 333 / 196	530 / 428 / 165	579 / 189 / 122	613 / 270 / 112	583 / 266 / 168	615 / 368 / 151	573 / 341 / 221	636 / 465 / 197	463 / 350 / 190	549 / 447 / 159									
	2	605 / 253 / 114	656 / 354 / 104	605 / 352 / 154	666 / 488 / 139	620 / 443 / 201	686 / 580 / 173	530 / 435 / 165	634 / 536 / 134	613 / 270 / 112	668 / 377 / 101	615 / 375 / 151	681 / 518 / 136	636 / 471 / 197	690 / 599 / 165	549 / 454 / 159	668 / 567 / 131									
	3	633 / 489 / 106	639 / 610 / 87	640 / 432 / 142	703 / 578 / 125	665 / 530 / 181	725 / 661 / 149	605 / 500 / 143	740 / 626 / 118	631 / 509 / 101	635 / 629 / 83	653 / 460 / 139	703 / 597 / 119	684 / 562 / 177	761 / 696 / 145	624 / 519 / 137	757 / 642 / 112									
	50	1	594 / 170 / 131	630 / 248 / 122	594 / 240 / 180	627 / 339 / 164	580 / 314 / 241	633 / 428 / 215	467 / 333 / 214	530 / 428 / 180	608 / 185 / 131	636 / 265 / 119	599 / 256 / 177	636 / 361 / 161	590 / 335 / 237	648 / 455 / 211	476 / 350 / 207	549 / 447 / 173								
		2	630 / 248 / 122	675 / 347 / 110	627 / 345 / 164	683 / 477 / 149	633 / 434 / 215	708 / 580 / 189	530 / 435 / 180	634 / 536 / 146	636 / 265 / 119	686 / 369 / 108	636 / 368 / 161	696 / 507 / 211	648 / 462 / 180	711 / 599 / 180	549 / 454 / 173	668 / 567 / 143								
		3	654 / 479 / 112	666 / 610 / 94	658 / 423 / 152	730 / 578 / 136	688 / 530 / 198	741 / 661 / 163	605 / 500 / 156	740 / 626 / 129	663 / 509 / 110	662 / 629 / 90	669 / 450 / 149	729 / 597 / 130	707 / 562 / 193	763 / 696 / 158	624 / 519 / 150	757 / 642 / 122								
	60	1	636 / 161 / 144	675 / 239 / 136	632 / 227 / 199	667 / 326 / 184	614 / 302 / 273	670 / 420 / 247	486 / 328 / 246	541 / 428 / 210	649 / 176 / 144	680 / 255 / 133	647 / 247 / 199	674 / 347 / 180	622 / 322 / 268	683 / 446 / 242	502 / 350 / 242	551 / 447 / 203								
		2	675 / 239 / 136	709 / 333 / 122	667 / 332 / 184	711 / 457 / 166	670 / 425 / 247	735 / 566 / 216	541 / 435 / 210	634 / 536 / 171	680 / 255 / 133	718 / 353 / 120	674 / 353 / 180	722 / 485 / 162	683 / 452 / 242	753 / 599 / 211	551 / 454 / 203	668 / 567 / 167								
		3	691 / 460 / 125	722 / 610 / 109	705 / 415 / 173	767 / 564 / 155	718 / 518 / 227	779 / 661 / 191	605 / 500 / 183	740 / 626 / 151	713 / 499 / 125	715 / 629 / 104	714 / 440 / 169	782 / 597 / 151	735 / 549 / 221	800 / 696 / 185	624 / 519 / 175	757 / 642 / 143								
45	1	583 / 202 / 120	620 / 287 / 110	589 / 283 / 165	624 / 391 / 148	584 / 363 / 217	652 / 492 / 193	471 / 367 / 183	567 / 464 / 152	579 / 189 / 122	613 / 270 / 112	583 / 266 / 168	615 / 368 / 151	573 / 341 / 221	636 / 465 / 197	463 / 350 / 190	549 / 447 / 159									
	2	620 / 287 / 110	681 / 400 / 99	624 / 398 / 148	680 / 536 / 131	652 / 499 / 193	691 / 616 / 157	567 / 471 / 152	684 / 583 / 124	613 / 270 / 112	668 / 377 / 101	615 / 375 / 151	681 / 518 / 136	636 / 471 / 197	690 / 599 / 165	549 / 454 / 159	668 / 567 / 131									
	3	627 / 528 / 97	630 / 645 / 78	665 / 487 / 136	701 / 614 / 113	687 / 580 / 169	774 / 710 / 137	641 / 535 / 131	792 / 674 / 109	631 / 509 / 101	635 / 629 / 83	653 / 460 / 139	703 / 597 / 119	684 / 562 / 177	761 / 696 / 145	624 / 519 / 137	757 / 642 / 112									
	50	1	611 / 198 / 128	643 / 282 / 117	603 / 273 / 174	644 / 383 / 158	601 / 356 / 233	663 / 482 / 206	484 / 367 / 200	567 / 464 / 166	608 / 185 / 131	636 / 265 / 119	599 / 256 / 177	636 / 361 / 161	590 / 335 / 237	648 / 455 / 211	476 / 350 / 207	549 / 447 / 173								
		2	643 / 282 / 117	697 / 391 / 106	644 / 390 / 158	709 / 536 / 142	663 / 489 / 206	712 / 616 / 171	567 / 471 / 166	684 / 583 / 136	636 / 265 / 119	686 / 369 / 108	636 / 368 / 161	696 / 507 / 146	648 / 462 / 211	711 / 599 / 180	549 / 454 / 173	668 / 567 / 143								
		3	658 / 528 / 106	655 / 645 / 85	681 / 476 / 146	726 / 614 / 123	708 / 580 / 184	774 / 710 / 149	641 / 535 / 143	792 / 674 / 119	663 / 509 / 110	662 / 629 / 90	669 / 450 / 149	729 / 597 / 130	707 / 562 / 193	763 / 696 / 158	624 / 519 / 150	757 / 642 / 122								
	60	1	650 / 188 / 141	684 / 271 / 130	649 / 263 / 195	680 / 368 / 177	631 / 342 / 263	696 / 472 / 237	509 / 367 / 234	567 / 464 / 195	649 / 176 / 144	680 / 255 / 133	647 / 247 / 199	674 / 347 / 180	622 / 322 / 268	683 / 446 / 242	502 / 350 / 242	551 / 447 / 203								
		2	684 / 271 / 130	727 / 374 / 117	680 / 375 / 177	733 / 512 / 158	696 / 478 / 237	752 / 616 / 201	567 / 471 / 195	684 / 583 / 159	680 / 255 / 133	718 / 353 / 120	674 / 353 / 180	722 / 485 / 162	683 / 452 / 242	753 / 599 / 211	551 / 454 / 203	668 / 567 / 167								
		3	720 / 528 / 122	705 / 645 / 99	724 / 466 / 166	776 / 614 / 144	734 / 566 / 211	796 / 710 / 175	641 / 535 / 167	792 / 674 / 139	713 / 499 / 125	715 / 629 / 104	714 / 440 / 169	782 / 597 / 151	735 / 549 / 221	800 / 696 / 185	624 / 519 / 175	757 / 642 / 143								

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																							
Wind Speed [mph]		140																150																160																							
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45											
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge													
		45	1	598 / 219 / 120	628 / 305 / 108	594 / 301 / 162	634 / 414 / 145	595 / 384 / 213	654 / 509 / 185	482 / 382 / 177	583 / 480 / 146	606 / 246 / 116	643 / 339 / 104	606 / 337 / 157	652 / 459 / 139	618 / 427 / 205	683 / 561 / 177	520 / 418 / 168	624 / 518 / 137	615 / 273 / 112	672 / 381 / 101	617 / 372 / 151	670 / 503 / 134	640 / 470 / 197	694 / 597 / 165	544 / 443 / 155	658 / 559 / 128	612 / 381 / 101	738 / 509 / 89	670 / 512 / 134	707 / 642 / 110	694 / 605 / 165	790 / 737 / 133	658 / 559 / 128	810 / 701 / 106	636 / 557 / 95	641 / 676 / 76	678 / 514 / 134	716 / 645 / 110	704 / 610 / 165	806 / 742 / 133	671 / 563 / 128	826 / 705 / 106	624 / 585 / 87	661 / 735 / 72	702 / 567 / 128	724 / 684 / 102	720 / 651 / 153	866 / 802 / 125	711 / 600 / 118	862 / 739 / 97	639 / 636 / 83	656 / 764 / 66	707 / 603 / 119	747 / 735 / 96	747 / 684 / 141	919 / 855 / 117
50	1	614 / 211 / 126	650 / 299 / 115	608 / 290 / 171	652 / 413 / 155	611 / 377 / 228	677 / 509 / 202	491 / 382 / 194	583 / 480 / 160	632 / 242 / 124	663 / 332 / 110	629 / 330 / 168	669 / 449 / 149	632 / 419 / 219	706 / 561 / 193	520 / 418 / 183	624 / 518 / 150	639 / 268 / 119	690 / 373 / 108	638 / 365 / 161	699 / 503 / 146	651 / 460 / 211	716 / 597 / 180	544 / 443 / 170	658 / 559 / 139	667 / 557 / 103	665 / 676 / 83	692 / 503 / 142	741 / 645 / 120	726 / 610 / 180	806 / 742 / 145	671 / 563 / 139	826 / 705 / 116	652 / 585 / 94	684 / 735 / 78	713 / 554 / 136	746 / 684 / 111	739 / 651 / 167	866 / 802 / 136	711 / 600 / 129	862 / 739 / 105	665 / 636 / 90	677 / 764 / 71	734 / 603 / 130	768 / 735 / 105	747 / 684 / 154	919 / 855 / 128	764 / 649 / 122	916 / 788 / 99								
60	1	651 / 200 / 138	689 / 287 / 128	652 / 280 / 192	686 / 389 / 173	639 / 363 / 257	709 / 498 / 232	516 / 382 / 226	583 / 480 / 187	666 / 228 / 136	712 / 325 / 125	671 / 318 / 188	714 / 440 / 169	656 / 402 / 247	734 / 548 / 221	536 / 418 / 214	624 / 518 / 175	682 / 257 / 133	721 / 357 / 120	676 / 350 / 180	726 / 481 / 162	686 / 450 / 242	758 / 597 / 211	544 / 443 / 199	658 / 559 / 163	689 / 287 / 128	735 / 395 / 114	686 / 396 / 173	743 / 540 / 155	709 / 505 / 232	768 / 646 / 196	583 / 487 / 187	716 / 612 / 155	712 / 325 / 125	769 / 445 / 112	714 / 448 / 169	781 / 607 / 151	734 / 556 / 221	777 / 685 / 180	624 / 526 / 175	756 / 651 / 143	721 / 357 / 120	784 / 485 / 106	726 / 490 / 162	780 / 642 / 211	758 / 605 / 170	802 / 737 / 170	658 / 559 / 163	810 / 701 / 135								
45	2	686 / 415 / 97	759 / 549 / 85	686 / 555 / 128	726 / 689 / 105	701 / 635 / 153	835 / 783 / 125	704 / 602 / 121	858 / 746 / 100	700 / 447 / 93	777 / 587 / 80	702 / 596 / 122	741 / 731 / 99	731 / 676 / 145	874 / 822 / 117	747 / 641 / 115	900 / 785 / 93	643 / 705 / 72	699 / 877 / 59	724 / 674 / 105	810 / 821 / 84	832 / 770 / 125	999 / 936 / 101	855 / 732 / 100	1036 / 896 / 81	643 / 705 / 72	699 / 877 / 59	724 / 674 / 105	810 / 821 / 84	832 / 770 / 125	999 / 936 / 101	855 / 732 / 100	1036 / 896 / 81	644 / 331 / 106	700 / 447 / 93	652 / 449 / 142	702 / 586 / 122	680 / 550 / 181	731 / 667 / 145	613 / 508 / 140	747 / 632 / 115	644 / 331 / 106	700 / 447 / 93	652 / 449 / 142	702 / 586 / 122	680 / 550 / 181	731 / 667 / 145	613 / 508 / 140	747 / 632 / 115								
50	2	702 / 406 / 103	786 / 549 / 92	715 / 555 / 139	749 / 689 / 114	720 / 635 / 167	835 / 783 / 136	704 / 602 / 133	858 / 746 / 109	729 / 447 / 101	802 / 587 / 87	729 / 596 / 133	763 / 731 / 108	740 / 676 / 158	874 / 822 / 128	747 / 641 / 126	900 / 785 / 102	643 / 705 / 78	718 / 877 / 64	747 / 674 / 114	810 / 821 / 92	832 / 770 / 136	999 / 936 / 110	855 / 732 / 109	1036 / 896 / 89	643 / 705 / 78	718 / 877 / 64	747 / 674 / 114	810 / 821 / 92	832 / 770 / 136	999 / 936 / 110	855 / 732 / 109	1036 / 896 / 89	664 / 325 / 112	729 / 447 / 101	669 / 440 / 152	729 / 586 / 133	688 / 538 / 193	740 / 667 / 158	613 / 508 / 153	747 / 632 / 126																
60	2	746 / 397 / 117	798 / 522 / 101	754 / 543 / 158	795 / 689 / 133	760 / 635 / 196	835 / 783 / 155	704 / 602 / 127	858 / 746 / 127	753 / 427 / 112	831 / 572 / 99	764 / 582 / 151	807 / 731 / 125	777 / 676 / 185	874 / 822 / 150	747 / 641 / 147	900 / 785 / 119	713 / 705 / 91	756 / 877 / 75	793 / 674 / 133	836 / 821 / 107	832 / 770 / 160	999 / 936 / 129	855 / 732 / 127	1036 / 896 / 103	713 / 705 / 91	756 / 877 / 75	793 / 674 / 133	836 / 821 / 107	832 / 770 / 160	999 / 936 / 129	855 / 732 / 127	1036 / 896 / 103	664 / 325 / 112	729 / 447 / 101	669 / 440 / 152	729 / 586 / 133	688 / 538 / 193	740 / 667 / 158	613 / 508 / 153	747 / 632 / 126																
45	3	650 / 741 / 68	720 / 909 / 55	736 / 711 / 99	869 / 885 / 81	895 / 831 / 121	1066 / 1002 / 97	892 / 766 / 93	1108 / 961 / 78	675 / 797 / 66	765 / 969 / 53	746 / 743 / 93	892 / 911 / 76	924 / 861 / 113	1131 / 1065 / 93	953 / 821 / 90	1128 / 980 / 72	650 / 741 / 68	720 / 909 / 55	736 / 711 / 99	869 / 885 / 81	895 / 831 / 121	1066 / 1002 / 97	892 / 766 / 93	1108 / 961 / 78	675 / 797 / 66	765 / 969 / 53	746 / 743 / 93	892 / 911 / 76	924 / 861 / 113	1131 / 1065 / 93	953 / 821 / 90	1128 / 980 / 72	672 / 389 / 99	739 / 518 / 87	685 / 525 / 134	726 / 658 / 110	697 / 607 / 161	822 / 758 / 133	685 / 574 / 128	818 / 698 / 103																
50	3	671 / 741 / 74	721 / 909 / 60	758 / 711 / 108	869 / 885 / 89	895 / 831 / 132	1066 / 1002 / 106	892 / 766 / 102	1108 / 961 / 85	696 / 797 / 71	765 / 969 / 58	746 / 743 / 101	892 / 911 / 82	924 / 861 / 123	1131 / 1065 / 101	953 / 821 / 99	1128 / 980 / 78	671 / 741 / 74	721 / 909 / 60	758 / 711 / 108	869 / 885 / 89	895 / 831 / 132	1066 / 1002 / 106	892 / 766 / 102	1108 / 961 / 85	696 / 797 / 71	765 / 969 / 58	746 / 743 / 101	892 / 911 / 82	924 / 861 / 123	1131 / 1065 / 101	953 / 821 / 99	1128 / 980 / 78	689 / 381 / 106	767 / 518 / 94	699 / 513 / 142	750 / 658 / 120	718 / 607 / 176	822 / 758 / 145	685 / 574 / 139	818 / 698 / 112																
60	3	717 / 342 / 122	778 / 466 / 109	720 / 461 / 166	792 / 624 / 147	747 / 574 / 216	791 / 703 / 175	650 / 542 / 171	785 / 667 / 139	735 / 373 / 120	802 / 506 / 106	740 / 502 / 162	799 / 658 / 140	759 / 607 / 206	826 / 758 / 170	685 / 574 / 163	818 / 698 / 131	717 / 342 / 122	778 / 466 / 109	720 / 461 / 166	792 / 624 / 147	747 / 574 / 216	791 / 703 / 175	650 / 542 / 171	785 / 667 / 139	735 / 373 / 120	802 / 506 / 106	740 / 502 / 162	799 / 658 / 140	759 / 607 / 206	826 / 758 / 170	685 / 574 / 163	818 / 698 / 131	728 / 489 / 91	792 / 621 / 76	697 / 619 / 113	754 / 768 / 93	766 / 713 / 137	938 / 886 / 109	785 / 677 / 90	968 / 846 / 84	739 / 518 / 87	803 / 652 / 72	707 / 652 / 108	777 / 799 / 87	797 / 745 / 129	963 / 912 / 105	818 / 709 / 103	997 / 874 / 84								
45	1	665 / 364 / 104	728 / 489 / 91	662 / 482 / 136	715 / 624 / 116	682 / 574 / 169	766 / 703 / 137	650 / 542 / 134	785 / 667 / 109	672 / 389 / 99	739 / 518 / 87	685 / 525 / 134	726 / 658 / 110	697 / 607 / 161	822 / 758 / 133	685 / 574 / 128	818 / 698 / 103	665 / 364 / 104	728 / 489 / 91	662 / 482 / 136	715 / 624 / 116	682 / 574 / 169	766 / 703 / 137	650 / 542 / 134	785 / 667 / 109	672 / 389 / 99	739 / 518 / 87	685 / 525 / 134	726 / 658 / 110	697 / 607 / 161	822 / 758 / 133	685 / 574 / 128	818 / 698 / 103	665 / 364 / 104	728 / 489 / 91	662 / 482 / 136	715 / 624 / 116	682 / 574 / 169	766 / 703 / 137	650 / 542 / 134	785 / 667 / 109	672 / 389 / 99	739 / 518 / 87	685 / 525 / 134	726 / 658 / 110	697 / 607 / 161	822 / 758 / 133	685 / 574 / 128	818 / 698 / 103								
50	1	684 / 357 / 110	740 / 477 / 96	677 / 472 / 146	741 / 624 / 127	704 / 574 / 184	766 / 703 / 149	650 / 542 / 146	785 / 667 / 119	689 / 381 / 106	767 / 518 / 94	699 / 513 / 142	750 / 658 / 120	718 / 607 / 176	822 / 758 / 145	685 / 574 / 139	818 / 698 / 112	684 / 357 / 110	740 / 477 / 96	677 / 472 / 146	741 / 624 / 127	704 / 574 / 184	766 / 703 / 149	650 / 542 / 146	785 / 667 / 119	689 / 381 / 106	767 / 518 / 94	699 / 513 / 142	750 / 658 / 120	718 / 607 / 176	822 / 758 / 145	685 / 574 / 139	818 / 698 / 112	684 / 357 / 110	740 / 477 / 96	677 / 472 / 146	741 / 624 / 127	704 / 574 / 184	766 / 703 / 149	650 / 542 / 146	785 / 667 / 119	689 / 381 / 106	767 / 518 / 94	699 / 513 / 142	750 / 658 / 120	718 / 607 / 176	822 / 758 / 145	685 / 574 / 139	818 / 698 / 112								
60	1	717 / 342 / 122	778 / 466 / 109	720 / 461 / 166	792 / 624 / 147	747 / 574 / 216	791 / 703 / 175	650 / 542 / 171	785 / 667 / 139	735 / 373 / 120	802 / 506 / 106	740 / 502 / 162	799 / 658 / 140	759 / 607 / 206	826 / 758 / 170	685 / 574 / 163	818 / 698 / 131	717 / 342 / 122	778 / 466 / 109	720 / 461 / 166	792 / 624 / 147	747 / 574 / 216	791 / 703 / 175	650 / 542 / 171	785 / 667 / 139	735 / 373 / 120	802 / 506 / 106	740 / 502 / 162	799 / 658 / 140	759 / 607 / 206	826 / 758 / 170	685 / 574 / 163	818 / 698 / 131	717 / 342 / 122	778 / 466 / 109	720 / 461 / 166	792 / 624 / 147	747 / 574 / 216	791 / 703 / 175	650 / 542 / 171	785 / 667 / 139	735 / 373 / 120	802 / 506 / 106	740 / 502 / 162	799 / 658 / 140	759 / 607 / 206	826 / 758 / 170	685 / 574 / 163	818 / 698 / 131								
45	2	728 / 489 / 91	792 / 621 / 76	697 / 619 / 113	754 / 768 / 93	766 / 713 / 137	938 / 886 / 109	785 / 677 / 90	968 / 846 / 84	739 / 518 / 87	803 / 652 / 72	707 / 652 / 108	777 / 799 / 87	797 / 745 / 129	963 / 912 / 105	818 / 709 / 103	997 / 874 / 84	728 / 489 / 91	792 / 621 / 76	697 / 619 / 113	754 / 768 / 93	766 / 713 / 137	938 / 886 / 109	785 / 677 / 90	968 / 846 / 84	739 / 518 / 87	803 / 652 / 72	707 / 652 / 108	777 / 799 / 87	797 / 745 / 129	963 / 912 / 105	818 / 709 / 103	997 / 874 / 84	650 / 741 / 68	720 / 909 / 55	736 / 711 / 99	869 / 885 / 81	895 / 831 / 121	1066 / 1002 / 97	892 / 766 / 93	1108 / 961 / 78	675 / 797 / 66	765 / 969 / 53	746 / 743 / 93	892 / 911 / 76	924 / 861 / 113	1131 / 1065 / 93	953 / 821 / 90	1128 / 980 / 72								
60	2	778 / 466 / 109	865 / 621 / 96	772 / 619 / 123	816 / 768 / 101	791 / 713 / 149																																																			

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge														
70	1	722 / 119 / 163	694 / 180 / 154	687 / 171 / 227	690 / 252 / 214	623 / 234 / 321	669 / 334 / 297	468 / 262 / 295	524 / 359 / 264	709 / 130 / 160	696 / 195 / 151	674 / 185 / 223	694 / 272 / 210	630 / 253 / 315	681 / 360 / 291	483 / 283 / 291	545 / 387 / 259	696 / 141 / 157	698 / 210 / 148	675 / 204 / 223	698 / 292 / 206	637 / 272 / 309	678 / 377 / 279	498 / 305 / 286	555 / 408 / 250
	2	694 / 180 / 154	719 / 259 / 142	690 / 257 / 214	725 / 365 / 198	669 / 339 / 297	710 / 456 / 262	524 / 364 / 264	578 / 469 / 223	696 / 195 / 151	725 / 279 / 139	694 / 278 / 210	734 / 393 / 193	681 / 365 / 291	727 / 488 / 256	545 / 393 / 259	590 / 493 / 214	698 / 210 / 148	732 / 298 / 136	698 / 298 / 206	743 / 420 / 189	678 / 383 / 279	744 / 521 / 250	555 / 415 / 250	613 / 516 / 205
	3	707 / 359 / 145	748 / 503 / 133	710 / 323 / 202	745 / 443 / 181	700 / 416 / 273	774 / 564 / 244	566 / 434 / 236	654 / 545 / 196	712 / 386 / 142	758 / 539 / 130	718 / 348 / 198	758 / 475 / 177	715 / 446 / 268	776 / 587 / 232	578 / 458 / 227	679 / 570 / 186	733 / 422 / 142	768 / 575 / 127	725 / 372 / 193	770 / 506 / 172	731 / 476 / 262	797 / 624 / 226	589 / 480 / 218	702 / 591 / 177
80	1	759 / 111 / 169	744 / 173 / 166	736 / 161 / 241	726 / 243 / 232	654 / 225 / 350	692 / 321 / 324	489 / 258 / 327	540 / 353 / 292	759 / 123 / 169	733 / 187 / 163	736 / 178 / 241	728 / 262 / 227	659 / 243 / 344	702 / 345 / 317	503 / 279 / 322	559 / 380 / 287	759 / 136 / 169	733 / 201 / 159	721 / 192 / 236	730 / 281 / 222	677 / 267 / 344	711 / 369 / 310	517 / 301 / 317	568 / 401 / 276
	2	744 / 173 / 166	749 / 248 / 152	726 / 247 / 232	752 / 350 / 213	692 / 325 / 324	738 / 445 / 290	540 / 358 / 292	599 / 469 / 251	733 / 187 / 163	771 / 272 / 152	728 / 266 / 227	759 / 376 / 208	702 / 350 / 317	753 / 477 / 283	559 / 386 / 287	611 / 493 / 241	733 / 201 / 159	775 / 292 / 149	730 / 286 / 222	766 / 401 / 203	711 / 374 / 310	768 / 508 / 276	568 / 407 / 276	621 / 516 / 230
	3	740 / 344 / 156	789 / 492 / 146	740 / 310 / 217	782 / 433 / 199	731 / 407 / 303	797 / 550 / 270	588 / 434 / 266	654 / 545 / 220	759 / 123 / 156	797 / 526 / 142	745 / 333 / 213	793 / 464 / 194	745 / 436 / 297	817 / 587 / 263	600 / 458 / 256	679 / 570 / 210	763 / 404 / 152	805 / 561 / 139	750 / 356 / 208	803 / 494 / 189	759 / 466 / 290	814 / 608 / 250	610 / 480 / 246	702 / 591 / 200
90	1	815 / 106 / 180	798 / 166 / 176	791 / 155 / 257	759 / 233 / 247	694 / 221 / 384	726 / 314 / 354	508 / 254 / 359	555 / 347 / 319	815 / 118 / 180	782 / 179 / 173	791 / 171 / 257	757 / 251 / 241	698 / 239 / 377	734 / 338 / 347	521 / 275 / 353	573 / 374 / 313	815 / 130 / 180	782 / 197 / 173	775 / 184 / 252	757 / 269 / 236	701 / 256 / 369	742 / 361 / 339	526 / 291 / 342	580 / 394 / 302
	2	798 / 166 / 176	792 / 242 / 165	759 / 237 / 247	792 / 342 / 231	726 / 319 / 354	764 / 435 / 317	555 / 352 / 319	620 / 469 / 279	782 / 179 / 173	795 / 260 / 161	757 / 255 / 241	797 / 367 / 226	734 / 343 / 347	778 / 466 / 309	573 / 379 / 313	631 / 493 / 268	782 / 197 / 173	797 / 279 / 158	757 / 274 / 236	802 / 392 / 220	742 / 366 / 339	791 / 496 / 302	580 / 399 / 302	640 / 516 / 256
	3	785 / 337 / 169	808 / 469 / 154	782 / 303 / 236	816 / 423 / 215	760 / 398 / 332	817 / 536 / 294	599 / 426 / 290	663 / 545 / 245	786 / 361 / 165	834 / 514 / 154	785 / 326 / 231	825 / 452 / 210	773 / 426 / 324	835 / 572 / 286	621 / 458 / 285	679 / 570 / 234	787 / 386 / 161	840 / 547 / 150	788 / 348 / 226	833 / 482 / 205	784 / 455 / 317	853 / 608 / 279	630 / 480 / 273	702 / 591 / 222
Wind Speed [mph]		110								115															
70	1	696 / 155 / 157	715 / 229 / 148	676 / 219 / 219	702 / 313 / 202	643 / 291 / 303	689 / 402 / 273	505 / 322 / 277	564 / 428 / 241	682 / 166 / 154	717 / 245 / 145	676 / 234 / 214	707 / 333 / 198	663 / 316 / 303	700 / 427 / 268	520 / 345 / 273	573 / 447 / 232	ASCE Group Zone							
	2	715 / 229 / 148	738 / 318 / 133	702 / 318 / 202	752 / 447 / 185	689 / 408 / 273	760 / 553 / 244	564 / 435 / 241	634 / 536 / 196	717 / 245 / 145	762 / 346 / 133	707 / 339 / 198	761 / 474 / 181	700 / 433 / 268	776 / 584 / 238	573 / 454 / 232	668 / 567 / 191	Panal Angle							
	3	738 / 450 / 139	778 / 610 / 124	732 / 397 / 189	782 / 538 / 168	746 / 507 / 256	817 / 661 / 220	605 / 500 / 209	740 / 626 / 173	744 / 478 / 136	767 / 629 / 118	740 / 421 / 185	794 / 568 / 164	761 / 536 / 250	837 / 696 / 214	624 / 519 / 200	757 / 642 / 164	Mono Slope							
80	1	759 / 149 / 169	749 / 220 / 159	721 / 210 / 236	732 / 300 / 217	682 / 285 / 337	721 / 393 / 303	522 / 317 / 307	576 / 420 / 266	744 / 160 / 166	750 / 234 / 156	713 / 224 / 232	751 / 326 / 217	688 / 304 / 330	730 / 417 / 297	537 / 339 / 302	595 / 447 / 261	0 - 7.5							
	2	749 / 220 / 159	780 / 311 / 146	732 / 305 / 217	772 / 427 / 199	721 / 399 / 303	783 / 539 / 270	576 / 427 / 266	634 / 536 / 220	750 / 234 / 156	784 / 330 / 142	751 / 332 / 217	797 / 463 / 199	730 / 423 / 297	797 / 570 / 263	595 / 454 / 261	668 / 567 / 215	7.5 - 15							
	3	766 / 430 / 149	813 / 595 / 136	773 / 388 / 208	813 / 524 / 184	772 / 495 / 283	833 / 643 / 243	619 / 500 / 236	740 / 626 / 195	769 / 456 / 146	820 / 629 / 132	778 / 412 / 203	823 / 554 / 180	786 / 524 / 276	850 / 677 / 236	626 / 519 / 225	757 / 642 / 184	15 - 30							
90	1	815 / 143 / 180	778 / 211 / 169	775 / 202 / 252	774 / 293 / 236	705 / 274 / 362	750 / 385 / 332	539 / 312 / 336	598 / 420 / 296	798 / 153 / 176	777 / 224 / 165	759 / 215 / 247	775 / 311 / 231	708 / 291 / 354	758 / 408 / 324	552 / 333 / 330	604 / 438 / 285	30 - 45							
	2	778 / 211 / 169	818 / 304 / 158	774 / 299 / 236	806 / 416 / 215	750 / 390 / 332	804 / 526 / 294	598 / 427 / 296	648 / 536 / 245	777 / 224 / 165	821 / 322 / 154	775 / 317 / 231	811 / 441 / 210	758 / 414 / 324	816 / 555 / 286	604 / 445 / 285	669 / 567 / 239	0 - 7.5							
	3	807 / 421 / 161	845 / 581 / 146	792 / 371 / 220	841 / 511 / 199	796 / 483 / 309	870 / 643 / 271	638 / 500 / 262	740 / 626 / 216	808 / 446 / 158	851 / 613 / 143	814 / 402 / 220	871 / 554 / 199	808 / 511 / 302	886 / 677 / 264	645 / 519 / 251	757 / 642 / 205	7.5 - 15							
Wind Speed [mph]		120								130															
70	1	694 / 181 / 154	720 / 260 / 142	691 / 254 / 214	726 / 360 / 198	670 / 336 / 297	711 / 451 / 262	526 / 361 / 264	580 / 464 / 223	682 / 166 / 154	717 / 245 / 145	676 / 234 / 214	707 / 333 / 198	663 / 316 / 303	700 / 427 / 268	520 / 345 / 273	573 / 447 / 232	ASCE Group Zone							
	2	720 / 260 / 142	768 / 366 / 130	726 / 367 / 198	770 / 500 / 177	711 / 458 / 262	792 / 616 / 232	580 / 471 / 223	684 / 583 / 182	717 / 245 / 145	762 / 346 / 133	707 / 339 / 198	761 / 474 / 181	700 / 433 / 268	776 / 584 / 238	573 / 454 / 232	668 / 567 / 191	Panal Angle							
	3	749 / 505 / 133	756 / 645 / 112	747 / 445 / 181	827 / 614 / 164	776 / 566 / 244	832 / 710 / 202	641 / 535 / 191	792 / 674 / 159	744 / 478 / 136	767 / 629 / 118	740 / 421 / 185	794 / 568 / 164	761 / 536 / 250	837 / 696 / 214	624 / 519 / 200	757 / 642 / 164	Mono Slope							
80	1	744 / 174 / 166	750 / 249 / 152	727 / 244 / 232	753 / 345 / 213	693 / 322 / 324	740 / 441 / 290	541 / 354 / 292	601 / 464 / 251	744 / 160 / 166	750 / 234 / 156	713 / 224 / 232	751 / 326 / 217	688 / 304 / 330	730 / 417 / 297	537 / 339 / 302	595 / 447 / 261	0 - 7.5							
	2	750 / 249 / 152	807 / 357 / 142	753 / 351 / 213	804 / 489 / 194	740 / 447 / 290	811 / 600 / 256	601 / 471 / 251	684 / 583 / 205	750 / 234 / 156	784 / 330 / 142	751 / 332 / 217	797 / 463 / 199	730 / 423 / 297	797 / 570 / 263	595 / 454 / 261	668 / 567 / 215	7.5 - 15							
	3	790 / 494 / 146	806 / 645 / 125	783 / 435 / 199	854 / 598 / 180	799 / 552 / 270	867 / 710 / 229	641 / 535 / 215	792 / 674 / 179	769 / 456 / 146	820 / 629 / 132	778 / 412 / 203	823 / 554 / 180	786 / 524 / 276	850 / 677 / 236	626 / 519 / 225	757 / 642 / 184	15 - 30							
90	1	798 / 167 / 176	793 / 243 / 165	759 / 234 / 247	793 / 337 / 231	727 / 316 / 354	766 / 431 / 317	556 / 348 / 319	622 / 464 / 279	798 / 153 / 176	777 / 224 / 165	759 / 215 / 247	775 / 311 / 231	708 / 291 / 354	758 / 408 / 324	552 / 333 / 330	604 / 438 / 285	30 - 45							
	2	793 / 243 / 165	823 / 340 / 150	793 / 344 / 231	836 / 477 / 210	766 / 437 / 317	828 / 584 / 279	622 / 471 / 279	684 / 583 / 228	777 / 224 / 165	821 / 322 / 154	775 / 317 / 231	811 / 441 / 210	758 / 414 / 324	816 / 555 / 286	604 / 445 / 285	669 / 567 / 239	0 - 7.5							
	3	809 / 471 / 154	856 / 645 / 139	818 / 425 / 215	879 / 583 / 194	819 / 538 / 294	902 / 710 / 256	649 / 535 / 239	792 / 674 / 199	808 / 446 / 158	851 / 613 / 143	814 / 402 / 220	871 / 554 / 199	808 / 511 / 302	886 / 677 / 264	645 / 519 / 251	757 / 642 / 205	7.5 - 15							

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		70	1	694 / 192 / 151	722 / 275 / 139	691 / 269 / 210	731 / 381 / 193	677 / 355 / 291	722 / 476 / 256	540 / 382 / 259	585 / 480 / 214	706 / 219 / 148	743 / 312 / 136	707 / 306 / 206	739 / 421 / 185	691 / 394 / 279	761 / 536 / 250	560 / 418 / 245	624 / 518 / 200	720 / 247 / 145	765 / 349 / 133	709 / 336 / 198	764 / 470 / 181	704 / 431 / 268	781 / 582 / 238	565 / 443 / 227
2	722 / 275 / 139		775 / 385 / 127	731 / 388 / 193	778 / 527 / 172	722 / 482 / 256	808 / 646 / 226	585 / 487 / 214	716 / 612 / 177	743 / 312 / 136	787 / 424 / 121	739 / 428 / 185	793 / 578 / 164	761 / 543 / 250	813 / 685 / 208	624 / 526 / 200	756 / 651 / 164	765 / 349 / 133	818 / 473 / 118	764 / 479 / 181	829 / 642 / 160	781 / 590 / 238	836 / 737 / 196	658 / 559 / 186	810 / 701 / 155	
3	754 / 532 / 130		763 / 676 / 109	772 / 480 / 181	838 / 645 / 160	791 / 595 / 238	848 / 742 / 196	671 / 563 / 186	826 / 705 / 155	763 / 585 / 124	776 / 735 / 103	786 / 528 / 172	836 / 684 / 147	818 / 651 / 226	879 / 802 / 184	711 / 600 / 173	862 / 739 / 141	771 / 636 / 118	761 / 764 / 94	798 / 574 / 164	853 / 735 / 139	819 / 684 / 208	919 / 855 / 173	764 / 649 / 164	916 / 788 / 132	
80	1	731 / 184 / 163	768 / 269 / 152	726 / 258 / 227	756 / 364 / 208	698 / 341 / 317	749 / 465 / 283	555 / 376 / 287	606 / 480 / 241	741 / 210 / 159	768 / 298 / 146	739 / 293 / 222	778 / 411 / 203	724 / 385 / 310	785 / 523 / 276	572 / 411 / 271	625 / 518 / 225	752 / 237 / 156	787 / 333 / 142	753 / 329 / 217	801 / 459 / 199	734 / 422 / 297	802 / 568 / 263	587 / 443 / 256	658 / 551 / 210	
	2	768 / 269 / 152	812 / 376 / 139	756 / 371 / 208	810 / 514 / 189	749 / 471 / 283	825 / 629 / 250	606 / 487 / 241	716 / 612 / 200	768 / 298 / 146	820 / 413 / 132	778 / 419 / 203	822 / 563 / 180	785 / 530 / 276	849 / 685 / 236	625 / 526 / 225	756 / 651 / 184	787 / 333 / 142	848 / 460 / 129	801 / 468 / 199	855 / 626 / 175	802 / 576 / 263	871 / 737 / 223	658 / 559 / 210	810 / 701 / 174	
	3	793 / 520 / 142	812 / 676 / 122	788 / 458 / 194	864 / 628 / 175	811 / 580 / 263	883 / 742 / 223	671 / 563 / 210	826 / 705 / 174	819 / 585 / 139	822 / 735 / 115	818 / 515 / 189	881 / 684 / 166	835 / 634 / 250	911 / 802 / 209	711 / 600 / 195	862 / 739 / 159	824 / 636 / 132	803 / 764 / 105	827 / 559 / 180	895 / 735 / 156	855 / 684 / 236	934 / 855 / 196	764 / 649 / 184	916 / 788 / 149	
90	1	782 / 177 / 173	792 / 257 / 161	754 / 247 / 241	794 / 356 / 226	731 / 334 / 347	773 / 454 / 309	569 / 369 / 313	626 / 480 / 268	771 / 201 / 169	807 / 291 / 158	765 / 281 / 236	814 / 402 / 220	738 / 369 / 332	807 / 510 / 302	584 / 403 / 296	644 / 518 / 251	779 / 227 / 165	824 / 325 / 154	777 / 315 / 231	814 / 437 / 210	761 / 412 / 324	820 / 553 / 286	608 / 443 / 285	658 / 551 / 234	
	2	792 / 257 / 161	846 / 367 / 150	794 / 362 / 226	840 / 501 / 205	773 / 460 / 309	863 / 629 / 279	626 / 487 / 268	716 / 612 / 222	807 / 291 / 158	850 / 403 / 143	814 / 409 / 220	871 / 563 / 199	807 / 517 / 302	885 / 685 / 264	644 / 526 / 251	756 / 651 / 205	824 / 325 / 154	876 / 448 / 139	814 / 445 / 210	878 / 609 / 189	820 / 561 / 286	905 / 737 / 249	658 / 559 / 234	810 / 701 / 194	
	3	830 / 508 / 154	860 / 676 / 135	821 / 447 / 210	887 / 611 / 189	830 / 565 / 286	917 / 742 / 249	671 / 563 / 234	826 / 705 / 194	832 / 557 / 146	868 / 735 / 128	848 / 503 / 205	926 / 684 / 184	849 / 617 / 271	943 / 802 / 234	711 / 600 / 216	862 / 739 / 177	854 / 619 / 143	845 / 764 / 116	852 / 545 / 194	938 / 735 / 173	892 / 684 / 264	964 / 855 / 219	764 / 649 / 205	916 / 788 / 165	
70	1	734 / 276 / 142	769 / 379 / 127	726 / 374 / 193	771 / 508 / 172	732 / 478 / 262	799 / 626 / 226	591 / 482 / 218	704 / 593 / 177	732 / 298 / 136	791 / 416 / 124	743 / 412 / 189	797 / 558 / 168	744 / 514 / 250	814 / 667 / 214	613 / 508 / 205	747 / 632 / 168									
	2	769 / 379 / 127	849 / 522 / 115	771 / 517 / 172	841 / 689 / 151	799 / 635 / 226	856 / 783 / 184	704 / 602 / 177	858 / 746 / 146	791 / 416 / 124	858 / 556 / 109	797 / 568 / 168	851 / 731 / 143	814 / 676 / 214	874 / 822 / 173	747 / 641 / 168	900 / 785 / 137									
	3	756 / 664 / 109	792 / 837 / 91	830 / 633 / 160	866 / 781 / 131	838 / 729 / 196	964 / 900 / 161	813 / 693 / 155	996 / 860 / 127	759 / 705 / 103	794 / 877 / 85	840 / 674 / 151	874 / 821 / 122	853 / 770 / 184	999 / 936 / 149	855 / 732 / 146	1036 / 896 / 118									
80	1	763 / 264 / 152	806 / 370 / 139	751 / 358 / 208	804 / 496 / 189	760 / 467 / 290	816 / 610 / 250	611 / 482 / 246	704 / 593 / 200	775 / 292 / 149	826 / 406 / 136	766 / 394 / 203	827 / 544 / 184	768 / 501 / 276	851 / 667 / 243	621 / 508 / 230	747 / 632 / 190									
	2	806 / 370 / 139	877 / 508 / 125	804 / 505 / 189	888 / 689 / 170	816 / 618 / 250	888 / 783 / 209	704 / 602 / 164	858 / 746 / 154	826 / 406 / 136	881 / 541 / 119	827 / 554 / 184	894 / 731 / 161	851 / 676 / 243	900 / 822 / 196	747 / 641 / 190	900 / 785 / 154									
	3	805 / 664 / 122	833 / 837 / 102	856 / 617 / 175	905 / 781 / 147	873 / 729 / 223	964 / 900 / 182	813 / 693 / 174	996 / 860 / 144	805 / 705 / 115	832 / 877 / 95	886 / 674 / 170	911 / 821 / 137	885 / 770 / 209	999 / 936 / 169	855 / 732 / 164	1036 / 896 / 133									
90	1	788 / 252 / 161	841 / 361 / 150	789 / 349 / 226	834 / 484 / 205	786 / 456 / 317	854 / 610 / 279	632 / 482 / 273	704 / 593 / 222	797 / 279 / 158	858 / 396 / 146	802 / 385 / 220	855 / 530 / 199	791 / 489 / 302	864 / 648 / 264	640 / 508 / 256	747 / 632 / 211									
	2	841 / 361 / 150	902 / 494 / 135	834 / 492 / 205	908 / 670 / 184	854 / 618 / 279	920 / 783 / 234	704 / 602 / 222	858 / 746 / 182	858 / 396 / 146	929 / 541 / 131	855 / 540 / 199	938 / 731 / 178	864 / 657 / 264	930 / 822 / 219	747 / 641 / 211	900 / 785 / 171									
	3	854 / 664 / 135	873 / 837 / 113	879 / 600 / 189	945 / 781 / 163	907 / 729 / 249	979 / 900 / 204	813 / 693 / 194	996 / 860 / 160	851 / 705 / 128	870 / 877 / 105	906 / 656 / 184	948 / 821 / 152	918 / 770 / 234	999 / 936 / 189	855 / 732 / 182	1036 / 896 / 148									
70	1	746 / 327 / 133	813 / 455 / 121	744 / 441 / 181	822 / 608 / 164	772 / 560 / 244	826 / 703 / 202	650 / 542 / 196	785 / 667 / 159	760 / 356 / 130	814 / 480 / 115	761 / 479 / 177	826 / 641 / 156	780 / 592 / 232	860 / 758 / 196	685 / 574 / 186	818 / 698 / 150									
	2	813 / 455 / 121	888 / 604 / 106	822 / 619 / 164	857 / 768 / 135	826 / 713 / 202	938 / 886 / 167	785 / 677 / 159	968 / 846 / 132	814 / 480 / 115	918 / 652 / 103	826 / 652 / 156	858 / 799 / 126	834 / 745 / 190	963 / 912 / 155	818 / 709 / 150	997 / 874 / 123									
	3	758 / 741 / 97	791 / 909 / 79	846 / 711 / 143	909 / 885 / 118	895 / 831 / 179	1066 / 1002 / 143	892 / 766 / 137	1108 / 961 / 114	780 / 797 / 94	815 / 969 / 76	848 / 743 / 135	908 / 911 / 110	924 / 861 / 167	1131 / 1065 / 137	953 / 821 / 132	1128 / 980 / 105									
80	1	787 / 320 / 146	845 / 443 / 132	780 / 431 / 199	850 / 592 / 180	794 / 547 / 270	861 / 703 / 229	650 / 542 / 220	785 / 667 / 179	799 / 348 / 142	865 / 480 / 129	795 / 468 / 194	873 / 641 / 175	800 / 577 / 256	895 / 758 / 223	685 / 574 / 210	818 / 698 / 169									
	2	845 / 443 / 132	909 / 587 / 115	850 / 603 / 180	898 / 768 / 151	861 / 713 / 229	939 / 886 / 189	785 / 677 / 179	968 / 846 / 149	865 / 480 / 129	936 / 633 / 112	873 / 652 / 175	897 / 799 / 142	867 / 745 / 216	963 / 912 / 175	818 / 709 / 169	997 / 874 / 138									
	3	802 / 741 / 109	826 / 909 / 88	889 / 711 / 161	945 / 885 / 133	924 / 831 / 202	1066 / 1002 / 162	892 / 766 / 154	1108 / 961 / 128	822 / 797 / 105	849 / 969 / 85	890 / 743 / 151	941 / 911 / 123	929 / 861 / 189	1131 / 1065 / 155	953 / 821 / 149	1128 / 980 / 118									
90	1	806 / 305 / 154	875 / 432 / 143	815 / 420 / 215	875 / 577 / 194	815 / 533 / 294	896 / 703 / 256	660 / 542 / 245	785 / 667 / 199	836 / 340 / 154	893 / 468 / 139	827 / 456 / 210	896 / 623 / 189	839 / 577 / 286	929 / 758 / 249	685 / 574 / 234	818 / 698 / 188									
	2	875 / 432 / 143	927 / 570 / 124	875 / 587 / 194	939 / 768 / 168	896 / 713 / 256	968 / 886 / 211	785 / 677 / 199	968 / 846 / 165	893 / 468 / 139	951 / 614 / 120	896 / 635 / 189	936 / 799 / 158	901 / 745 / 241	968 / 912 / 196	818 / 709 / 188	997 / 874 / 154									
	3	845 / 741 / 120	862 / 909 / 98	933 / 711 / 178	981 / 885 / 147	955 / 831 / 226	1066 / 1002 / 181	892 / 766 / 171	1108 / 961 / 143	864 / 797 / 116	883 / 969 / 94	931 / 743 / 168	975 / 911 / 137	958 / 861 / 211	1131 / 1065 / 174	953 / 821 / 165	1128 / 980 / 131									

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs									
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	846 / 173 / 185	830 / 251 / 173	804 / 242 / 260	829 / 348 / 242	761 / 326 / 375	796 / 442 / 333	582 / 362 / 338	646 / 480 / 295	827 / 197 / 181	844 / 284 / 169	805 / 274 / 254	826 / 382 / 231	765 / 360 / 358	827 / 497 / 325	606 / 403 / 326	663 / 518 / 276	819 / 221 / 177	858 / 318 / 165	815 / 308 / 248	844 / 426 / 225	787 / 403 / 350	860 / 553 / 317	617 / 434 / 307	676 / 551 / 257		
	2	830 / 251 / 173	878 / 358 / 161	829 / 354 / 242	868 / 488 / 219	796 / 449 / 333	877 / 612 / 300	646 / 487 / 295	716 / 612 / 245	844 / 284 / 169	878 / 392 / 152	826 / 389 / 231	896 / 548 / 213	827 / 504 / 325	895 / 666 / 283	663 / 526 / 276	756 / 651 / 226	858 / 318 / 165	901 / 436 / 148	844 / 434 / 225	898 / 592 / 202	860 / 561 / 317	939 / 737 / 275	676 / 559 / 257	810 / 701 / 213		
	3	864 / 495 / 165	909 / 676 / 148	850 / 436 / 225	907 / 594 / 202	846 / 550 / 308	951 / 742 / 275	686 / 563 / 257	826 / 705 / 213	862 / 542 / 156	914 / 735 / 140	875 / 490 / 219	943 / 664 / 196	887 / 617 / 300	975 / 802 / 258	711 / 600 / 238	862 / 739 / 194	882 / 603 / 152	887 / 764 / 128	900 / 545 / 213	980 / 735 / 190	901 / 664 / 283	994 / 855 / 242	764 / 649 / 226	916 / 788 / 182		
Wind Speed [mph]		170								180																	
100	1	826 / 247 / 173	872 / 352 / 161	825 / 341 / 242	862 / 471 / 219	809 / 446 / 342	869 / 594 / 300	639 / 472 / 295	704 / 593 / 245	833 / 272 / 169	887 / 386 / 156	835 / 376 / 236	880 / 516 / 213	811 / 477 / 325	900 / 648 / 292	660 / 508 / 282	747 / 632 / 232										
	2	872 / 352 / 161	925 / 481 / 144	862 / 480 / 219	926 / 651 / 196	869 / 602 / 300	952 / 783 / 258	704 / 602 / 245	858 / 746 / 201	887 / 386 / 156	948 / 525 / 140	880 / 525 / 213	953 / 710 / 190	900 / 657 / 292	960 / 822 / 242	747 / 641 / 232	900 / 785 / 188										
	3	902 / 664 / 148	914 / 837 / 124	900 / 583 / 202	985 / 781 / 179	941 / 729 / 275	1006 / 900 / 225	813 / 693 / 213	996 / 860 / 176	897 / 705 / 140	908 / 877 / 115	924 / 637 / 196	986 / 821 / 167	950 / 770 / 258	1011 / 936 / 209	855 / 732 / 201	1036 / 896 / 163										
Wind Speed [mph]		190								200																	
100	1	841 / 297 / 165	902 / 421 / 152	846 / 410 / 231	898 / 561 / 208	833 / 519 / 317	932 / 703 / 283	679 / 542 / 270	785 / 667 / 220	848 / 323 / 161	917 / 455 / 148	857 / 445 / 225	916 / 606 / 202	855 / 562 / 308	934 / 735 / 267	695 / 574 / 257	818 / 698 / 207										
	2	902 / 421 / 152	972 / 570 / 136	898 / 571 / 208	980 / 768 / 185	932 / 713 / 283	997 / 886 / 233	785 / 677 / 220	968 / 846 / 182	917 / 455 / 148	995 / 614 / 132	916 / 617 / 202	974 / 799 / 173	934 / 745 / 267	995 / 912 / 217	818 / 709 / 207	997 / 874 / 169										
	3	888 / 741 / 132	897 / 909 / 107	948 / 690 / 190	1017 / 885 / 162	986 / 831 / 250	1066 / 1002 / 200	892 / 766 / 188	1108 / 961 / 157	906 / 797 / 128	917 / 969 / 103	972 / 743 / 185	1008 / 911 / 150	987 / 861 / 233	1131 / 1065 / 192	953 / 821 / 182	1128 / 980 / 144										

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge													
		0	2	346 / 228 / 42	437 / 317 / 37	371 / 312 / 46	462 / 418 / 40	457 / 379 / 49	546 / 475 / 40	450 / 351 / 53	551 / 448 / 45	368 / 249 / 41	458 / 337 / 36	389 / 334 / 45	475 / 436 / 38	471 / 396 / 47	570 / 501 / 39	473 / 373 / 52	564 / 462 / 42	385 / 265 / 40	479 / 357 / 35	413 / 360 / 44	496 / 460 / 37	492 / 418 / 45	592 / 524 / 37
0	1	401 / 282 / 39	498 / 376 / 34	431 / 381 / 43	515 / 483 / 35	512 / 439 / 44	626 / 557 / 36	506 / 406 / 47	621 / 515 / 40	423 / 302 / 38	516 / 394 / 32	447 / 401 / 41	522 / 494 / 33	531 / 459 / 42	645 / 577 / 35	525 / 424 / 46	640 / 533 / 38	ASCE Group Zone							
		Panal Angle		Mono Slope																					
		0 - 7.5		2 = 2																					
		7.5 - 15		3 = 3																					
		15 - 30		1 = 1																					
		30 - 45		2 = 2																					
				3 = 3																					
				1 = 1																					
				2 = 2																					
				3 = 3																					
0	2	498 / 376 / 34	597 / 473 / 28	505 / 482 / 35	594 / 590 / 28	612 / 553 / 36	740 / 685 / 29	621 / 522 / 40	756 / 650 / 33	516 / 394 / 32	615 / 491 / 26	522 / 503 / 33	625 / 624 / 27	630 / 572 / 34	754 / 701 / 28	640 / 541 / 38	772 / 666 / 31								
0	1	401 / 282 / 39	498 / 376 / 34	431 / 381 / 43	515 / 483 / 35	512 / 439 / 44	626 / 557 / 36	506 / 406 / 47	621 / 515 / 40	423 / 302 / 38	516 / 394 / 32	447 / 401 / 41	522 / 494 / 33	531 / 459 / 42	645 / 577 / 35	525 / 424 / 46	640 / 533 / 38								
0	1	439 / 318 / 37	533 / 411 / 31	463 / 420 / 40	548 / 523 / 33	548 / 477 / 40	661 / 595 / 33	553 / 450 / 45	656 / 549 / 36	423 / 302 / 38	516 / 394 / 32	447 / 401 / 41	522 / 494 / 33	531 / 459 / 42	645 / 577 / 35	525 / 424 / 46	640 / 533 / 38								
0	1	439 / 318 / 37	533 / 411 / 31	463 / 420 / 40	548 / 523 / 33	548 / 477 / 40	661 / 595 / 33	553 / 450 / 45	656 / 549 / 36	423 / 302 / 38	516 / 394 / 32	447 / 401 / 41	522 / 494 / 33	531 / 459 / 42	645 / 577 / 35	525 / 424 / 46	640 / 533 / 38								

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		0	1	461 / 338 / 36	549 / 427 / 30	478 / 438 / 39	563 / 540 / 31	575 / 505 / 40	691 / 625 / 32	569 / 466 / 43	687 / 577 / 35	488 / 367 / 34	587 / 464 / 28	505 / 471 / 36	599 / 583 / 29	602 / 534 / 36	731 / 666 / 30	610 / 504 / 40	726 / 614 / 33	521 / 398 / 32	621 / 496 / 26	527 / 499 / 33	631 / 619 / 27	651 / 583 / 35	783 / 719 / 28	646 / 538 / 38	779 / 663 / 31	488 / 367 / 34	587 / 464 / 28	505 / 471 / 36	599 / 583 / 29	602 / 534 / 36	731 / 666 / 30	610 / 504 / 40	726 / 614 / 33	521 / 398 / 32	621 / 496 / 26	527 / 499 / 33	631 / 619 / 27	651 / 583 / 35	783 / 719 / 28	646 / 538 / 38	779 / 663 / 31						
0	2	549 / 427 / 30	660 / 534 / 25	551 / 538 / 31	666 / 672 / 25	674 / 618 / 32	819 / 767 / 26	687 / 585 / 35	841 / 730 / 29	587 / 464 / 28	716 / 585 / 24	586 / 579 / 29	699 / 711 / 23	731 / 675 / 30	879 / 827 / 24	726 / 623 / 33	905 / 788 / 27	621 / 496 / 26	749 / 617 / 22	615 / 614 / 27	745 / 763 / 22	761 / 708 / 28	931 / 879 / 23	779 / 672 / 31	961 / 840 / 26	587 / 464 / 28	716 / 585 / 24	586 / 579 / 29	699 / 711 / 23	731 / 675 / 30	879 / 827 / 24	726 / 623 / 33	905 / 788 / 27	621 / 496 / 26	749 / 617 / 22	615 / 614 / 27	745 / 763 / 22	761 / 708 / 28	931 / 879 / 23	779 / 672 / 31	961 / 840 / 26								
0	3	532 / 648 / 22	637 / 794 / 18	627 / 616 / 27	760 / 765 / 22	776 / 713 / 28	950 / 886 / 23	795 / 677 / 31	947 / 816 / 25	574 / 705 / 21	679 / 852 / 17	679 / 674 / 25	815 / 825 / 21	836 / 772 / 26	1010 / 946 / 21	832 / 712 / 28	1007 / 871 / 23	613 / 759 / 20	715 / 902 / 16	707 / 706 / 23	863 / 878 / 19	889 / 825 / 24	1059 / 995 / 20	885 / 760 / 27	1100 / 954 / 22	574 / 705 / 21	679 / 852 / 17	679 / 674 / 25	815 / 825 / 21	836 / 772 / 26	1010 / 946 / 21	832 / 712 / 28	1007 / 871 / 23	613 / 759 / 20	715 / 902 / 16	707 / 706 / 23	863 / 878 / 19	889 / 825 / 24	1059 / 995 / 20	885 / 760 / 27	1100 / 954 / 22								
5	1	461 / 338 / 36	549 / 427 / 30	478 / 438 / 45	563 / 540 / 36	575 / 505 / 49	691 / 625 / 40	569 / 466 / 49	687 / 577 / 40	488 / 367 / 34	587 / 464 / 28	505 / 471 / 42	599 / 583 / 34	602 / 534 / 45	731 / 666 / 37	610 / 504 / 46	726 / 614 / 37	521 / 398 / 32	621 / 496 / 26	527 / 499 / 39	631 / 619 / 32	651 / 583 / 43	783 / 719 / 35	646 / 538 / 43	779 / 663 / 35	488 / 367 / 34	587 / 464 / 28	505 / 471 / 42	599 / 583 / 34	602 / 534 / 45	731 / 666 / 37	610 / 504 / 46	726 / 614 / 37	521 / 398 / 32	621 / 496 / 26	527 / 499 / 39	631 / 619 / 32	651 / 583 / 43	783 / 719 / 35	646 / 538 / 43	779 / 663 / 35								
5	2	549 / 427 / 30	660 / 534 / 25	551 / 538 / 36	666 / 672 / 29	674 / 618 / 39	819 / 767 / 32	687 / 585 / 40	841 / 730 / 33	587 / 464 / 28	716 / 585 / 24	586 / 579 / 33	699 / 711 / 27	731 / 675 / 37	879 / 827 / 30	726 / 623 / 37	905 / 788 / 31	621 / 496 / 26	749 / 617 / 22	615 / 614 / 31	745 / 763 / 25	761 / 708 / 34	931 / 879 / 28	779 / 672 / 35	961 / 840 / 29	587 / 464 / 28	716 / 585 / 24	586 / 579 / 33	699 / 711 / 27	731 / 675 / 37	879 / 827 / 30	726 / 623 / 37	905 / 788 / 31	621 / 496 / 26	749 / 617 / 22	615 / 614 / 31	745 / 763 / 25	761 / 708 / 34	931 / 879 / 28	779 / 672 / 35	961 / 840 / 29								
5	3	532 / 648 / 22	637 / 794 / 18	627 / 616 / 31	760 / 765 / 25	776 / 713 / 34	950 / 886 / 28	795 / 677 / 35	947 / 816 / 28	574 / 705 / 21	679 / 852 / 17	679 / 674 / 29	815 / 825 / 24	836 / 772 / 26	1010 / 946 / 26	832 / 712 / 32	1007 / 871 / 26	613 / 759 / 20	715 / 902 / 16	707 / 706 / 27	863 / 878 / 22	889 / 825 / 30	1059 / 995 / 24	885 / 760 / 30	1100 / 954 / 25	574 / 705 / 21	679 / 852 / 17	679 / 674 / 29	815 / 825 / 24	836 / 772 / 26	1010 / 946 / 26	832 / 712 / 32	1007 / 871 / 26	613 / 759 / 20	715 / 902 / 16	707 / 706 / 27	863 / 878 / 22	889 / 825 / 30	1059 / 995 / 24	885 / 760 / 30	1100 / 954 / 25								
10	1	466 / 338 / 43	549 / 427 / 36	478 / 438 / 58	563 / 540 / 47	575 / 505 / 63	691 / 625 / 52	569 / 466 / 60	687 / 577 / 49	488 / 367 / 41	587 / 464 / 34	505 / 471 / 54	599 / 583 / 44	602 / 534 / 58	731 / 666 / 48	610 / 504 / 56	726 / 614 / 45	521 / 398 / 38	621 / 496 / 31	527 / 499 / 50	631 / 619 / 41	651 / 583 / 56	783 / 719 / 45	646 / 538 / 53	779 / 663 / 43	488 / 367 / 41	587 / 464 / 34	505 / 471 / 54	599 / 583 / 44	602 / 534 / 58	731 / 666 / 48	610 / 504 / 56	726 / 614 / 45	521 / 398 / 38	621 / 496 / 31	527 / 499 / 50	631 / 619 / 41	651 / 583 / 56	783 / 719 / 45	646 / 538 / 53	779 / 663 / 43								
10	2	549 / 427 / 36	660 / 534 / 29	551 / 538 / 46	666 / 672 / 38	674 / 618 / 51	819 / 767 / 42	687 / 585 / 49	841 / 730 / 40	587 / 464 / 34	716 / 585 / 28	586 / 579 / 43	699 / 711 / 35	731 / 675 / 48	879 / 827 / 39	726 / 623 / 45	905 / 788 / 38	621 / 496 / 31	749 / 617 / 26	615 / 614 / 40	745 / 763 / 33	761 / 708 / 44	931 / 879 / 36	779 / 672 / 43	961 / 840 / 36	587 / 464 / 34	716 / 585 / 28	586 / 579 / 43	699 / 711 / 35	731 / 675 / 48	879 / 827 / 39	726 / 623 / 45	905 / 788 / 38	621 / 496 / 31	749 / 617 / 26	615 / 614 / 40	745 / 763 / 33	761 / 708 / 44	931 / 879 / 36	779 / 672 / 43	961 / 840 / 36								
10	3	532 / 648 / 26	637 / 794 / 22	627 / 616 / 40	760 / 765 / 33	776 / 713 / 44	950 / 886 / 36	795 / 677 / 43	947 / 816 / 34	574 / 705 / 25	679 / 852 / 20	679 / 674 / 38	815 / 825 / 31	836 / 772 / 42	1010 / 946 / 34	832 / 712 / 39	1007 / 871 / 32	613 / 759 / 24	715 / 902 / 19	707 / 706 / 35	863 / 878 / 29	889 / 825 / 39	1059 / 995 / 31	885 / 760 / 37	1100 / 954 / 31	574 / 705 / 25	679 / 852 / 20	679 / 674 / 38	815 / 825 / 31	836 / 772 / 42	1010 / 946 / 34	832 / 712 / 39	1007 / 871 / 32	613 / 759 / 24	715 / 902 / 19	707 / 706 / 35	863 / 878 / 29	889 / 825 / 39	1059 / 995 / 31	885 / 760 / 37	1100 / 954 / 31								
Wind Speed [mph]		170																180																															
0	1	551 / 428 / 31	665 / 537 / 25	554 / 531 / 31	655 / 648 / 25	680 / 614 / 32	806 / 743 / 26	675 / 567 / 35	827 / 707 / 29	577 / 454 / 29	689 / 561 / 24	590 / 572 / 30	692 / 689 / 24	721 / 656 / 31	873 / 809 / 25	717 / 605 / 34	869 / 745 / 27	665 / 537 / 25	795 / 660 / 21	655 / 660 / 25	786 / 809 / 21	806 / 753 / 26	974 / 923 / 21	827 / 717 / 29	1008 / 884 / 24	689 / 561 / 24	836 / 698 / 19	692 / 702 / 24	820 / 848 / 19	845 / 793 / 24	1048 / 996 / 20	869 / 756 / 27	1045 / 918 / 22	665 / 537 / 25	795 / 660 / 21	655 / 660 / 25	786 / 809 / 21	806 / 753 / 26	974 / 923 / 21	827 / 717 / 29	1008 / 884 / 24	689 / 561 / 24	836 / 698 / 19	692 / 702 / 24	820 / 848 / 19	845 / 793 / 24	1048 / 996 / 20	869 / 756 / 27	1045 / 918 / 22
0	2	665 / 537 / 25	795 / 660 / 21	655 / 660 / 25	786 / 809 / 21	806 / 753 / 26	974 / 923 / 21	827 / 717 / 29	1008 / 884 / 24	689 / 561 / 24	836 / 698 / 19	692 / 702 / 24	820 / 848 / 19	845 / 793 / 24	1048 / 996 / 20	869 / 756 / 27	1045 / 918 / 22	665 / 537 / 25	795 / 660 / 21	655 / 660 / 25	786 / 809 / 21	806 / 753 / 26	974 / 923 / 21	827 / 717 / 29	1008 / 884 / 24	689 / 561 / 24	836 / 698 / 19	692 / 702 / 24	820 / 848 / 19	845 / 793 / 24	1048 / 996 / 20	869 / 756 / 27	1045 / 918 / 22	665 / 537 / 25	795 / 660 / 21	655 / 660 / 25	786 / 809 / 21	806 / 753 / 26	974 / 923 / 21	827 / 717 / 29	1008 / 884 / 24	689 / 561 / 24	836 / 698 / 19	692 / 702 / 24	820 / 848 / 19	845 / 793 / 24	1048 / 996 / 20	869 / 756 / 27	1045 / 918 / 22
0	3	647 / 806 / 19	774 / 981 / 15	748 / 752 / 22	902 / 922 / 18	934 / 871 / 23	1144 / 1077 / 19	964 / 831 / 26	1141 / 992 / 20	676 / 847 / 18	796 / 1013 / 14	783 / 792 / 21	970 / 995 / 17	971 / 908 / 21	1169 / 1103 / 17	1005 / 868 / 21	1222 / 1064 / 20	647 / 806 / 19	774 / 981 / 15	748 / 752 / 22	902 / 922 / 18	934 / 871 / 23	1144 / 1077 / 19	964 / 831 / 26	1141 / 992 / 20	676 / 847 / 18	796 / 1013 / 14	783 / 792 / 21	970 / 995 / 17	971 / 908 / 21	1169 / 1103 / 17	1005 / 868 / 21	1222 / 1064 / 20	647 / 806 / 19	774 / 981 / 15	748 / 752 / 22	902 / 922 / 18	934 / 871 / 23	1144 / 1077 / 19	964 / 831 / 26	1141 / 992 / 20	676 / 847 / 18	796 / 1013 / 14	783 / 792 / 21	970 / 995 / 17	971 / 908 / 21	1169 / 1103 / 17	1005 / 868 / 21	1222 / 1064 / 20
5	1	551 / 428 / 31	665 / 537 / 25	554 / 531 / 36	655 / 648 / 29	680 / 614 / 40	806 / 743 / 32	675 / 567 / 40	827 / 707 / 33	577 / 454 / 29	689 / 561 / 24	590 / 572 / 35	692 / 689 / 28	721 / 656 / 38	873 / 809 / 31	717 / 605 / 38	869 / 745 / 31	665 / 537 / 25	795 / 660 / 21	655 / 660 / 25	786 / 809 / 24	806 / 753 / 32	974 / 923 / 26	827 / 717 / 33	1008 / 884 / 27	689 / 561 / 24	836 / 698 / 19	692 / 702 / 28	820 / 848 / 22	845 / 793 / 30	1048 / 996 / 25	869 / 756 / 31	1045 / 918 / 25	665 / 537 / 25	795 / 660 / 21	655 / 660 / 25	786 / 809 / 24	806 / 753 / 32	974 / 923 / 26	827 / 717 / 33	1008 / 884 / 27	689 / 561 / 24	836 / 698 / 19	692 / 702 / 28	820 / 848 / 22	845 / 793 / 30	1048 / 996 / 25	869 / 756 / 31	1045 / 918 / 25
5	2	665 / 537 / 25	795 / 660 / 21	655 / 660 / 29	786 / 809 / 24	806 / 753 / 32	974 / 923 / 26	827 / 717 / 33	1008 / 884 / 27	689 / 561 / 24	836 / 698 / 19	692 / 702 / 28	820 / 848 / 22	845 / 793 / 30	1048 / 996 / 25	869 / 756 / 31	1045 / 918 / 25	665 / 537 / 25	795 / 660 / 21	655 / 660 / 29	786 / 809 / 24	806 / 753 / 32	974 / 923 / 26	827 / 717 / 33	1008 / 884 / 27	689 / 561 / 24	836 / 698 / 19	692 / 702 / 28	820 / 848 / 22	845 / 793 / 30	1048 / 996 / 25	869 / 756 / 31	1045 / 918 / 25	665 / 537 / 25	795 / 660 / 21	655 / 660 / 29	786 / 809 / 24	806 / 753 / 32	974 / 923 / 26	827 / 717 / 33	1008 / 884 / 27	689 / 561 / 24	836 / 698 / 19	692 / 702 / 28	820 / 848 / 22	845 / 793 / 30	1048 / 996 / 25	869 / 756 / 31	1045 / 918 / 25
5	3	647 / 806 / 19	774 / 981 / 15	748 / 752 / 25	902 / 922 / 21	934 / 871 / 28	1144 / 1077 / 23	964 / 831 / 29	1141 / 992 / 23	676 / 847 / 18	796 / 1013 / 14	783 / 792 / 24	970 / 995 / 20	971 / 908 / 26	1169 / 1103 / 21	1005 / 868 / 27	1222 / 1064 / 22	647 / 806 / 19	774 / 981 / 15	748 / 752 / 25	902 / 922 / 21	934 / 871 / 28	1144 / 1077 / 23	964 / 831 / 29	1141 / 992 / 23																								

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																								
Wind Speed [mph]		95																100																105																								
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45												
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge														
		15	1	441/219/55	498/311/51	450/303/82	507/418/73	457/379/97	546/475/80	450/351/88	551/448/73	454/238/55	516/337/50	465/329/81	509/436/70	471/396/92	570/501/77	473/373/85	564/462/69	467/258/54	526/357/48	472/349/78	519/460/67	492/418/89	592/524/73	494/394/82	599/494/68	20	2	498/311/51	548/409/43	507/426/73	535/519/58	546/482/80	658/601/65	551/455/73	669/568/60	516/337/50	560/432/42	509/444/70	557/545/56	570/507/77	682/626/62	564/469/69	695/593/58	526/357/48	577/454/40	509/460/66	577/569/54	592/531/73	702/648/59	599/502/68	717/614/55					
3	468/511/40		522/631/32	529/489/63	613/599/51	631/563/70	763/698/58	626/520/63	759/644/52	475/537/38	539/656/31	532/505/60	634/624/49	656/589/67	785/722/54	651/544/60	805/685/50	482/561/37	568/696/30	552/529/57	653/646/46	678/612/64	803/741/51	673/565/58	824/704/48	25	1		486/212/61	534/301/56	491/294/94	539/404/84	478/379/120	546/475/98	450/351/102	551/448/85	497/231/61	541/320/54	504/318/93	557/436/82	483/396/114	570/501/94	473/373/99	564/462/80	509/250/60	558/345/53	517/344/91	565/460/79	494/418/110	592/524/90	494/394/95	599/494/79						
2	534/301/56		594/409/49	539/412/84	570/519/69	546/482/98	658/601/81	551/455/85	669/568/70	541/320/54	604/432/47	557/444/82	579/545/66	570/507/94	682/626/77	564/469/80	695/593/67	558/345/53	613/454/46	555/460/78	586/569/63	592/531/90	702/648/73	599/502/79	717/614/64		30		3	511/511/46	538/631/37	573/489/75	613/599/60	631/563/87	763/698/71	626/520/74	759/644/60	516/537/44	543/656/35	571/505/71	634/624/58	656/589/83	785/722/67	651/544/70	805/685/59	521/561/42	568/696/34	579/529/68	653/646/55	678/612/79	803/741/63	673/565/67	824/704/55					
1	486/212/61		534/301/56	491/294/94	539/404/84	502/373/142	547/475/118	450/351/120	551/448/100	497/231/61	541/320/54	504/318/93	557/436/82	513/396/137	570/501/113	473/373/116	564/462/94	509/250/60	558/345/53	517/344/91	565/460/79	523/418/132	592/524/109	494/394/112	599/494/92				35	2	534/301/56	594/409/49	539/412/84	570/519/69	547/482/118	658/601/97	551/455/100	669/568/82	541/320/54	604/432/47	557/444/82	579/545/66	570/507/113	682/626/92	564/469/94	695/593/79	558/345/53	613/454/46	555/460/78	586/569/63	592/531/109	702/648/88	599/502/92	717/614/75				
3	511/511/46		538/631/37	573/489/75	613/599/60	631/563/104	763/698/85	626/520/86	759/644/71	516/537/44	543/656/35	571/505/71	634/624/58	656/589/99	785/722/81	651/544/82	805/685/69	521/561/42	568/696/34	579/529/68	653/646/55	678/612/95	803/741/76	673/565/79	824/704/65																																	
15	1		480/278/53	534/376/46	487/375/77	528/483/65	512/439/86	626/557/72	506/406/78	621/515/65	494/298/52	542/394/45	502/401/76	525/494/61	531/459/83	645/577/69	525/424/75	640/533/62	20	2	534/376/46	597/473/38	518/482/63	594/590/51	612/553/70					740/685/58	621/522/65	756/650/53	542/394/45	615/491/37	525/503/61	625/624/50	630/572/67	754/701/54	640/541/62	772/666/50	25	3	488/582/35	580/714/28	570/551/55	687/683/45	697/632/61	843/780/50	710/599/56	866/742/46	500/601/33	607/751/28	600/583/54	700/699/42	732/667/59	880/817/48	727/615/53	906/778/45
	1		521/269/59	564/363/51	522/363/88	572/483/77	512/439/106	626/557/89	506/406/90	621/515/75	524/284/57	580/387/50	536/388/87	567/494/72	531/459/102	645/577/85	525/424/87	640/533/72		30	2	564/363/51	621/473/44	561/482/75	594/590/60					612/553/87	740/685/71	621/522/75	756/650/62	580/387/50	627/491/42	567/503/72	625/624/59	630/572/83	754/701/67	640/541/72		772/666/59																
	3		524/582/40	580/714/32	585/551/65	687/683/53	697/632/75	843/780/61	710/599/65	866/742/54	526/601/38	607/751/31	604/583/63	700/699/50	732/667/73	880/817/59	727/615/62	906/778/52																																								
	1		521/269/59	564/363/51	522/363/88	572/483/77	532/439/128	626/557/106	506/406/106	621/515/88	524/284/57	580/387/50	536/388/87	567/494/72	541/459/123	645/577/102	525/424/102	640/533/84			35	2	564/363/51	621/473/44	561/482/75					594/590/60	612/553/104	740/685/85	621/522/88	756/650/73	580/387/50	627/491/42	567/503/72	625/624/59	630/572/81	754/701/84		640/541/77	772/666/69															
	3	524/582/40	580/714/32	585/551/65	687/683/53	697/632/90	843/780/73	710/599/77	866/742/63	526/601/38	607/751/31	604/583/63	700/699/50	732/667/88	880/817/71	727/615/73	906/778/61																																									
	15	1	499/313/51	549/411/43	509/420/73	548/523/60	548/477/80	661/595/65	553/450/73	656/549/59	494/298/52	542/394/45	502/401/76	525/494/61	531/459/83	645/577/69	525/424/75	640/533/62				20	2	549/411/43	646/519/36	537/521/58		638/640/47		661/603/65	787/734/53	656/557/59	807/698/49	542/394/45	615/491/37	525/503/61	625/624/50	630/572/67	754/701/54	640/541/62		772/666/50																
		3	524/633/32	613/762/26	615/601/51	731/733/41	745/682/56	916/852/46	762/646/52	913/785/42	500/601/33	607/751/28	600/583/54	700/699/42	732/667/59	880/817/48	727/615/53	906/778/45																																								
		1	535/303/56	596/411/49	540/406/84	583/523/71	548/477/98	661/595/81	553/450/85	656/549/69	524/284/57	580/387/50	536/388/87	567/494/72	531/459/102	645/577/85	525/424/87	640/533/72					25	2	596/411/49	646/519/41	571/521/69	638/640/56	661/603/81	787/734/65	656/557/69	807/698/57	580/387/50	627/491/42	567/503/72	625/624/59	630/572/83	754/701/67	640/541/72	772/666/59																		
		3	540/633/37	613/762/30	615/601/60	731/733/49	745/682/69	916/852/57	762/646/60	913/785/49	526/601/38	607/751/31	604/583/63	700/699/50	732/667/73	880/817/59	727/615/62	906/778/52																																								
1		535/303/56	596/411/49	540/406/84	583/523/71	548/477/118	661/595/97	553/450/100	656/549/80	524/284/57	580/387/50	536/388/87	567/494/72	541/459/123	645/577/102	525/424/102	640/533/84	30	2					596/411/49	646/519/41	571/521/69	638/640/56	661/603/97	787/734/78	656/557/80	807/698/67	580/387/50	627/491/42	567/503/72	625/624/59	630/572/81	754/701/84	640/541/77	772/666/69																			
3		540/633/37	613/762/30	615/601/60	731/733/49	745/682/83	916/852/69	762/646/71	913/785/57	526/601/38	607/751/31	604/583/63	700/699/50	732/667/88	880/817/71	727/615/73	906/778/61																																									

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				70in x 41in				Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160											
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45					
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge				
15	1	512 / 333 / 50	555 / 427 / 42	514 / 438 / 71	563 / 540 / 57	575 / 505 / 78	691 / 625 / 64	569 / 466 / 70	687 / 577 / 58	530 / 367 / 47	587 / 464 / 39	523 / 471 / 66	599 / 583 / 54	602 / 534 / 72	731 / 666 / 59	610 / 504 / 66	726 / 614 / 53	546 / 398 / 45	621 / 496 / 37	529 / 499 / 61	631 / 619 / 50	651 / 583 / 69	783 / 719 / 56	646 / 538 / 62	779 / 663 / 50				
	2	555 / 427 / 42	660 / 534 / 34	551 / 538 / 56	666 / 672 / 46	674 / 618 / 62	819 / 767 / 51	687 / 585 / 58	841 / 730 / 48	587 / 464 / 39	716 / 585 / 32	586 / 579 / 52	699 / 711 / 42	731 / 675 / 59	879 / 827 / 48	726 / 623 / 53	905 / 788 / 45	621 / 496 / 37	749 / 617 / 30	615 / 614 / 49	745 / 763 / 40	761 / 708 / 54	931 / 879 / 45	779 / 672 / 50	961 / 840 / 42				
	3	532 / 648 / 31	637 / 794 / 25	627 / 616 / 49	760 / 765 / 40	776 / 713 / 54	950 / 886 / 45	795 / 677 / 50	947 / 816 / 40	574 / 705 / 29	679 / 852 / 23	679 / 674 / 46	815 / 825 / 38	836 / 772 / 51	1010 / 946 / 42	832 / 712 / 46	1007 / 871 / 38	613 / 759 / 28	715 / 902 / 22	707 / 706 / 42	863 / 878 / 35	889 / 825 / 48	1059 / 995 / 39	885 / 760 / 43	1100 / 954 / 36				
20	1	547 / 322 / 55	600 / 427 / 47	553 / 431 / 82	587 / 540 / 68	575 / 505 / 96	691 / 625 / 79	569 / 466 / 82	687 / 577 / 67	561 / 354 / 52	617 / 464 / 45	569 / 471 / 78	604 / 583 / 63	602 / 534 / 89	731 / 666 / 73	610 / 504 / 77	726 / 614 / 62	583 / 391 / 50	631 / 496 / 42	570 / 499 / 72	631 / 619 / 59	651 / 583 / 85	783 / 719 / 69	646 / 538 / 72	779 / 663 / 59				
	2	600 / 427 / 47	660 / 534 / 39	574 / 538 / 66	666 / 672 / 55	674 / 618 / 77	819 / 767 / 63	687 / 585 / 67	841 / 730 / 55	617 / 464 / 45	716 / 585 / 37	590 / 579 / 62	699 / 711 / 50	731 / 675 / 73	879 / 827 / 59	726 / 623 / 62	905 / 788 / 52	631 / 496 / 42	749 / 617 / 34	615 / 614 / 58	745 / 763 / 47	761 / 708 / 67	931 / 879 / 55	779 / 672 / 59	961 / 840 / 49				
	3	539 / 648 / 35	637 / 794 / 29	627 / 616 / 58	760 / 765 / 47	776 / 713 / 67	950 / 886 / 55	795 / 677 / 59	947 / 816 / 47	574 / 705 / 33	679 / 852 / 27	679 / 674 / 55	815 / 825 / 44	836 / 772 / 63	1010 / 946 / 51	832 / 712 / 54	1007 / 871 / 44	613 / 759 / 31	715 / 902 / 25	707 / 706 / 50	863 / 878 / 41	889 / 825 / 59	1059 / 995 / 47	885 / 760 / 50	1100 / 954 / 42				
25	1	547 / 322 / 55	600 / 427 / 47	553 / 431 / 82	587 / 540 / 68	575 / 505 / 116	691 / 625 / 95	569 / 466 / 96	687 / 577 / 79	561 / 354 / 52	617 / 464 / 45	569 / 471 / 78	604 / 583 / 106	602 / 534 / 88	731 / 666 / 90	610 / 504 / 73	726 / 614 / 61	583 / 391 / 50	631 / 496 / 42	570 / 499 / 72	631 / 619 / 59	651 / 583 / 102	783 / 719 / 83	646 / 538 / 84	779 / 663 / 69				
	2	600 / 427 / 47	660 / 534 / 39	574 / 538 / 66	666 / 672 / 55	674 / 618 / 92	819 / 767 / 76	687 / 585 / 79	841 / 730 / 65	617 / 464 / 45	716 / 585 / 37	590 / 579 / 62	699 / 711 / 50	731 / 675 / 88	879 / 827 / 71	726 / 623 / 73	905 / 788 / 61	631 / 496 / 42	749 / 617 / 34	615 / 614 / 58	745 / 763 / 47	761 / 708 / 81	931 / 879 / 66	779 / 672 / 69	961 / 840 / 57				
	3	539 / 648 / 35	637 / 794 / 29	627 / 616 / 58	760 / 765 / 47	776 / 713 / 81	950 / 886 / 66	795 / 677 / 69	947 / 816 / 55	574 / 705 / 33	679 / 852 / 27	679 / 674 / 55	815 / 825 / 44	836 / 772 / 76	1010 / 946 / 62	832 / 712 / 63	1007 / 871 / 51	613 / 759 / 31	715 / 902 / 25	707 / 706 / 50	863 / 878 / 41	889 / 825 / 71	1059 / 995 / 57	885 / 760 / 59	1100 / 954 / 49				
15	1	559 / 428 / 42	665 / 537 / 35	554 / 531 / 57	655 / 648 / 46	680 / 614 / 64	806 / 743 / 51	675 / 567 / 58	827 / 707 / 48	577 / 454 / 40	689 / 561 / 32	590 / 572 / 55	692 / 689 / 44	721 / 656 / 61	873 / 809 / 50	717 / 605 / 55	869 / 745 / 45	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	665 / 537 / 35	795 / 660 / 28	655 / 660 / 46	786 / 809 / 38	806 / 753 / 51	974 / 923 / 42	827 / 717 / 48	1008 / 884 / 39	689 / 561 / 32	836 / 698 / 27	692 / 702 / 44	820 / 848 / 35	845 / 793 / 48	1048 / 996 / 40	869 / 756 / 45	1045 / 918 / 36												
	3	647 / 806 / 26	774 / 981 / 21	748 / 752 / 40	902 / 922 / 33	934 / 871 / 45	1144 / 1077 / 37	964 / 831 / 42	1141 / 992 / 33	676 / 847 / 24	796 / 1013 / 19	783 / 792 / 38	970 / 995 / 31	971 / 908 / 42	1169 / 1103 / 34	1005 / 868 / 39	1222 / 1064 / 32												
20	1	605 / 428 / 48	665 / 537 / 40	580 / 531 / 68	655 / 648 / 55	680 / 614 / 79	806 / 743 / 63	675 / 567 / 67	827 / 707 / 55	613 / 454 / 46	689 / 561 / 37	590 / 572 / 65	692 / 689 / 52	721 / 656 / 75	873 / 809 / 61	717 / 605 / 64	869 / 745 / 52	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	665 / 537 / 40	795 / 660 / 32	655 / 660 / 55	786 / 809 / 44	806 / 753 / 63	974 / 923 / 51	827 / 717 / 55	1008 / 884 / 45	689 / 561 / 37	836 / 698 / 31	692 / 702 / 52	820 / 848 / 41	845 / 793 / 59	1048 / 996 / 49	869 / 756 / 52	1045 / 918 / 42												
	3	647 / 806 / 30	774 / 981 / 24	748 / 752 / 47	902 / 922 / 39	934 / 871 / 55	1144 / 1077 / 45	964 / 831 / 49	1141 / 992 / 39	676 / 847 / 28	796 / 1013 / 22	783 / 792 / 44	970 / 995 / 37	971 / 908 / 51	1169 / 1103 / 42	1005 / 868 / 45	1222 / 1064 / 37												
25	1	605 / 428 / 48	665 / 537 / 40	580 / 531 / 68	655 / 648 / 55	680 / 614 / 95	806 / 743 / 76	675 / 567 / 79	827 / 707 / 65	613 / 454 / 46	689 / 561 / 37	590 / 572 / 65	692 / 689 / 52	721 / 656 / 90	873 / 809 / 73	717 / 605 / 75	869 / 745 / 61	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	665 / 537 / 40	795 / 660 / 32	655 / 660 / 55	786 / 809 / 44	806 / 753 / 76	974 / 923 / 62	827 / 717 / 65	1008 / 884 / 53	689 / 561 / 37	836 / 698 / 31	692 / 702 / 52	820 / 848 / 41	845 / 793 / 71	1048 / 996 / 59	869 / 756 / 61	1045 / 918 / 49												
	3	647 / 806 / 30	774 / 981 / 24	748 / 752 / 47	902 / 922 / 39	934 / 871 / 66	1144 / 1077 / 55	964 / 831 / 57	1141 / 992 / 45	676 / 847 / 28	796 / 1013 / 22	783 / 792 / 44	970 / 995 / 37	971 / 908 / 62	1169 / 1103 / 50	1005 / 868 / 53	1222 / 1064 / 43												
15	1	612 / 487 / 38	725 / 595 / 31	609 / 595 / 51	724 / 726 / 41	759 / 694 / 58	908 / 844 / 46	755 / 640 / 52	935 / 805 / 43	631 / 506 / 36	779 / 643 / 30	639 / 629 / 49	775 / 781 / 40	792 / 728 / 54	934 / 872 / 43	788 / 671 / 49	966 / 833 / 40	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	725 / 595 / 31	900 / 754 / 26	724 / 739 / 41	879 / 912 / 34	908 / 856 / 46	1072 / 1022 / 37	935 / 816 / 43	1116 / 983 / 35	779 / 643 / 30	931 / 783 / 24	751 / 770 / 39	900 / 937 / 31	934 / 884 / 43	1135 / 1084 / 35	966 / 845 / 40	1184 / 1045 / 33												
	3	699 / 880 / 23	846 / 1080 / 19	841 / 854 / 36	993 / 1021 / 29	1038 / 973 / 40	1239 / 1172 / 32	1076 / 932 / 38	1299 / 1133 / 30	744 / 940 / 22	893 / 1143 / 18	866 / 882 / 34	1050 / 1083 / 28	1102 / 1036 / 39	1303 / 1234 / 31	1100 / 954 / 35	1369 / 1196 / 29												
20	1	632 / 487 / 44	725 / 595 / 35	609 / 595 / 60	724 / 726 / 49	759 / 694 / 71	908 / 844 / 57	755 / 640 / 60	935 / 805 / 50	635 / 506 / 41	779 / 643 / 34	639 / 629 / 58	775 / 781 / 47	792 / 728 / 67	934 / 872 / 53	788 / 671 / 57	966 / 833 / 47	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	725 / 595 / 35	900 / 754 / 30	724 / 739 / 49	879 / 912 / 40	908 / 856 / 57	1072 / 1022 / 45	935 / 816 / 50	1116 / 983 / 40	779 / 643 / 34	931 / 783 / 28	751 / 770 / 46	900 / 937 / 37	934 / 884 / 53	1135 / 1084 / 44	966 / 845 / 47	1184 / 1045 / 39												
	3	699 / 880 / 26	846 / 1080 / 21	841 / 854 / 43	993 / 1021 / 34	1038 / 973 / 49	1239 / 1172 / 44	1076 / 932 / 44	1299 / 1133 / 35	744 / 940 / 25	893 / 1143 / 20	866 / 882 / 40	1050 / 1083 / 33	1102 / 1036 / 47	1303 / 1234 / 38	1100 / 954 / 40	1369 / 1196 / 34												
25	1	632 / 487 / 44	725 / 595 / 35	609 / 595 / 60	724 / 726 / 49	759 / 694 / 85	908 / 844 / 69	755 / 640 / 71	935 / 805 / 59	635 / 506 / 41	779 / 643 / 34	639 / 629 / 58	775 / 781 / 47	792 / 728 / 81	934 / 872 / 64	788 / 671 / 67	966 / 833 / 55	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	725 / 595 / 35	900 / 754 / 30	724 / 739 / 49	879 / 912 / 40	908 / 856 / 69	1072 / 1022 / 55	935 / 816 / 59	1116 / 983 / 47	779 / 643 / 34	931 / 783 / 28	751 / 770 / 46	900 / 937 / 37	934 / 884 / 53	1135 / 1084 / 44	966 / 845 / 55	1184 / 1045 / 45												
	3	699 / 880 / 26	846 / 1080 / 21	841 / 854 / 43	993 / 1021 / 34	1038 / 973 / 49	1239 / 1172 / 44	1076 / 932 / 44	1299 / 1133 / 35	744 / 940 / 25	893 / 1143 / 20	866 / 882 / 40	1050 / 1083 / 33	1102 / 1036 / 47	1303 / 1234 / 38	1100 / 954 / 40	1369 / 1196 / 34												

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs																												
Wind Speed [mph]		95										100										105												
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge			
30	1	501 / 205 / 64	553 / 296 / 59	512 / 289 / 100	555 / 397 / 89	524 / 367 / 163	572 / 475 / 138	450 / 351 / 137	551 / 448 / 115	520 / 227 / 64	559 / 315 / 57	524 / 313 / 99	572 / 429 / 88	533 / 389 / 157	584 / 501 / 133	473 / 373 / 133	564 / 462 / 108	531 / 246 / 63	574 / 339 / 56	528 / 333 / 96	579 / 452 / 84	552 / 418 / 155	594 / 524 / 127	494 / 394 / 128	599 / 494 / 106	574 / 339 / 56	637 / 454 / 49	579 / 460 / 84	606 / 569 / 69	594 / 531 / 127	702 / 648 / 102	599 / 502 / 106	717 / 614 / 86	
	2	534 / 511 / 49	557 / 631 / 40	596 / 489 / 81	625 / 599 / 65	631 / 563 / 122	763 / 698 / 100	626 / 520 / 99	759 / 644 / 81	539 / 537 / 47	561 / 656 / 38	593 / 505 / 77	634 / 624 / 62	656 / 589 / 116	785 / 722 / 94	651 / 544 / 95	805 / 685 / 79	542 / 561 / 45	579 / 696 / 37	600 / 529 / 73	653 / 646 / 59	678 / 612 / 111	803 / 741 / 89	673 / 565 / 90	824 / 704 / 74	542 / 561 / 45	579 / 696 / 37	600 / 529 / 73	653 / 646 / 59	678 / 612 / 111	803 / 741 / 89	673 / 565 / 90	824 / 704 / 74	
	3	535 / 202 / 68	572 / 286 / 62	535 / 280 / 110	580 / 390 / 99	545 / 360 / 183	598 / 475 / 158	450 / 351 / 155	551 / 448 / 129	545 / 220 / 67	586 / 309 / 60	546 / 303 / 108	585 / 413 / 96	553 / 382 / 177	609 / 501 / 152	473 / 373 / 149	564 / 462 / 122	554 / 238 / 66	589 / 326 / 58	557 / 327 / 106	601 / 443 / 94	570 / 411 / 174	618 / 524 / 145	494 / 394 / 144	599 / 494 / 119	589 / 326 / 58	655 / 444 / 52	601 / 451 / 94	634 / 569 / 78	618 / 531 / 145	702 / 648 / 117	599 / 502 / 119	717 / 614 / 96	
	35	1	566 / 511 / 53	583 / 631 / 43	616 / 480 / 90	651 / 599 / 74	639 / 563 / 139	763 / 698 / 114	626 / 520 / 112	759 / 644 / 91	570 / 537 / 51	586 / 656 / 41	623 / 505 / 87	658 / 624 / 71	656 / 589 / 133	785 / 722 / 108	651 / 544 / 107	805 / 685 / 89	572 / 561 / 48	603 / 696 / 40	629 / 529 / 83	663 / 646 / 67	678 / 612 / 126	803 / 741 / 101	673 / 565 / 102	824 / 704 / 84	572 / 561 / 48	603 / 696 / 40	629 / 529 / 83	663 / 646 / 67	678 / 612 / 126	803 / 741 / 101	673 / 565 / 102	824 / 704 / 84
		2	559 / 196 / 116	599 / 281 / 106	555 / 271 / 156	604 / 383 / 143	565 / 354 / 208	624 / 475 / 183	450 / 351 / 172	551 / 448 / 144	567 / 213 / 114	601 / 298 / 102	565 / 293 / 153	608 / 405 / 137	571 / 376 / 201	633 / 501 / 175	473 / 373 / 166	564 / 462 / 135	575 / 230 / 112	613 / 320 / 100	575 / 316 / 151	622 / 435 / 135	588 / 403 / 197	642 / 524 / 168	494 / 394 / 161	599 / 494 / 133	613 / 320 / 100	672 / 435 / 89	622 / 443 / 135	661 / 569 / 114	642 / 531 / 168	702 / 648 / 135	599 / 502 / 133	717 / 614 / 107
		3	599 / 281 / 106	650 / 386 / 95	604 / 390 / 143	651 / 519 / 124	624 / 482 / 183	670 / 601 / 150	551 / 455 / 144	669 / 568 / 119	601 / 298 / 102	654 / 406 / 91	608 / 413 / 137	657 / 545 / 119	633 / 507 / 175	682 / 626 / 143	564 / 469 / 135	695 / 593 / 113	613 / 320 / 100	672 / 435 / 89	622 / 443 / 135	661 / 569 / 114	642 / 531 / 168	702 / 648 / 135	599 / 502 / 133	717 / 614 / 107	613 / 320 / 100	672 / 435 / 89	622 / 443 / 135	661 / 569 / 114	642 / 531 / 168	702 / 648 / 135	599 / 502 / 133	717 / 614 / 107
	40	1	599 / 511 / 93	610 / 631 / 75	636 / 470 / 129	678 / 599 / 108	662 / 563 / 161	763 / 698 / 132	626 / 520 / 124	759 / 644 / 102	601 / 537 / 89	611 / 656 / 72	654 / 505 / 127	683 / 624 / 103	672 / 589 / 153	785 / 722 / 124	651 / 544 / 119	805 / 685 / 99	602 / 561 / 85	628 / 696 / 70	659 / 529 / 122	687 / 646 / 98	680 / 612 / 146	803 / 741 / 117	673 / 565 / 113	824 / 704 / 93	602 / 561 / 85	628 / 696 / 70	659 / 529 / 122	687 / 646 / 98	680 / 612 / 146	803 / 741 / 117	673 / 565 / 113	824 / 704 / 93
		2	533 / 260 / 61	579 / 356 / 54	541 / 357 / 94	596 / 483 / 83	560 / 439 / 149	626 / 557 / 124	506 / 406 / 121	621 / 515 / 101	543 / 279 / 60	594 / 380 / 53	553 / 381 / 92	589 / 494 / 78	568 / 459 / 144	645 / 577 / 119	525 / 424 / 117	640 / 533 / 97	594 / 380 / 53	648 / 491 / 45	589 / 503 / 78	630 / 624 / 64	630 / 572 / 116	754 / 701 / 94	640 / 541 / 97	772 / 666 / 79	594 / 380 / 53	648 / 491 / 45	589 / 503 / 78	630 / 624 / 64	630 / 572 / 116	754 / 701 / 94	640 / 541 / 97	772 / 666 / 79
		3	544 / 582 / 43	580 / 714 / 35	605 / 551 / 70	687 / 683 / 58	697 / 632 / 105	843 / 780 / 86	710 / 599 / 88	866 / 742 / 72	545 / 601 / 41	607 / 751 / 34	624 / 583 / 69	700 / 699 / 54	732 / 667 / 102	880 / 817 / 83	727 / 615 / 83	906 / 778 / 70	545 / 601 / 41	607 / 751 / 34	624 / 583 / 69	700 / 699 / 54	732 / 667 / 102	880 / 817 / 83	727 / 615 / 83	906 / 778 / 70	545 / 601 / 41	607 / 751 / 34	624 / 583 / 69	700 / 699 / 54	732 / 667 / 102	880 / 817 / 83	727 / 615 / 83	906 / 778 / 70
35	1	554 / 252 / 64	603 / 349 / 57	559 / 345 / 103	617 / 473 / 92	577 / 431 / 167	639 / 557 / 142	506 / 406 / 137	621 / 515 / 114	564 / 269 / 63	617 / 372 / 56	570 / 368 / 101	621 / 494 / 89	594 / 459 / 164	646 / 577 / 136	525 / 424 / 132	640 / 533 / 109	564 / 269 / 63	617 / 372 / 56	570 / 368 / 101	621 / 494 / 89	594 / 459 / 164	646 / 577 / 136	525 / 424 / 132	640 / 533 / 109	564 / 269 / 63	617 / 372 / 56	570 / 368 / 101	621 / 494 / 89	594 / 459 / 164	646 / 577 / 136	525 / 424 / 132	640 / 533 / 109	
	2	603 / 349 / 57	674 / 473 / 51	617 / 482 / 92	637 / 590 / 74	625 / 553 / 139	740 / 685 / 114	621 / 522 / 114	756 / 650 / 94	617 / 372 / 56	678 / 491 / 48	621 / 503 / 89	656 / 624 / 72	631 / 572 / 133	754 / 701 / 108	640 / 541 / 109	772 / 666 / 89	617 / 372 / 56	678 / 491 / 48	621 / 503 / 89	656 / 624 / 72	631 / 572 / 133	754 / 701 / 108	640 / 541 / 109	772 / 666 / 89	617 / 372 / 56	678 / 491 / 48	621 / 503 / 89	656 / 624 / 72	631 / 572 / 133	754 / 701 / 108	640 / 541 / 109	772 / 666 / 89	
	3	573 / 582 / 46	603 / 714 / 38	634 / 551 / 80	687 / 683 / 65	697 / 632 / 120	843 / 780 / 98	710 / 599 / 99	866 / 742 / 81	572 / 601 / 44	618 / 751 / 36	651 / 583 / 78	700 / 699 / 62	732 / 667 / 117	880 / 817 / 95	727 / 615 / 94	906 / 778 / 79	572 / 601 / 44	618 / 751 / 36	651 / 583 / 78	700 / 699 / 62	732 / 667 / 117	880 / 817 / 95	727 / 615 / 94	906 / 778 / 79	572 / 601 / 44	618 / 751 / 36	651 / 583 / 78	700 / 699 / 62	732 / 667 / 117	880 / 817 / 95	727 / 615 / 94	906 / 778 / 79	
40	1	583 / 247 / 110	626 / 343 / 98	585 / 339 / 148	637 / 464 / 132	593 / 423 / 190	663 / 557 / 164	506 / 406 / 152	621 / 515 / 127	592 / 265 / 108	639 / 365 / 97	595 / 362 / 145	639 / 483 / 127	609 / 450 / 186	668 / 577 / 157	525 / 424 / 147	640 / 533 / 121	592 / 265 / 108	639 / 365 / 97	595 / 362 / 145	639 / 483 / 127	609 / 450 / 186	668 / 577 / 157	525 / 424 / 147	640 / 533 / 121	592 / 265 / 108	639 / 365 / 97	595 / 362 / 145	639 / 483 / 127	609 / 450 / 186	668 / 577 / 157	525 / 424 / 147	640 / 533 / 121	
	2	626 / 343 / 98	690 / 463 / 87	637 / 473 / 132	664 / 590 / 108	648 / 553 / 161	740 / 685 / 132	621 / 522 / 127	756 / 650 / 105	639 / 365 / 97	708 / 491 / 85	639 / 492 / 127	681 / 624 / 106	653 / 572 / 153	754 / 701 / 124	640 / 541 / 121	772 / 666 / 99	639 / 365 / 97	708 / 491 / 85	639 / 492 / 127	681 / 624 / 106	653 / 572 / 153	754 / 701 / 124	640 / 541 / 121	772 / 666 / 99	639 / 365 / 97	708 / 491 / 85	639 / 492 / 127	681 / 624 / 106	653 / 572 / 153	754 / 701 / 124	640 / 541 / 121	772 / 666 / 99	
	3	601 / 582 / 81	626 / 714 / 66	662 / 551 / 116	707 / 683 / 95	697 / 632 / 139	843 / 780 / 113	710 / 599 / 110	866 / 742 / 90	599 / 601 / 77	640 / 751 / 64	679 / 583 / 114	706 / 699 / 90	732 / 667 / 135	880 / 817 / 110	727 / 615 / 105	906 / 778 / 88	599 / 601 / 77	640 / 751 / 64	679 / 583 / 114	706 / 699 / 90	732 / 667 / 135	880 / 817 / 110	727 / 615 / 105	906 / 778 / 88	599 / 601 / 77	640 / 751 / 64	679 / 583 / 114	706 / 699 / 90	732 / 667 / 135	880 / 817 / 110	727 / 615 / 105	906 / 778 / 88	
30	1	554 / 297 / 59	609 / 403 / 52	556 / 399 / 89	605 / 523 / 77	574 / 477 / 138	661 / 595 / 113	553 / 450 / 115	656 / 549 / 92	543 / 279 / 60	594 / 380 / 53	553 / 381 / 92	589 / 494 / 78	568 / 459 / 144	645 / 577 / 119	525 / 424 / 117	640 / 533 / 97	543 / 279 / 60	594 / 380 / 53	553 / 381 / 92	589 / 494 / 78	568 / 459 / 144	645 / 577 / 119	525 / 424 / 117	640 / 533 / 97	543 / 279 / 60	594 / 380 / 53	553 / 381 / 92	589 / 494 / 78	568 / 459 / 144	645 / 577 / 119	525 / 424 / 117	640 / 533 / 97	
	2	609 / 403 / 52	667 / 519 / 44	593 / 521 / 75	638 / 640 / 61	661 / 603 / 113	787 / 734 / 91	656 / 557 / 92	807 / 698 / 77	594 / 380 / 53	648 / 491 / 45	589 / 503 / 78	630 / 624 / 64	630 / 572 / 116	754 / 701 / 94	640 / 541 / 97	772 / 666 / 79	594 / 380 / 53	648 / 491 / 45	589 / 503 / 78	630 / 624 / 64	630 / 572 / 116	754 / 701 / 94	640 / 541 / 97	772 / 666 / 79	594 / 380 / 53	648 / 491 / 45	589 / 503 / 78	630 / 624 / 64	630 / 572 / 116	754 / 701 / 94	640 / 541 / 97	772 / 666 / 79	
	3	559 / 633 / 40	613 / 762 / 32	627 / 601 / 65	731 / 733 / 53	745 / 682 / 97	916 / 852 / 80	762 / 646 / 81	913 / 785 / 65	545 / 601 / 41	607 / 751 / 34	624 / 583 / 69	700 / 699 / 54	732 / 667 / 102	880 / 817 / 83	727 / 615 / 83	906 / 778 / 70	545 / 601 / 41	607 / 751 / 34	624 / 583 / 69	700 / 699 / 54	732 / 667 / 102	880 / 817 / 83	727 / 615 / 83	906 / 778 / 70	545 / 601 / 41	607 / 751 / 34	624 / 583 / 69	700 / 699 / 54	732 / 667 / 102	880 / 817 / 83	727 / 615 / 83	906 / 778 / 70	
	35	1	573 / 287 / 62	631 / 395 / 55	581 / 392 / 99	636 / 523 / 87	600 / 477 / 158	661 / 595 / 130	553 / 450 / 129	656 / 549 / 104	564 / 269 / 63	617 / 372 / 56	570 / 368 / 101	621 / 494 / 89	594 / 459 / 164	646 / 577 / 136	525 / 424 / 132	640 / 533 / 109	564 / 269 / 63	617 / 372 / 56	570 / 368 / 101	621 / 494 / 89	594 / 459 / 164	646 / 577 / 136	525 / 424 / 132	640 / 533 / 109	564 / 269 / 63	617 / 372 / 56	570 / 368 / 101	621 / 494 / 89	594 / 459 / 164	646 / 577 / 136	525 / 424 / 132	

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	555 / 311 / 57	624 / 427 / 51	568 / 423 / 88	608 / 540 / 73	591 / 505 / 135	691 / 625 / 111	569 / 466 / 110	687 / 577 / 90	576 / 347 / 55	640 / 464 / 48	593 / 471 / 84	623 / 583 / 69	602 / 534 / 124	731 / 666 / 102	610 / 504 / 103	726 / 614 / 83	597 / 384 / 53	652 / 496 / 45	593 / 499 / 78	634 / 619 / 64	651 / 583 / 119	783 / 719 / 97	646 / 538 / 97	779 / 663 / 79
	2	624 / 427 / 51	669 / 534 / 42	595 / 538 / 72	666 / 672 / 59	674 / 618 / 108	819 / 767 / 89	687 / 585 / 90	841 / 730 / 74	640 / 464 / 48	716 / 585 / 40	609 / 579 / 67	699 / 711 / 54	731 / 675 / 102	879 / 827 / 83	726 / 623 / 83	905 / 788 / 70	652 / 496 / 45	749 / 617 / 37	619 / 614 / 62	745 / 763 / 51	761 / 708 / 94	931 / 879 / 78	779 / 672 / 79	961 / 840 / 65
	3	557 / 648 / 38	637 / 794 / 31	628 / 616 / 62	760 / 765 / 51	776 / 713 / 94	950 / 886 / 78	795 / 677 / 79	947 / 816 / 63	579 / 705 / 36	679 / 852 / 29	679 / 674 / 59	815 / 825 / 48	836 / 772 / 89	1010 / 946 / 72	832 / 712 / 72	1007 / 871 / 59	613 / 759 / 34	715 / 902 / 27	707 / 706 / 54	863 / 878 / 45	889 / 825 / 83	1059 / 995 / 67	885 / 760 / 68	1100 / 954 / 56
	1	583 / 305 / 60	645 / 418 / 54	593 / 415 / 98	637 / 540 / 83	616 / 505 / 155	691 / 625 / 126	569 / 466 / 124	687 / 577 / 102	602 / 341 / 58	657 / 454 / 51	603 / 454 / 92	651 / 583 / 78	622 / 534 / 142	731 / 666 / 117	610 / 504 / 117	726 / 614 / 94	620 / 376 / 56	682 / 496 / 48	624 / 499 / 89	660 / 619 / 72	651 / 583 / 136	783 / 719 / 111	646 / 538 / 109	779 / 663 / 89
	2	645 / 418 / 54	697 / 534 / 45	624 / 538 / 81	673 / 672 / 67	674 / 618 / 123	819 / 767 / 101	687 / 585 / 102	841 / 730 / 84	657 / 454 / 51	729 / 585 / 43	636 / 579 / 76	699 / 711 / 62	731 / 675 / 117	879 / 827 / 95	726 / 623 / 94	905 / 788 / 79	682 / 496 / 48	749 / 617 / 40	644 / 614 / 71	745 / 763 / 58	761 / 708 / 108	931 / 879 / 89	779 / 672 / 89	961 / 840 / 74
	3	582 / 648 / 41	637 / 794 / 33	653 / 616 / 71	760 / 765 / 58	776 / 713 / 108	950 / 886 / 89	795 / 677 / 89	947 / 816 / 71	603 / 705 / 39	679 / 852 / 31	682 / 674 / 67	815 / 825 / 54	836 / 772 / 101	1010 / 946 / 82	832 / 712 / 81	1007 / 871 / 66	622 / 759 / 36	715 / 902 / 29	707 / 706 / 62	863 / 878 / 51	889 / 825 / 95	1059 / 995 / 76	885 / 760 / 76	1100 / 954 / 64
	1	609 / 300 / 104	664 / 410 / 93	604 / 400 / 137	667 / 540 / 122	629 / 494 / 175	691 / 625 / 146	569 / 466 / 138	687 / 577 / 113	625 / 335 / 100	674 / 444 / 87	623 / 445 / 132	678 / 583 / 114	645 / 534 / 164	731 / 666 / 135	610 / 504 / 130	726 / 614 / 105	642 / 369 / 97	712 / 496 / 85	642 / 488 / 127	686 / 619 / 106	673 / 583 / 157	783 / 719 / 128	646 / 538 / 121	779 / 663 / 99
	2	664 / 410 / 93	725 / 534 / 79	652 / 538 / 119	696 / 672 / 98	674 / 618 / 143	819 / 767 / 117	687 / 585 / 113	841 / 730 / 93	674 / 444 / 87	756 / 585 / 75	663 / 579 / 111	705 / 711 / 90	731 / 675 / 135	879 / 827 / 110	726 / 623 / 105	905 / 788 / 88	712 / 496 / 85	763 / 617 / 70	669 / 614 / 103	745 / 763 / 85	761 / 708 / 124	931 / 879 / 102	779 / 672 / 99	961 / 840 / 82
	3	607 / 648 / 72	646 / 794 / 58	678 / 616 / 103	760 / 765 / 85	776 / 713 / 124	950 / 886 / 102	795 / 677 / 99	947 / 816 / 79	627 / 705 / 68	679 / 852 / 54	706 / 674 / 98	815 / 825 / 79	836 / 772 / 117	1010 / 946 / 95	832 / 712 / 90	1007 / 871 / 74	645 / 759 / 64	715 / 902 / 50	711 / 706 / 90	863 / 878 / 74	889 / 825 / 110	1059 / 995 / 88	885 / 760 / 85	1100 / 954 / 71
Wind Speed [mph]		170								180															
30	1	617 / 419 / 51	677 / 537 / 43	601 / 531 / 73	655 / 648 / 59	680 / 614 / 111	806 / 743 / 89	675 / 567 / 90	827 / 707 / 74	637 / 454 / 49	689 / 561 / 40	620 / 572 / 70	692 / 689 / 56	721 / 656 / 105	873 / 809 / 86	717 / 605 / 86	869 / 745 / 70	ASCE Group Zone							
	2	677 / 537 / 43	795 / 660 / 35	655 / 660 / 59	786 / 809 / 48	806 / 753 / 89	974 / 923 / 72	827 / 717 / 74	1008 / 884 / 61	689 / 561 / 40	836 / 698 / 33	692 / 702 / 56	820 / 848 / 45	845 / 793 / 83	1048 / 996 / 69	869 / 756 / 70	1045 / 918 / 56	Panal Angle							
	3	647 / 806 / 32	774 / 981 / 26	748 / 752 / 51	902 / 922 / 42	934 / 871 / 78	1144 / 1077 / 64	964 / 831 / 65	1141 / 992 / 52	676 / 847 / 30	796 / 1013 / 24	783 / 792 / 48	970 / 995 / 40	971 / 908 / 72	1169 / 1103 / 58	1005 / 868 / 61	1222 / 1064 / 50	Mono Slope							
	1	638 / 411 / 54	706 / 537 / 46	631 / 531 / 83	664 / 648 / 67	680 / 614 / 126	806 / 743 / 101	675 / 567 / 102	827 / 707 / 84	655 / 444 / 52	709 / 561 / 43	648 / 572 / 80	692 / 689 / 63	721 / 656 / 120	873 / 809 / 98	717 / 605 / 96	869 / 745 / 79	0 - 7.5							
	2	706 / 537 / 46	795 / 660 / 38	664 / 660 / 67	786 / 809 / 54	806 / 753 / 101	974 / 923 / 82	827 / 717 / 84	1008 / 884 / 69	709 / 561 / 43	836 / 698 / 35	692 / 702 / 63	820 / 848 / 51	845 / 793 / 95	1048 / 996 / 79	869 / 756 / 79	1045 / 918 / 64	7.5 - 15							
	3	647 / 806 / 34	774 / 981 / 28	748 / 752 / 58	902 / 922 / 47	934 / 871 / 89	1144 / 1077 / 73	964 / 831 / 74	1141 / 992 / 59	676 / 847 / 32	796 / 1013 / 26	783 / 792 / 54	970 / 995 / 45	971 / 908 / 82	1169 / 1103 / 67	1005 / 868 / 69	1222 / 1064 / 56	15 - 30							
	1	658 / 402 / 93	734 / 537 / 81	660 / 531 / 122	688 / 648 / 98	682 / 614 / 146	806 / 743 / 117	675 / 567 / 113	827 / 707 / 93	672 / 435 / 89	735 / 561 / 75	677 / 572 / 116	705 / 689 / 93	721 / 656 / 139	873 / 809 / 113	717 / 605 / 107	869 / 745 / 88	30 - 45							
	2	734 / 537 / 81	795 / 660 / 66	688 / 660 / 98	786 / 809 / 79	806 / 753 / 117	974 / 923 / 95	827 / 717 / 93	1008 / 884 / 76	735 / 561 / 75	836 / 698 / 62	705 / 702 / 93	820 / 848 / 74	845 / 793 / 110	1048 / 996 / 92	869 / 756 / 88	1045 / 918 / 71	1 - 1							
	3	659 / 806 / 60	774 / 981 / 49	748 / 752 / 85	902 / 922 / 69	934 / 871 / 102	1144 / 1077 / 84	964 / 831 / 82	1141 / 992 / 65	676 / 847 / 56	796 / 1013 / 45	783 / 792 / 79	970 / 995 / 66	971 / 908 / 95	1169 / 1103 / 77	1005 / 868 / 76	1222 / 1064 / 62	2 = 2							
Wind Speed [mph]		190								200															
30	1	654 / 487 / 47	725 / 595 / 38	623 / 595 / 65	724 / 726 / 53	759 / 694 / 100	908 / 844 / 80	755 / 640 / 81	935 / 805 / 68	656 / 506 / 44	779 / 643 / 37	639 / 629 / 62	775 / 781 / 51	792 / 728 / 94	934 / 872 / 75	788 / 671 / 77	966 / 833 / 63	ASCE Group Zone							
	2	725 / 595 / 38	900 / 754 / 32	724 / 739 / 53	879 / 912 / 43	908 / 856 / 80	1072 / 1022 / 64	935 / 816 / 68	1116 / 983 / 54	779 / 643 / 37	931 / 783 / 30	751 / 770 / 50	900 / 937 / 40	934 / 884 / 75	1135 / 1084 / 61	966 / 845 / 63	1184 / 1045 / 52	Panal Angle							
	3	699 / 880 / 28	846 / 1080 / 23	841 / 854 / 46	993 / 1021 / 37	1038 / 973 / 69	1239 / 1172 / 56	1076 / 932 / 59	1299 / 1133 / 48	744 / 940 / 27	893 / 1143 / 22	866 / 882 / 43	1050 / 1083 / 35	1102 / 1036 / 67	1303 / 1234 / 53	1100 / 954 / 54	1369 / 1196 / 45	Mono Slope							
	1	671 / 476 / 50	726 / 595 / 41	649 / 595 / 74	724 / 726 / 60	759 / 694 / 114	908 / 844 / 92	755 / 640 / 91	935 / 805 / 76	685 / 506 / 47	779 / 643 / 40	662 / 629 / 71	775 / 781 / 58	792 / 728 / 108	934 / 872 / 86	788 / 671 / 86	966 / 833 / 71	0 - 7.5							
	2	726 / 595 / 41	900 / 754 / 34	724 / 739 / 60	879 / 912 / 49	908 / 856 / 92	1072 / 1022 / 73	935 / 816 / 76	1116 / 983 / 61	779 / 643 / 40	931 / 783 / 32	751 / 770 / 56	900 / 937 / 45	934 / 884 / 86	1135 / 1084 / 70	966 / 845 / 71	1184 / 1045 / 59	7.5 - 15							
	3	699 / 880 / 30	846 / 1080 / 24	841 / 854 / 53	993 / 1021 / 42	1038 / 973 / 79	1239 / 1172 / 63	1076 / 932 / 66	1299 / 1133 / 54	744 / 940 / 29	893 / 1143 / 23	866 / 882 / 49	1050 / 1083 / 40	1102 / 1036 / 76	1303 / 1234 / 60	1100 / 954 / 61	1369 / 1196 / 51	15 - 30							
	1	686 / 466 / 85	751 / 595 / 72	675 / 595 / 108	724 / 726 / 87	759 / 694 / 132	908 / 844 / 106	755 / 640 / 102	935 / 805 / 85	714 / 506 / 83	786 / 643 / 70	687 / 629 / 103	775 / 781 / 85	792 / 728 / 124	934 / 872 / 99	788 / 671 / 96	966 / 833 / 79	30 - 45							
	2	751 / 595 / 72	900 / 754 / 60	724 / 739 / 87	879 / 912 / 72	908 / 856 / 106	1072 / 1022 / 84	935 / 816 / 85	1116 / 983 / 68	786 / 643 / 70	931 / 783 / 56	751 / 770 / 82	900 / 937 / 66	934 / 884 / 99	1135 / 1084 / 81	966 / 845 / 79	1184 / 1045 / 65	1 - 1							
	3	699 / 880 / 52	846 / 1080 / 43	841 / 854 / 77	993 / 1021 / 61	1038 / 973 / 92	1239 / 1172 / 73	1076 / 932 / 74	1299 / 1133 / 60	744 / 940 / 50	893 / 1143 / 41	866 / 882 / 72	1050 / 1083 / 58	1102 / 1036 / 88	1303 / 1234 / 70	1100 / 954 / 68	1369 / 1196 / 57	2 = 2							

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																
Wind Speed [mph]		95																100																105																
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																							
45	1	579 / 189 / 122	613 / 271 / 112	583 / 266 / 168	615 / 369 / 151	574 / 342 / 221	637 / 466 / 197	463 / 351 / 190	551 / 448 / 159	586 / 206 / 120	625 / 292 / 110	592 / 288 / 165	629 / 397 / 148	589 / 369 / 217	645 / 490 / 189	476 / 373 / 183	564 / 462 / 149	593 / 222 / 118	636 / 314 / 108	590 / 305 / 160	642 / 426 / 145	604 / 396 / 213	665 / 524 / 185	494 / 394 / 177	599 / 494 / 146	613 / 271 / 112	669 / 378 / 101	615 / 376 / 151	682 / 519 / 136	637 / 472 / 197	691 / 601 / 165	551 / 455 / 159	669 / 568 / 131	625 / 292 / 110	672 / 398 / 97	629 / 405 / 148	686 / 545 / 131	645 / 497 / 189	699 / 626 / 157	564 / 469 / 149	695 / 593 / 124	636 / 314 / 108	688 / 425 / 95	642 / 434 / 145	689 / 569 / 125	665 / 531 / 185	705 / 648 / 149	599 / 502 / 146	717 / 614 / 118	
	2	631 / 511 / 101	636 / 631 / 83	653 / 461 / 139	704 / 599 / 119	685 / 563 / 177	763 / 698 / 145	626 / 520 / 137	759 / 644 / 112	632 / 537 / 97	636 / 656 / 78	671 / 495 / 136	708 / 624 / 113	694 / 589 / 169	785 / 722 / 137	651 / 544 / 131	805 / 685 / 109	632 / 561 / 93	652 / 696 / 76	688 / 529 / 134	710 / 646 / 108	701 / 612 / 161	803 / 741 / 129	673 / 565 / 124	824 / 704 / 103	631 / 511 / 101	636 / 631 / 83	653 / 461 / 139	704 / 599 / 119	685 / 563 / 177	763 / 698 / 145	626 / 520 / 137	759 / 644 / 112	632 / 537 / 97	636 / 656 / 78	671 / 495 / 136	708 / 624 / 113	694 / 589 / 169	785 / 722 / 137	651 / 544 / 131	805 / 685 / 109	632 / 561 / 93	652 / 696 / 76	688 / 529 / 134	710 / 646 / 108	701 / 612 / 161	803 / 741 / 129	673 / 565 / 124	824 / 704 / 103	
	3	608 / 186 / 131	637 / 266 / 119	599 / 257 / 177	636 / 362 / 161	591 / 336 / 237	649 / 456 / 211	477 / 351 / 207	551 / 448 / 173	614 / 202 / 128	647 / 287 / 117	607 / 278 / 174	649 / 390 / 158	605 / 362 / 233	669 / 490 / 206	489 / 373 / 200	564 / 462 / 163	620 / 218 / 126	657 / 308 / 115	614 / 299 / 171	661 / 418 / 155	620 / 388 / 228	674 / 512 / 198	501 / 394 / 194	599 / 494 / 160	608 / 186 / 131	637 / 266 / 119	599 / 257 / 177	636 / 362 / 161	591 / 336 / 237	649 / 456 / 211	477 / 351 / 207	551 / 448 / 173	614 / 202 / 128	647 / 287 / 117	607 / 278 / 174	649 / 390 / 158	605 / 362 / 233	669 / 490 / 206	489 / 373 / 200	564 / 462 / 163	620 / 218 / 126	657 / 308 / 115	614 / 299 / 171	661 / 418 / 155	620 / 388 / 228	674 / 512 / 198	501 / 394 / 194	599 / 494 / 160	
	50	1	637 / 266 / 119	687 / 370 / 108	636 / 369 / 161	697 / 508 / 146	649 / 463 / 211	712 / 601 / 180	551 / 455 / 173	669 / 568 / 143	647 / 287 / 117	703 / 398 / 106	649 / 397 / 158	699 / 533 / 139	669 / 497 / 206	719 / 626 / 171	564 / 469 / 163	695 / 593 / 136	657 / 308 / 115	703 / 416 / 101	661 / 425 / 155	717 / 569 / 136	674 / 519 / 198	724 / 648 / 163	599 / 502 / 160	717 / 614 / 129	637 / 266 / 119	687 / 370 / 108	636 / 369 / 161	697 / 508 / 146	649 / 463 / 211	712 / 601 / 180	551 / 455 / 173	669 / 568 / 143	647 / 287 / 117	703 / 398 / 106	649 / 397 / 158	699 / 533 / 139	669 / 497 / 206	719 / 626 / 171	564 / 469 / 163	695 / 593 / 136	657 / 308 / 115	703 / 416 / 101	661 / 425 / 155	717 / 569 / 136	674 / 519 / 198	724 / 648 / 163	599 / 502 / 160	717 / 614 / 129
	2	664 / 511 / 110	663 / 631 / 90	670 / 451 / 149	730 / 599 / 130	708 / 563 / 193	764 / 698 / 158	626 / 520 / 150	759 / 644 / 122	663 / 537 / 106	661 / 656 / 85	686 / 484 / 146	733 / 624 / 123	716 / 589 / 184	785 / 722 / 149	651 / 544 / 143	805 / 685 / 119	661 / 561 / 101	677 / 696 / 83	702 / 518 / 142	734 / 646 / 117	721 / 612 / 176	803 / 741 / 141	673 / 565 / 136	824 / 704 / 112	664 / 511 / 110	663 / 631 / 90	670 / 451 / 149	730 / 599 / 130	708 / 563 / 193	764 / 698 / 158	626 / 520 / 150	759 / 644 / 122	663 / 537 / 106	661 / 656 / 85	686 / 484 / 146	733 / 624 / 123	716 / 589 / 184	785 / 722 / 149	651 / 544 / 143	805 / 685 / 119	661 / 561 / 101	677 / 696 / 83	702 / 518 / 142	734 / 646 / 117	721 / 612 / 176	803 / 741 / 141	673 / 565 / 136	824 / 704 / 112	
	3	649 / 176 / 144	680 / 255 / 133	647 / 248 / 199	674 / 348 / 180	623 / 323 / 268	684 / 447 / 242	503 / 351 / 242	552 / 448 / 203	653 / 191 / 141	688 / 275 / 130	653 / 268 / 195	684 / 374 / 177	635 / 348 / 263	687 / 469 / 232	515 / 373 / 234	564 / 462 / 191	656 / 206 / 138	696 / 296 / 128	658 / 288 / 192	695 / 401 / 173	648 / 373 / 257	705 / 501 / 227	526 / 394 / 226	599 / 494 / 187	649 / 176 / 144	680 / 255 / 133	647 / 248 / 199	674 / 348 / 180	623 / 323 / 268	684 / 447 / 242	503 / 351 / 242	552 / 448 / 203	653 / 191 / 141	688 / 275 / 130	653 / 268 / 195	684 / 374 / 177	635 / 348 / 263	687 / 469 / 232	515 / 373 / 234	564 / 462 / 191	656 / 206 / 138	696 / 296 / 128	658 / 288 / 192	695 / 401 / 173	648 / 373 / 257	705 / 501 / 227	526 / 394 / 226	599 / 494 / 187	
	60	1	680 / 255 / 133	719 / 354 / 120	674 / 354 / 180	723 / 486 / 162	684 / 453 / 242	754 / 601 / 211	552 / 455 / 203	669 / 568 / 167	688 / 275 / 130	732 / 380 / 117	684 / 381 / 177	739 / 521 / 158	687 / 476 / 201	760 / 626 / 191	564 / 469 / 159	695 / 593 / 159	696 / 296 / 128	745 / 406 / 114	695 / 408 / 173	754 / 555 / 155	705 / 508 / 227	762 / 648 / 191	599 / 502 / 187	717 / 614 / 151	680 / 255 / 133	719 / 354 / 120	674 / 354 / 180	723 / 486 / 162	684 / 453 / 242	754 / 601 / 211	552 / 455 / 203	669 / 568 / 167	688 / 275 / 130	732 / 380 / 117	684 / 381 / 177	739 / 521 / 158	687 / 476 / 201	760 / 626 / 191	564 / 469 / 159	695 / 593 / 159	696 / 296 / 128	745 / 406 / 114	695 / 408 / 173	754 / 555 / 155	705 / 508 / 227	762 / 648 / 191	599 / 502 / 187	717 / 614 / 151
	2	714 / 500 / 125	716 / 631 / 104	715 / 441 / 169	764 / 584 / 147	719 / 538 / 216	801 / 698 / 185	626 / 520 / 175	759 / 644 / 143	710 / 525 / 120	711 / 656 / 99	729 / 474 / 166	784 / 624 / 144	741 / 575 / 211	805 / 722 / 175	651 / 544 / 167	805 / 685 / 139	721 / 561 / 117	725 / 696 / 96	726 / 495 / 158	782 / 646 / 136	763 / 612 / 206	806 / 741 / 165	673 / 565 / 159	824 / 704 / 131	714 / 500 / 125	716 / 631 / 104	715 / 441 / 169	764 / 584 / 147	719 / 538 / 216	801 / 698 / 185	626 / 520 / 175	759 / 644 / 143	710 / 525 / 120	711 / 656 / 99	729 / 474 / 166	784 / 624 / 144	741 / 575 / 211	805 / 722 / 175	651 / 544 / 167	805 / 685 / 139	721 / 561 / 117	725 / 696 / 96	726 / 495 / 158	782 / 646 / 136	763 / 612 / 206	806 / 741 / 165	673 / 565 / 159	824 / 704 / 131	
	3	600 / 239 / 116	648 / 336 / 106	599 / 327 / 157	656 / 455 / 142	608 / 415 / 205	686 / 557 / 181	506 / 406 / 168	621 / 515 / 140	607 / 255 / 114	659 / 358 / 104	608 / 349 / 154	670 / 483 / 139	623 / 441 / 201	690 / 577 / 173	525 / 424 / 162	640 / 533 / 134	607 / 255 / 114	659 / 358 / 104	608 / 349 / 154	670 / 483 / 139	623 / 441 / 201	690 / 577 / 173	525 / 424 / 162	640 / 533 / 134	600 / 239 / 116	648 / 336 / 106	599 / 327 / 157	656 / 455 / 142	608 / 415 / 205	686 / 557 / 181	506 / 406 / 168	621 / 515 / 140	607 / 255 / 114	659 / 358 / 104	608 / 349 / 154	670 / 483 / 139	623 / 441 / 201	690 / 577 / 173	525 / 424 / 162	640 / 533 / 134									
45	2	648 / 336 / 106	705 / 453 / 93	656 / 463 / 142	690 / 590 / 119	671 / 553 / 177	740 / 685 / 145	621 / 522 / 115	756 / 650 / 115	659 / 358 / 104	721 / 480 / 91	670 / 492 / 139	707 / 624 / 116	674 / 572 / 169	754 / 701 / 134	640 / 541 / 109	772 / 666 / 109	659 / 358 / 104	721 / 480 / 91	670 / 492 / 139	707 / 624 / 116	674 / 572 / 169	754 / 701 / 134	640 / 541 / 109	772 / 666 / 109	648 / 336 / 106	705 / 453 / 93	656 / 463 / 142	690 / 590 / 119	671 / 553 / 177	740 / 685 / 145	621 / 522 / 115	756 / 650 / 115	659 / 358 / 104	721 / 480 / 91	670 / 492 / 139	707 / 624 / 116	674 / 572 / 169	754 / 701 / 134	640 / 541 / 109	772 / 666 / 109									
3	630 / 582 / 89	649 / 714 / 72	690 / 551 / 128	730 / 683 / 105	705 / 632 / 153	843 / 780 / 125	710 / 599 / 121	866 / 742 / 100	626 / 601 / 85	663 / 751 / 70	707 / 583 / 125	728 / 699 / 99	732 / 667 / 149	880 / 817 / 121	727 / 615 / 115	906 / 778 / 97	626 / 601 / 85	663 / 751 / 70	707 / 583 / 125	728 / 699 / 99	732 / 667 / 149	880 / 817 / 121	727 / 615 / 115	906 / 778 / 97	630 / 582 / 89	649 / 714 / 72	690 / 551 / 128	730 / 683 / 105	705 / 632 / 153	843 / 780 / 125	710 / 599 / 121	866 / 742 / 100	626 / 601 / 85	663 / 751 / 70	707 / 583 / 125	728 / 699 / 99	732 / 667 / 149	880 / 817 / 121	727 / 615 / 115	906 / 778 / 97										
50	1	626 / 234 / 124	668 / 329 / 112	622 / 321 / 168	674 / 446 / 152	622 / 407 / 219	693 / 545 / 193	506 / 406 / 183	621 / 515 / 153	632 / 250 / 122	678 / 351 / 110	630 / 342 / 164	686 / 473 / 149	636 / 433 / 215	713 / 577 / 189	525 / 424 / 177	640 / 533 / 146	632 / 250 / 122	678 / 351 / 110	630 / 342 / 164	686 / 473 / 149	636 / 433 / 215	713 / 577 / 189	525 / 424 / 177	640 / 533 / 146	626 / 234 / 124	668 / 329 / 112	622 / 321 / 168	674 / 446 / 152	622 / 407 / 219	693 / 545 / 193	506 / 406 / 183	621 / 515 / 153	632 / 250 / 122	678 / 351 / 110	630 / 342 / 164	686 / 473 / 149	636 / 433 / 215	713 / 577 / 189	525 / 424 / 177	640 / 533 / 146									
2	668 / 329 / 112	718 / 443 / 99	674 / 454 / 152	717 / 590 / 130	693 / 553 / 193	747 / 685 / 158	621 / 522 / 153	756 / 650 / 126	678 / 351 / 110	733 / 469 / 96	686 / 482 / 149	733 / 624 / 127	696 / 572 / 184	754 / 701 / 149	640 / 541 / 146	772 / 666 / 119	678 / 351 / 110	733 / 469 / 96	686 / 482 / 149	733 / 624 / 127	696 / 572 / 184	754 / 701 / 149	640 / 541 / 146	772 / 666 / 119	668 / 329 / 112	718 / 443 / 99	674 / 454 / 152	717 / 590 / 130	693 / 553 / 193	747 / 685 / 158	621 / 522 / 153	756 / 650 / 126	678 / 351 / 110	733 / 469 / 96	686 / 482 / 149	733 / 624 / 127	696 / 572 / 184	754 / 701 / 149	640 / 541 / 146	772 / 666 / 119										
3	658 / 582 / 96	672 / 714 / 78	718 / 551 / 139	753 / 683 / 114	725 / 632 / 167	843 / 780 / 136	710 / 599 / 133	866 / 742 / 109	654 / 601 / 92	685 / 751 / 76	734 / 583 / 136	750 / 699 / 108	746 / 667 / 163	880 / 817 / 132	727 / 615 / 126	906 / 778 / 105	654 / 601 / 92	685 / 751 / 76	734 / 583 / 136	750 / 699 / 108	746 / 667 / 163	880 / 817 / 132	727 / 615 / 126	906 / 778 / 105	658 / 582 / 96	672 / 714 / 78	718 / 551 / 139	753 / 683 / 114	725 / 632 / 167	843 / 780 / 136	710 / 599 / 133	866 / 742 / 109	654 / 601 / 92	685 / 751 / 76	734 / 583 / 136	750 / 699 / 108	746 / 667 / 163	880 / 817 / 132	727 / 615 / 126	906 / 778 / 105										
60	1	660 / 221 / 136	704 / 316 / 125	664 / 309 / 188	705 / 427 / 169	660 / 399 / 252	722 / 533 / 221	526 / 406 / 214																																										

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge														
70	1	682 / 166 / 154	718 / 245 / 145	677 / 234 / 214	707 / 333 / 198	664 / 317 / 303	701 / 428 / 268	520 / 345 / 273	573 / 448 / 232	697 / 184 / 154	724 / 264 / 142	680 / 253 / 210	715 / 358 / 193	661 / 335 / 291	717 / 459 / 262	531 / 367 / 264	574 / 462 / 218	699 / 198 / 151	730 / 283 / 139	697 / 277 / 210	723 / 384 / 189	672 / 358 / 285	733 / 490 / 256	541 / 387 / 254	599 / 494 / 214
	2	718 / 245 / 145	762 / 346 / 133	707 / 340 / 198	762 / 475 / 181	701 / 434 / 268	777 / 586 / 238	573 / 455 / 232	669 / 568 / 191	724 / 264 / 142	774 / 372 / 130	715 / 365 / 193	775 / 509 / 177	717 / 465 / 262	800 / 626 / 232	574 / 469 / 218	695 / 593 / 182	730 / 283 / 139	785 / 397 / 127	723 / 391 / 189	789 / 542 / 172	733 / 496 / 256	800 / 648 / 220	599 / 502 / 214	717 / 614 / 173
	3	744 / 479 / 136	768 / 631 / 118	740 / 422 / 185	795 / 570 / 164	762 / 538 / 250	838 / 698 / 214	626 / 520 / 200	759 / 644 / 164	754 / 513 / 133	762 / 656 / 112	752 / 453 / 181	812 / 608 / 160	764 / 561 / 238	841 / 722 / 202	651 / 544 / 191	805 / 685 / 159	763 / 548 / 130	774 / 696 / 109	764 / 483 / 177	829 / 646 / 156	784 / 597 / 232	839 / 741 / 190	673 / 565 / 182	824 / 704 / 150
	1	744 / 160 / 166	750 / 235 / 156	713 / 225 / 232	751 / 326 / 217	688 / 305 / 330	731 / 418 / 297	537 / 340 / 302	595 / 448 / 261	729 / 173 / 163	754 / 253 / 152	715 / 243 / 227	757 / 351 / 213	697 / 328 / 324	745 / 448 / 290	546 / 360 / 292	595 / 462 / 246	736 / 190 / 163	757 / 271 / 149	731 / 266 / 227	763 / 375 / 208	706 / 351 / 317	759 / 478 / 283	555 / 380 / 282	618 / 494 / 241
	2	750 / 235 / 156	785 / 331 / 142	751 / 332 / 217	798 / 464 / 199	731 / 424 / 297	798 / 571 / 263	595 / 455 / 261	669 / 568 / 215	754 / 253 / 152	793 / 355 / 139	757 / 357 / 213	810 / 497 / 194	745 / 455 / 290	819 / 610 / 256	595 / 469 / 246	695 / 593 / 205	757 / 271 / 149	801 / 378 / 136	763 / 382 / 208	821 / 529 / 189	759 / 485 / 283	839 / 648 / 250	618 / 502 / 241	717 / 614 / 195
	3	769 / 458 / 146	821 / 631 / 132	779 / 413 / 203	824 / 555 / 180	787 / 525 / 276	851 / 679 / 236	627 / 520 / 225	759 / 644 / 184	795 / 502 / 146	812 / 656 / 125	789 / 442 / 199	839 / 592 / 175	785 / 547 / 263	876 / 722 / 229	651 / 544 / 215	805 / 685 / 179	802 / 535 / 142	823 / 696 / 122	798 / 472 / 194	853 / 629 / 170	803 / 582 / 256	872 / 741 / 216	673 / 565 / 205	824 / 704 / 169
	1	798 / 153 / 176	777 / 225 / 165	759 / 216 / 247	775 / 312 / 231	709 / 292 / 354	759 / 409 / 324	553 / 334 / 330	605 / 439 / 285	798 / 170 / 176	797 / 247 / 165	760 / 238 / 247	779 / 335 / 226	716 / 314 / 347	771 / 438 / 317	561 / 354 / 319	616 / 462 / 273	782 / 182 / 173	798 / 265 / 161	760 / 255 / 241	801 / 366 / 226	739 / 344 / 347	784 / 467 / 309	568 / 373 / 307	638 / 494 / 268
	2	777 / 225 / 165	822 / 323 / 154	775 / 318 / 231	812 / 442 / 210	759 / 415 / 324	817 / 557 / 286	605 / 446 / 285	670 / 568 / 239	797 / 247 / 165	828 / 346 / 150	779 / 341 / 226	841 / 485 / 210	771 / 444 / 317	835 / 594 / 279	616 / 469 / 273	695 / 593 / 228	798 / 265 / 161	834 / 369 / 146	801 / 373 / 226	851 / 516 / 205	784 / 473 / 309	853 / 630 / 271	638 / 502 / 268	717 / 614 / 216
	3	808 / 447 / 158	852 / 615 / 143	815 / 403 / 220	872 / 555 / 199	809 / 512 / 302	888 / 679 / 264	646 / 520 / 251	759 / 644 / 205	813 / 478 / 154	862 / 656 / 139	823 / 432 / 215	886 / 592 / 194	826 / 547 / 294	911 / 722 / 256	657 / 544 / 239	805 / 685 / 199	818 / 510 / 150	872 / 696 / 135	830 / 460 / 210	900 / 629 / 189	843 / 582 / 286	905 / 741 / 241	673 / 565 / 228	824 / 704 / 188
Wind Speed [mph]		110								115															
70	1	701 / 213 / 148	735 / 302 / 136	701 / 296 / 206	747 / 418 / 189	682 / 382 / 279	749 / 520 / 250	549 / 406 / 245	621 / 515 / 205	702 / 227 / 145	741 / 321 / 133	705 / 316 / 202	755 / 443 / 185	692 / 406 / 273	764 / 551 / 244	557 / 424 / 236	640 / 533 / 196								
	2	735 / 302 / 136	795 / 422 / 124	747 / 425 / 189	802 / 575 / 168	749 / 527 / 250	821 / 685 / 214	621 / 522 / 205	756 / 650 / 168	741 / 321 / 133	806 / 447 / 121	755 / 451 / 185	815 / 608 / 164	764 / 558 / 244	817 / 701 / 202	640 / 541 / 196	772 / 666 / 159								
	3	772 / 582 / 127	764 / 714 / 103	775 / 513 / 172	846 / 683 / 151	804 / 632 / 184	861 / 780 / 177	710 / 599 / 146	866 / 742 / 146	762 / 601 / 121	774 / 751 / 100	786 / 543 / 168	837 / 699 / 143	822 / 667 / 220	882 / 817 / 179	727 / 615 / 168	906 / 778 / 141								
	1	736 / 204 / 159	779 / 296 / 149	733 / 284 / 222	769 / 399 / 203	715 / 374 / 310	773 / 508 / 276	573 / 406 / 276	626 / 515 / 230	751 / 222 / 159	782 / 314 / 146	735 / 303 / 217	775 / 423 / 199	724 / 397 / 303	787 / 537 / 270	580 / 424 / 266	640 / 533 / 220								
	2	779 / 296 / 149	830 / 412 / 136	769 / 406 / 203	832 / 561 / 184	773 / 515 / 276	858 / 685 / 243	626 / 522 / 230	756 / 650 / 190	782 / 314 / 146	839 / 436 / 132	775 / 431 / 199	843 / 593 / 180	787 / 545 / 270	852 / 701 / 229	640 / 541 / 220	772 / 666 / 179								
	3	809 / 568 / 139	810 / 714 / 115	807 / 501 / 189	892 / 683 / 170	821 / 616 / 250	893 / 780 / 209	710 / 599 / 200	866 / 742 / 164	816 / 601 / 136	819 / 751 / 112	817 / 529 / 184	881 / 699 / 161	837 / 649 / 243	913 / 817 / 202	727 / 615 / 190	906 / 778 / 159								
	1	765 / 195 / 169	800 / 282 / 158	760 / 272 / 236	805 / 390 / 220	746 / 366 / 339	796 / 496 / 302	585 / 399 / 302	646 / 515 / 256	780 / 213 / 169	821 / 307 / 158	776 / 296 / 236	809 / 413 / 215	753 / 389 / 332	808 / 524 / 294	602 / 424 / 296	652 / 533 / 245								
	2	800 / 282 / 158	862 / 401 / 146	805 / 397 / 220	860 / 547 / 199	796 / 502 / 302	871 / 666 / 264	646 / 522 / 256	756 / 650 / 211	821 / 307 / 158	869 / 424 / 143	809 / 421 / 215	868 / 577 / 194	808 / 531 / 294	887 / 701 / 256	652 / 541 / 245	772 / 666 / 199								
	3	844 / 555 / 150	856 / 714 / 128	837 / 488 / 205	912 / 664 / 184	859 / 616 / 279	925 / 780 / 234	710 / 599 / 222	866 / 742 / 182	849 / 586 / 146	864 / 751 / 124	844 / 516 / 199	924 / 699 / 178	875 / 649 / 271	944 / 817 / 226	727 / 615 / 211	906 / 778 / 177								
Wind Speed [mph]		120								130															
70	1	719 / 246 / 145	764 / 348 / 133	708 / 335 / 198	763 / 469 / 181	703 / 430 / 268	779 / 580 / 238	575 / 450 / 232	656 / 549 / 186	702 / 227 / 145	741 / 321 / 133	705 / 316 / 202	755 / 443 / 185	692 / 406 / 273	764 / 551 / 244	557 / 424 / 236	640 / 533 / 196								
	2	764 / 348 / 133	816 / 471 / 118	763 / 477 / 181	827 / 640 / 160	779 / 588 / 238	835 / 734 / 196	656 / 557 / 186	807 / 698 / 155	741 / 321 / 133	806 / 447 / 121	755 / 451 / 185	815 / 608 / 164	764 / 558 / 244	817 / 701 / 202	640 / 541 / 196	772 / 666 / 159								
	3	770 / 633 / 118	760 / 762 / 94	797 / 572 / 164	851 / 733 / 139	817 / 682 / 208	916 / 852 / 173	762 / 646 / 164	913 / 785 / 132	762 / 601 / 121	774 / 751 / 100	786 / 543 / 168	837 / 699 / 143	822 / 667 / 220	882 / 817 / 179	727 / 615 / 168	906 / 778 / 141								
	1	751 / 236 / 156	786 / 332 / 142	752 / 328 / 217	800 / 458 / 199	733 / 420 / 297	800 / 566 / 263	597 / 450 / 261	656 / 549 / 210	751 / 222 / 159	782 / 314 / 146	735 / 303 / 217	775 / 423 / 199	724 / 397 / 303	787 / 537 / 270	580 / 424 / 266	640 / 533 / 220								
	2	786 / 332 / 142	847 / 459 / 129	800 / 466 / 199	853 / 623 / 175	800 / 574 / 263	869 / 734 / 223	656 / 557 / 210	807 / 698 / 174	782 / 314 / 146	839 / 436 / 132	775 / 431 / 199	843 / 593 / 180	787 / 545 / 270	852 / 701 / 229	640 / 541 / 220	772 / 666 / 179								
	3	823 / 633 / 132	802 / 762 / 105	825 / 557 / 180	893 / 733 / 156	854 / 682 / 236	932 / 852 / 196	762 / 646 / 184	913 / 785 / 149	816 / 601 / 136	819 / 751 / 112	817 / 529 / 184	881 / 699 / 161	837 / 649 / 243	913 / 817 / 202	727 / 615 / 190	906 / 778 / 159								
	1	778 / 226 / 165	823 / 324 / 154	776 / 314 / 231	813 / 436 / 210	760 / 411 / 324	819 / 551 / 286	607 / 441 / 285	656 / 549 / 234	780 / 213 / 169	821 / 307 / 158	776 / 296 / 236	809 / 413 / 215	753 / 389 / 332	808 / 524 / 294	602 / 424 / 296	652 / 533 / 245								
	2	823 / 324 / 154	875 / 447 / 139	813 / 444 / 210	876 / 607 / 189	819 / 559 / 286	903 / 734 / 249	656 / 557 / 234	807 / 698 / 194	821 / 307 / 158	869 / 424 / 143	809 / 421 / 215	868 / 577 / 194	808 / 531 / 294	887 / 701 / 256	652 / 541 / 245	772 / 666 / 199								
	3	853 / 617 / 143	844 / 762 / 116	851 / 543 / 194	936 / 733 / 173	890 / 682 / 264	962 / 852 / 219	762 / 646 / 205	913 / 785 / 165	849 / 586 / 146	864 / 751 / 124	844 / 516 / 199	924 / 699 / 178	875 / 649 / 271	944 / 817 / 226	727 / 615 / 211	906 / 778 / 177								

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft			70in x 41in			Load: Up / Down / Side , lbs																				
Wind Speed [mph]			140									150									160								
Panal Angle			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45					
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		70	1	721 / 261 / 142	770 / 367 / 130	712 / 354 / 193	771 / 493 / 177	713 / 453 / 262	794 / 610 / 232	581 / 466 / 223	687 / 577 / 182	740 / 296 / 139	780 / 404 / 124	735 / 400 / 189	785 / 542 / 168	732 / 499 / 250	822 / 666 / 220	610 / 504 / 209	726 / 614 / 168	744 / 325 / 133	810 / 451 / 121	759 / 448 / 185	819 / 603 / 164	769 / 556 / 244	846 / 719 / 208	646 / 538 / 196	779 / 663 / 159		
2	770 / 367 / 130		826 / 495 / 115	771 / 502 / 177	839 / 672 / 156	794 / 618 / 232	851 / 767 / 190	687 / 585 / 182	841 / 730 / 150	780 / 404 / 124	844 / 540 / 109	785 / 552 / 168	836 / 711 / 143	822 / 675 / 220	881 / 827 / 179	726 / 623 / 168	905 / 788 / 141	810 / 451 / 121	884 / 600 / 106	819 / 614 / 164	853 / 763 / 135	822 / 708 / 202	931 / 879 / 167	779 / 672 / 159	961 / 840 / 132				
3	757 / 648 / 112		767 / 794 / 91	828 / 616 / 164	864 / 765 / 135	834 / 713 / 202	950 / 886 / 167	795 / 677 / 159	947 / 816 / 127	769 / 705 / 106	780 / 852 / 85	849 / 674 / 156	887 / 825 / 126	864 / 772 / 190	1010 / 946 / 155	832 / 712 / 146	1007 / 871 / 118	779 / 759 / 100	787 / 902 / 79	842 / 706 / 143	904 / 878 / 118	889 / 825 / 179	1059 / 995 / 143	885 / 760 / 137	1100 / 954 / 114				
80	1		751 / 250 / 152	789 / 350 / 139	754 / 346 / 213	805 / 482 / 194	741 / 443 / 290	813 / 594 / 256	602 / 466 / 251	687 / 577 / 205	768 / 283 / 149	816 / 395 / 136	775 / 391 / 208	816 / 528 / 184	775 / 499 / 283	837 / 657 / 243	622 / 504 / 236	726 / 614 / 190	785 / 317 / 146	843 / 440 / 132	778 / 427 / 199	847 / 588 / 180	791 / 543 / 270	883 / 719 / 236	646 / 538 / 220	779 / 663 / 179			
	2		789 / 350 / 139	854 / 482 / 125	805 / 490 / 194	863 / 653 / 170	813 / 602 / 256	884 / 767 / 216	687 / 585 / 205	841 / 730 / 169	816 / 395 / 136	893 / 540 / 122	816 / 538 / 184	880 / 711 / 161	837 / 657 / 243	912 / 827 / 202	726 / 623 / 190	905 / 788 / 159	843 / 440 / 132	905 / 583 / 115	847 / 599 / 180	894 / 763 / 151	857 / 708 / 229	934 / 879 / 189	779 / 672 / 179	961 / 840 / 149			
	3		807 / 648 / 125	808 / 794 / 102	856 / 601 / 180	905 / 482 / 151	869 / 713 / 229	950 / 886 / 189	795 / 677 / 179	947 / 816 / 144	817 / 705 / 119	818 / 852 / 95	872 / 655 / 170	925 / 825 / 142	897 / 772 / 216	1010 / 946 / 175	832 / 712 / 164	1007 / 871 / 133	823 / 759 / 112	823 / 902 / 88	886 / 706 / 161	940 / 878 / 133	920 / 825 / 202	1059 / 995 / 162	885 / 760 / 154	1100 / 954 / 128			
90	1		794 / 244 / 165	824 / 342 / 150	776 / 331 / 226	837 / 470 / 210	767 / 433 / 317	830 / 578 / 279	623 / 466 / 279	687 / 577 / 228	809 / 277 / 161	848 / 385 / 146	794 / 374 / 220	844 / 515 / 199	799 / 487 / 309	874 / 648 / 271	642 / 504 / 262	726 / 614 / 211	824 / 310 / 158	872 / 429 / 143	812 / 417 / 215	872 / 573 / 194	812 / 529 / 294	892 / 698 / 256	657 / 538 / 245	779 / 663 / 199			
	2		824 / 342 / 150	880 / 469 / 135	837 / 479 / 210	884 / 635 / 184	830 / 586 / 279	917 / 767 / 241	687 / 585 / 228	841 / 730 / 188	848 / 385 / 146	915 / 525 / 131	844 / 524 / 199	924 / 711 / 178	874 / 657 / 271	943 / 827 / 226	726 / 623 / 211	905 / 788 / 177	872 / 429 / 143	951 / 583 / 128	872 / 583 / 194	935 / 763 / 168	892 / 708 / 256	963 / 879 / 211	779 / 672 / 199	961 / 840 / 165			
	3		857 / 648 / 139	849 / 794 / 113	881 / 585 / 194	946 / 765 / 168	904 / 713 / 256	978 / 886 / 211	795 / 677 / 199	947 / 816 / 160	864 / 705 / 131	856 / 852 / 105	893 / 637 / 184	964 / 825 / 158	930 / 772 / 241	1010 / 946 / 196	832 / 712 / 182	1007 / 871 / 148	868 / 759 / 124	858 / 902 / 98	929 / 706 / 178	976 / 878 / 147	951 / 825 / 226	1059 / 995 / 181	885 / 760 / 171	1100 / 954 / 143			
Wind Speed [mph]			170									180																	
70	1	764 / 361 / 130	819 / 486 / 115	765 / 485 / 177	831 / 648 / 156	786 / 599 / 232	841 / 743 / 190	675 / 567 / 182	827 / 707 / 150	785 / 397 / 127	848 / 532 / 112	789 / 533 / 172	840 / 689 / 147	822 / 656 / 226	884 / 809 / 184	717 / 605 / 173	869 / 745 / 141												
	2	819 / 486 / 115	925 / 660 / 103	831 / 660 / 156	865 / 809 / 126	841 / 753 / 190	974 / 923 / 155	827 / 717 / 150	1008 / 884 / 123	848 / 532 / 112	936 / 698 / 97	840 / 702 / 147	872 / 848 / 118	855 / 793 / 179	1048 / 996 / 149	869 / 756 / 141	1045 / 918 / 114												
	3	785 / 806 / 94	822 / 981 / 76	855 / 752 / 135	915 / 922 / 110	934 / 871 / 167	1144 / 1077 / 137	964 / 831 / 132	1141 / 992 / 105	787 / 847 / 88	819 / 1013 / 70	863 / 792 / 126	970 / 995 / 105	971 / 908 / 155	1169 / 1103 / 125	1005 / 868 / 123	1222 / 1064 / 100												
	80	1	803 / 352 / 142	847 / 473 / 125	799 / 473 / 194	855 / 631 / 170	805 / 584 / 256	874 / 743 / 216	675 / 567 / 205	827 / 707 / 169	801 / 378 / 136	874 / 518 / 122	821 / 520 / 189	885 / 689 / 166	839 / 639 / 250	916 / 809 / 209	717 / 605 / 195	869 / 745 / 159											
		2	847 / 473 / 125	943 / 640 / 112	855 / 642 / 170	904 / 809 / 142	874 / 753 / 216	974 / 923 / 175	827 / 717 / 169	1008 / 884 / 138	874 / 518 / 122	980 / 698 / 109	885 / 702 / 166	908 / 848 / 133	886 / 793 / 202	1048 / 996 / 169	869 / 756 / 159	1045 / 918 / 128											
		3	827 / 806 / 105	856 / 981 / 85	896 / 752 / 151	949 / 922 / 123	937 / 871 / 189	1144 / 1077 / 155	964 / 831 / 149	1141 / 992 / 118	827 / 847 / 98	850 / 1013 / 78	902 / 792 / 142	989 / 995 / 118	971 / 908 / 175	1169 / 1103 / 142	1005 / 868 / 138	1222 / 1064 / 113											
	90	1	819 / 335 / 150	897 / 473 / 139	831 / 462 / 210	901 / 631 / 189	844 / 584 / 286	907 / 743 / 241	675 / 567 / 228	827 / 707 / 188	834 / 369 / 146	897 / 504 / 131	851 / 507 / 205	904 / 670 / 178	853 / 622 / 271	948 / 809 / 234	717 / 605 / 216	869 / 745 / 177											
		2	897 / 473 / 139	957 / 621 / 120	901 / 642 / 189	942 / 809 / 158	907 / 753 / 241	976 / 923 / 196	827 / 717 / 188	1008 / 884 / 154	897 / 504 / 131	991 / 676 / 116	904 / 682 / 178	944 / 848 / 147	917 / 793 / 226	1048 / 996 / 189	869 / 756 / 177	1045 / 918 / 143											
		3	869 / 806 / 116	890 / 981 / 94	937 / 752 / 168	982 / 922 / 137	966 / 871 / 211	1144 / 1077 / 174	964 / 831 / 165	1141 / 992 / 131	866 / 847 / 109	882 / 1013 / 87	940 / 792 / 158	1022 / 995 / 131	974 / 908 / 196	1169 / 1103 / 159	1005 / 868 / 154	1222 / 1064 / 126											
Wind Speed [mph]			190									200																	
70	1	786 / 423 / 121	877 / 579 / 109	793 / 566 / 164	846 / 726 / 139	835 / 694 / 214	908 / 844 / 173	755 / 640 / 164	935 / 805 / 137	806 / 459 / 118	880 / 607 / 103	816 / 613 / 160	875 / 781 / 135	845 / 728 / 202	934 / 872 / 161	788 / 671 / 155	966 / 833 / 127												
	2	877 / 579 / 109	975 / 754 / 94	846 / 739 / 139	907 / 912 / 114	908 / 856 / 173	1072 / 1022 / 137	935 / 816 / 137	1116 / 983 / 109	880 / 607 / 103	978 / 783 / 88	848 / 770 / 131	904 / 937 / 105	934 / 884 / 161	1135 / 1084 / 131	966 / 845 / 127	1184 / 1045 / 105												
	3	785 / 880 / 82	847 / 1080 / 67	897 / 854 / 122	993 / 1021 / 97	1038 / 973 / 149	1239 / 1172 / 119	1076 / 932 / 118	1299 / 1133 / 96	809 / 940 / 79	893 / 1143 / 64	897 / 882 / 114	1050 / 1083 / 93	1102 / 1036 / 143	1303 / 1234 / 113	1100 / 954 / 109	1369 / 1196 / 91												
	80	1	819 / 413 / 132	900 / 563 / 119	843 / 566 / 184	888 / 726 / 156	848 / 675 / 236	925 / 844 / 196	755 / 640 / 184	935 / 805 / 154	837 / 447 / 129	926 / 607 / 115	842 / 597 / 175	916 / 781 / 151	880 / 728 / 229	934 / 872 / 182	788 / 671 / 174	966 / 833 / 144											
		2	900 / 563 / 119	984 / 730 / 102	888 / 739 / 156	942 / 912 / 128	925 / 856 / 196	1072 / 1022 / 155	935 / 816 / 154	1116 / 983 / 123	926 / 607 / 115	1018 / 783 / 98	888 / 770 / 147	937 / 937 / 118	934 / 884 / 182	1135 / 1084 / 149	966 / 845 / 144	1184 / 1045 / 118											
		3	822 / 880 / 92	877 / 1080 / 75	935 / 854 / 137	993 / 1021 / 109	1038 / 973 / 169	1239 / 1172 / 135	1076 / 932 / 133	1299 / 1133 / 108	844 / 940 / 88	902 / 1143 / 71	932 / 882 / 128	1050 / 1083 / 104	1102 / 1036 / 162	1303 / 1234 / 128	1100 / 954 / 123	1369 / 1196 / 103											
	90	1	850 / 402 / 143	921 / 547 / 128	870 / 552 / 199	931 / 726 / 173	885 / 675 / 264	955 / 844 / 219	755 / 640 / 205	935 / 805 / 171	865 / 436 / 139	944 / 590 / 124	890 / 597 / 194	958 / 781 / 168	916 / 728 / 256	956 / 872 / 204	788 / 671 / 194	966 / 833 / 160											
		2	921 / 547 / 128	1024 / 730 / 113	931 / 739 / 173	976 / 912 / 142	955 / 856 / 219	1072 / 1022 / 174	935 / 816 / 171	1116 / 983 / 137	944 / 590 / 124	1057 / 783 / 109	928 / 770 / 163	969 / 937 / 131	956 / 884 / 204	1135 / 1084 / 166	966 / 845 / 160	1184 / 1045 / 131											
		3	858 / 880 / 101	907 / 1080 / 83	972 / 854 / 152	1015 / 1021 / 121	1038 / 973 / 189	1239 / 1172 / 151	1076 / 932 / 148	1299 / 1133 / 120	880 / 940 / 98	930 / 1143 / 79	967 / 882 / 142	1050 / 1083 / 116	1102 / 1036 / 181	1303 / 1234 / 143	1100 / 954 / 137	1369 / 1196 / 114											

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	846 / 147 / 185	818 / 220 / 177	822 / 211 / 265	813 / 305 / 248	741 / 286 / 383	785 / 399 / 350	568 / 328 / 357	627 / 439 / 313	846 / 162 / 185	817 / 236 / 173	804 / 228 / 260	815 / 327 / 242	747 / 307 / 375	795 / 428 / 342	574 / 348 / 345	636 / 462 / 301	827 / 175 / 181	837 / 259 / 173	786 / 244 / 254	817 / 349 / 236	752 / 329 / 367	806 / 456 / 333	591 / 373 / 338	658 / 494 / 295
	2	818 / 220 / 177	856 / 315 / 165	813 / 311 / 248	841 / 431 / 225	785 / 405 / 350	856 / 557 / 317	627 / 446 / 313	688 / 568 / 263	817 / 236 / 173	860 / 337 / 161	815 / 333 / 242	870 / 472 / 225	795 / 434 / 342	874 / 594 / 308	636 / 469 / 301	699 / 593 / 251	837 / 259 / 173	864 / 359 / 156	817 / 356 / 236	878 / 503 / 219	806 / 462 / 333	890 / 630 / 300	658 / 502 / 295	717 / 614 / 238
	3	845 / 436 / 169	879 / 598 / 152	827 / 384 / 231	897 / 540 / 213	829 / 499 / 325	897 / 659 / 283	665 / 520 / 276	759 / 644 / 226	848 / 467 / 165	912 / 656 / 152	854 / 421 / 231	908 / 576 / 208	844 / 533 / 317	918 / 701 / 275	675 / 544 / 263	805 / 685 / 220	850 / 497 / 161	920 / 696 / 148	860 / 449 / 225	920 / 611 / 202	859 / 566 / 308	938 / 741 / 267	682 / 565 / 251	824 / 704 / 207
Wind Speed [mph]		110								115															
100	1	827 / 191 / 181	837 / 276 / 169	799 / 266 / 254	839 / 381 / 236	775 / 358 / 367	816 / 483 / 325	596 / 391 / 326	665 / 515 / 282	808 / 203 / 177	836 / 292 / 165	797 / 283 / 248	841 / 403 / 231	781 / 380 / 358	826 / 510 / 317	612 / 416 / 320	671 / 533 / 270								
	2	837 / 276 / 169	892 / 391 / 156	839 / 388 / 236	885 / 532 / 213	816 / 490 / 325	907 / 666 / 292	665 / 522 / 282	756 / 650 / 232	836 / 292 / 165	896 / 413 / 152	841 / 410 / 231	891 / 561 / 208	826 / 517 / 317	922 / 701 / 283	671 / 541 / 270	772 / 666 / 220								
	3	875 / 541 / 161	902 / 714 / 140	865 / 476 / 219	930 / 645 / 196	873 / 599 / 300	957 / 780 / 258	710 / 599 / 245	866 / 742 / 201	878 / 571 / 156	908 / 751 / 136	870 / 502 / 213	940 / 679 / 190	887 / 631 / 292	975 / 817 / 250	727 / 615 / 232	906 / 778 / 194								
Wind Speed [mph]		120								130															
100	1	819 / 221 / 177	857 / 316 / 165	814 / 306 / 248	843 / 425 / 225	786 / 401 / 350	858 / 551 / 317	628 / 441 / 313	674 / 549 / 257	808 / 203 / 177	836 / 292 / 165	797 / 283 / 248	841 / 403 / 231	781 / 380 / 358	826 / 510 / 317	612 / 416 / 320	671 / 533 / 270								
	2	857 / 316 / 165	900 / 435 / 148	843 / 433 / 225	897 / 590 / 202	858 / 559 / 317	937 / 734 / 275	674 / 557 / 257	807 / 698 / 213	836 / 292 / 165	896 / 413 / 152	841 / 410 / 231	891 / 561 / 208	826 / 517 / 317	922 / 701 / 283	671 / 541 / 270	772 / 666 / 220								
	3	881 / 601 / 152	886 / 762 / 128	899 / 543 / 213	978 / 733 / 190	899 / 662 / 283	992 / 852 / 242	762 / 646 / 226	913 / 785 / 182	878 / 571 / 156	908 / 751 / 136	870 / 502 / 213	940 / 679 / 190	887 / 631 / 292	975 / 817 / 250	727 / 615 / 232	906 / 778 / 194								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	815 / 233 / 173	857 / 333 / 161	812 / 323 / 242	866 / 458 / 225	791 / 422 / 342	868 / 578 / 308	631 / 457 / 301	693 / 577 / 251	827 / 264 / 169	878 / 375 / 156	828 / 365 / 236	869 / 501 / 213	821 / 475 / 333	886 / 630 / 292	662 / 504 / 288	726 / 614 / 232	839 / 295 / 165	900 / 417 / 152	844 / 407 / 231	895 / 557 / 208	830 / 516 / 317	928 / 698 / 283	675 / 538 / 270	779 / 663 / 220		
	2	857 / 333 / 161	929 / 469 / 148	866 / 467 / 225	929 / 635 / 202	868 / 586 / 308	951 / 767 / 267	693 / 585 / 251	841 / 730 / 207	878 / 375 / 156	935 / 510 / 140	869 / 510 / 213	939 / 690 / 190	886 / 639 / 292	974 / 827 / 250	726 / 623 / 232	905 / 788 / 194	900 / 417 / 152	968 / 565 / 136	895 / 567 / 208	976 / 763 / 185	928 / 708 / 283	992 / 879 / 233	779 / 672 / 220	961 / 840 / 182		
	3	907 / 648 / 152	889 / 794 / 124	903 / 569 / 208	987 / 765 / 185	912 / 692 / 275	1006 / 886 / 233	795 / 677 / 220	947 / 816 / 176	911 / 705 / 144	894 / 852 / 115	938 / 637 / 202	1002 / 825 / 173	963 / 772 / 267	1031 / 946 / 217	832 / 712 / 201	1007 / 871 / 163	913 / 759 / 136	893 / 902 / 107	945 / 685 / 190	1012 / 878 / 162	982 / 825 / 250	1059 / 995 / 200	885 / 760 / 188	1100 / 954 / 157		
Wind Speed [mph]		170								180																	
100	1	851 / 327 / 161	922 / 461 / 148	861 / 450 / 225	921 / 613 / 202	860 / 568 / 308	940 / 743 / 267	684 / 567 / 251	827 / 707 / 207	864 / 359 / 156	944 / 504 / 144	878 / 494 / 219	947 / 670 / 196	890 / 622 / 300	980 / 809 / 258	717 / 605 / 238	869 / 745 / 194										
	2	922 / 461 / 148	1001 / 621 / 132	921 / 624 / 202	981 / 809 / 173	940 / 753 / 267	1003 / 923 / 217	827 / 717 / 207	1008 / 884 / 169	944 / 504 / 144	1033 / 676 / 128	947 / 682 / 196	980 / 848 / 162	948 / 793 / 250	1048 / 996 / 209	869 / 756 / 194	1045 / 918 / 157										
	3	911 / 806 / 128	923 / 981 / 103	978 / 752 / 185	1016 / 922 / 150	995 / 871 / 233	1144 / 1077 / 192	964 / 831 / 182	1141 / 992 / 144	905 / 847 / 120	913 / 1013 / 95	979 / 792 / 173	1054 / 995 / 144	1001 / 908 / 217	1169 / 1103 / 175	1005 / 868 / 169	1222 / 1064 / 138										
Wind Speed [mph]		190								200																	
100	1	877 / 392 / 152	967 / 547 / 140	895 / 537 / 213	973 / 726 / 190	894 / 656 / 283	985 / 844 / 242	755 / 640 / 226	935 / 805 / 188	890 / 424 / 148	959 / 572 / 132	912 / 581 / 208	999 / 781 / 185	923 / 706 / 275	984 / 872 / 225	788 / 671 / 213	966 / 833 / 176										
	2	967 / 547 / 140	1030 / 706 / 120	973 / 739 / 190	1011 / 912 / 156	985 / 856 / 242	1072 / 1022 / 192	935 / 816 / 188	1116 / 983 / 151	959 / 572 / 132	1058 / 756 / 115	968 / 770 / 179	1001 / 937 / 144	984 / 884 / 225	1135 / 1084 / 184	966 / 845 / 176	1184 / 1045 / 144										
	3	895 / 880 / 111	937 / 1080 / 91	1009 / 854 / 167	1044 / 1021 / 133	1041 / 973 / 209	1239 / 1172 / 167	1076 / 932 / 163	1299 / 1133 / 132	915 / 940 / 107	958 / 1143 / 87	1001 / 882 / 156	1075 / 1083 / 127	1102 / 1036 / 200	1303 / 1234 / 159	1100 / 954 / 151	1369 / 1196 / 126										

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
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θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
0	1	383/264/40	476/355/35	411/358/44	493/458/37	490/416/45	589/521/37	492/392/50	596/492/41	402/282/39	499/377/34	431/382/43	516/484/35	513/440/44	613/546/36	507/407/47	622/516/40	427/305/38	520/398/32	451/405/41	526/498/33	535/463/42	650/583/35	529/428/46	645/538/38
	2	476/355/35	574/451/29	493/466/37	574/566/29	589/528/37	718/661/31	596/499/41	713/611/34	499/377/34	598/474/28	506/483/35	595/591/28	613/554/36	741/686/29	622/523/40	757/651/33	520/398/32	620/496/26	526/507/33	614/614/27	635/577/34	760/707/28	645/546/38	778/671/31
	3	471/558/26	565/692/22	549/526/31	667/660/26	674/609/32	824/760/27	686/576/36	820/700/29	489/583/25	581/716/21	571/552/30	688/685/25	698/634/31	844/781/25	712/600/34	868/743/28	504/607/24	612/758/20	591/575/29	706/705/23	738/673/30	888/824/24	733/621/33	884/759/27
5	1	383/264/40	476/355/35	411/358/51	493/458/43	490/416/54	589/521/44	492/392/56	596/492/46	402/282/39	499/377/34	431/382/50	516/484/41	513/440/52	613/546/42	507/407/53	622/516/44	427/305/38	520/398/32	451/405/48	526/498/39	535/463/50	650/583/42	529/428/51	645/538/42
	2	476/355/35	574/451/29	493/466/43	574/566/34	589/528/44	718/661/37	596/499/46	713/611/37	499/377/34	598/474/28	506/483/40	595/591/32	613/554/42	741/686/35	622/523/44	757/651/36	520/398/32	620/496/26	526/507/39	614/614/31	635/577/41	760/707/33	645/546/42	778/671/35
	3	471/558/26	565/692/22	549/526/36	667/660/30	674/609/39	824/760/32	686/576/40	820/700/33	489/583/25	581/716/21	571/552/35	688/685/29	698/634/37	844/781/30	712/600/38	868/743/32	504/607/24	612/758/20	591/575/33	706/705/27	738/673/36	888/824/29	733/621/36	884/759/30
10	1	420/264/48	476/355/41	430/358/66	493/458/55	490/416/69	589/521/57	492/392/67	596/492/55	430/282/46	499/377/40	442/382/64	516/484/53	513/440/66	613/546/54	507/407/63	622/516/53	446/305/45	520/398/38	453/405/62	526/498/50	535/463/64	650/583/53	529/428/61	645/538/51
	2	476/355/41	574/451/34	493/466/55	574/566/44	589/528/57	718/661/47	596/499/55	713/611/45	499/377/40	598/474/33	506/483/52	595/591/42	613/554/54	741/686/44	622/523/53	757/651/44	520/398/38	620/496/31	526/507/50	614/614/40	635/577/52	760/707/42	645/546/51	778/671/41
	3	471/558/31	565/692/26	549/526/47	667/660/39	674/609/49	824/760/41	686/576/48	820/700/39	489/583/30	581/716/24	571/552/45	688/685/37	698/634/47	844/781/38	712/600/46	868/743/38	504/607/29	612/758/24	591/575/43	706/705/35	738/673/46	888/824/37	733/621/44	884/759/35
0	1	445/323/37	541/418/31	462/420/39	545/520/32	555/485/40	670/604/33	550/448/44	665/557/36	462/340/36	559/436/30	479/440/38	561/540/31	574/505/39	687/623/32	569/466/42	700/589/35	462/340/36	559/436/30	479/440/38	561/540/31	574/505/39	687/623/32	569/466/42	700/589/35
	2	541/418/31	655/527/26	545/529/32	647/650/26	670/612/33	799/745/27	665/566/36	819/709/30	559/436/30	673/545/25	561/550/31	661/667/25	687/631/32	836/783/26	700/598/35	832/722/28	559/436/30	673/545/25	561/550/31	661/667/25	687/631/32	836/783/26	700/598/35	832/722/28
	3	531/643/24	622/773/19	624/610/28	741/744/23	755/692/28	930/865/24	773/656/32	926/797/26	543/661/22	649/811/18	639/629/27	776/781/22	792/728/28	935/872/22	788/671/30	966/833/25	543/661/22	649/811/18	639/629/27	776/781/22	792/728/28	935/872/22	788/671/30	966/833/25
5	1	445/323/37	541/418/31	462/420/46	545/520/37	555/485/48	670/604/40	550/448/49	665/557/40	462/340/36	559/436/30	479/440/44	561/540/36	574/505/46	687/623/38	569/466/47	700/589/39	462/340/36	559/436/30	479/440/44	561/540/36	574/505/46	687/623/38	569/466/47	700/589/39
	2	541/418/31	655/527/26	545/529/37	647/650/30	670/612/40	799/745/32	665/566/36	819/709/34	559/436/30	673/545/25	561/550/36	661/667/29	687/631/38	836/783/31	700/598/39	832/722/32	559/436/30	673/545/25	561/550/36	661/667/29	687/631/38	836/783/31	700/598/39	832/722/32
	3	531/643/24	622/773/19	624/610/32	741/744/26	755/692/34	930/865/28	773/656/35	926/797/29	543/661/22	649/811/18	639/629/31	776/781/25	792/728/33	935/872/26	788/671/34	966/833/28	543/661/22	649/811/18	639/629/31	776/781/25	792/728/33	935/872/26	788/671/34	966/833/28
10	1	456/323/44	541/418/37	462/420/59	545/520/48	555/485/61	670/604/50	550/448/59	665/557/48	465/340/43	559/436/36	479/440/57	561/540/46	574/505/59	687/623/48	569/466/56	700/589/47	465/340/43	559/436/36	479/440/57	561/540/46	574/505/59	687/623/48	569/466/56	700/589/47
	2	541/418/37	655/527/31	545/529/48	647/650/39	670/612/50	799/745/41	665/566/48	819/709/40	559/436/36	673/545/29	561/550/46	661/667/37	687/631/48	836/783/40	700/598/47	832/722/38	559/436/36	673/545/29	561/550/46	661/667/37	687/631/48	836/783/40	700/598/47	832/722/38
	3	531/643/28	622/773/22	624/610/42	741/744/34	755/692/43	930/865/36	773/656/42	926/797/34	543/661/26	649/811/22	639/629/40	776/781/33	792/728/42	935/872/33	788/671/40	966/833/33	543/661/26	649/811/22	639/629/40	776/781/33	792/728/42	935/872/33	788/671/40	966/833/33
0	1	478/357/35	576/453/29	495/460/37	589/571/30	591/523/37	720/655/31	599/494/41	716/604/34	462/340/36	559/436/30	479/440/38	561/540/31	574/505/39	687/623/32	569/466/42	700/589/35	462/340/36	559/436/30	479/440/38	561/540/31	574/505/39	687/623/32	569/466/42	700/589/35
	2	576/453/29	688/561/24	576/568/29	691/701/24	702/647/30	844/792/24	716/613/34	868/755/27	559/436/30	673/545/25	561/550/31	661/667/25	687/631/32	836/783/26	700/598/35	832/722/28	559/436/30	673/545/25	561/550/31	661/667/25	687/631/32	836/783/26	700/598/35	832/722/28
	3	568/695/22	675/846/18	652/645/25	782/791/21	802/740/26	969/906/21	823/703/29	1003/867/24	543/661/22	649/811/18	639/629/27	776/781/22	792/728/28	935/872/22	788/671/30	966/833/25	543/661/22	649/811/18	639/629/27	776/781/22	792/728/28	935/872/22	788/671/30	966/833/25
5	1	478/357/35	576/453/29	495/460/43	589/571/35	591/523/44	720/655/37	599/494/46	716/604/37	462/340/36	559/436/30	479/440/44	561/540/36	574/505/46	687/623/38	569/466/47	700/589/39	462/340/36	559/436/30	479/440/44	561/540/36	574/505/46	687/623/38	569/466/47	700/589/39
	2	576/453/29	688/561/24	576/568/34	691/701/28	702/647/36	844/792/29	716/613/37	868/755/31	559/436/30	673/545/25	561/550/36	661/667/29	687/631/38	836/783/31	700/598/39	832/722/32	559/436/30	673/545/25	561/550/36	661/667/29	687/631/38	836/783/31	700/598/39	832/722/32
	3	568/695/22	675/846/18	652/645/29	782/791/24	802/740/31	969/906/25	823/703/33	1003/867/27	543/661/22	649/811/18	639/629/31	776/781/25	792/728/33	935/872/26	788/671/34	966/833/28	543/661/22	649/811/18	639/629/31	776/781/25	792/728/33	935/872/26	788/671/34	966/833/28
10	1	478/357/41	576/453/34	495/460/55	589/571/45	591/523/57	720/655/47	599/494/55	716/604/45	465/340/43	559/436/36	479/440/57	561/540/46	574/505/59	687/623/48	569/466/56	700/589/47	465/340/43	559/436/36	479/440/57	561/540/46	574/505/59	687/623/48	569/466/56	700/589/47
	2	576/453/34	688/561/28	576/568/44	691/701/36	702/647/46	844/792/37	716/613/45	868/755/37	559/436/36	673/545/29	561/550/46	661/667/37	687/631/48	836/783/40	700/598/47	832/722/38	559/436/36	673/545/29	561/550/46	661/667/37	687/631/48	836/783/40	700/598/47	832/722/38
	3	568/695/26	675/846/21	652/645/38	782/791/31	802/740/40	969/906/32	823/703/39	1003/867/32	543/661/26	649/811/22	639/629/40	776/781/33	792/728/42	935/872/33	788/671/40	966/833/33	543/661/26	649/811/22	639/629/40	776/781/33	792/728/42	935/872/33	788/671/40	966/833/33

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
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Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		0	1	494 / 372 / 34	591 / 468 / 28	510 / 478 / 35	603 / 587 / 29	620 / 552 / 36	732 / 669 / 29	615 / 509 / 40	748 / 634 / 33	530 / 408 / 32	630 / 505 / 26	535 / 509 / 33	638 / 628 / 27	660 / 593 / 34	791 / 727 / 28	655 / 548 / 37	787 / 670 / 30	553 / 432 / 29	679 / 551 / 25	567 / 545 / 31	667 / 662 / 25	694 / 629 / 32	844 / 780 / 26	689 / 580 / 34	840 / 719 / 28	679 / 551 / 25	808 / 672 / 20	667 / 674 / 25	796 / 820 / 20	818 / 766 / 25	981 / 931 / 20	840 / 729 / 28	1017 / 893 / 23	679 / 551 / 25	778 / 987 / 17	759 / 764 / 25	945 / 967 / 20	944 / 881 / 25	1146 / 1081 / 25	975 / 841 / 28	1196 / 1040 / 23						
0	2	591 / 468 / 28	719 / 589 / 23	603 / 598 / 29	720 / 733 / 23	732 / 678 / 29	876 / 824 / 24	748 / 643 / 33	902 / 787 / 27	630 / 505 / 26	778 / 642 / 22	638 / 640 / 27	750 / 769 / 21	791 / 737 / 28	933 / 883 / 22	787 / 680 / 30	965 / 844 / 25	679 / 551 / 25	808 / 672 / 20	667 / 674 / 25	796 / 820 / 20	818 / 766 / 25	981 / 931 / 20	840 / 729 / 28	1017 / 893 / 23	679 / 551 / 25	808 / 672 / 20	667 / 674 / 25	796 / 820 / 20	818 / 766 / 25	981 / 931 / 20	840 / 729 / 28	1017 / 893 / 23	679 / 551 / 25	778 / 987 / 17	759 / 764 / 25	945 / 967 / 20	944 / 881 / 25	1146 / 1081 / 25	975 / 841 / 28	1196 / 1040 / 23								
0	3	575 / 707 / 21	700 / 879 / 17	680 / 676 / 25	812 / 823 / 20	834 / 772 / 25	1001 / 938 / 20	857 / 734 / 28	1038 / 899 / 23	617 / 766 / 19	743 / 939 / 16	734 / 735 / 23	865 / 881 / 19	893 / 830 / 24	1101 / 1035 / 20	920 / 791 / 27	1098 / 953 / 21	655 / 819 / 18	778 / 987 / 15	759 / 764 / 21	945 / 967 / 18	944 / 881 / 22	1146 / 1081 / 18	975 / 841 / 25	1196 / 1040 / 20	655 / 819 / 18	778 / 987 / 15	759 / 764 / 21	945 / 967 / 18	944 / 881 / 22	1146 / 1081 / 18	975 / 841 / 25	1196 / 1040 / 20	655 / 819 / 18	778 / 987 / 15	759 / 764 / 21	945 / 967 / 18	944 / 881 / 22	1146 / 1081 / 18	975 / 841 / 25	1196 / 1040 / 20								
5	1	494 / 372 / 34	591 / 468 / 28	510 / 478 / 41	603 / 587 / 33	620 / 552 / 43	732 / 669 / 35	615 / 509 / 44	748 / 634 / 36	530 / 408 / 32	630 / 505 / 26	535 / 509 / 38	638 / 628 / 31	660 / 593 / 41	791 / 727 / 33	655 / 548 / 41	787 / 670 / 34	553 / 432 / 29	679 / 551 / 25	567 / 545 / 36	667 / 662 / 29	694 / 629 / 38	844 / 780 / 31	689 / 580 / 38	840 / 719 / 32	679 / 551 / 25	808 / 672 / 20	667 / 674 / 29	796 / 820 / 23	818 / 766 / 30	981 / 931 / 24	840 / 729 / 32	1017 / 893 / 26	679 / 551 / 25	778 / 987 / 17	759 / 764 / 29	945 / 967 / 23	944 / 881 / 30	1146 / 1081 / 24	975 / 841 / 32	1196 / 1040 / 26								
5	2	591 / 468 / 28	719 / 589 / 23	603 / 598 / 33	720 / 733 / 27	732 / 678 / 35	876 / 824 / 28	748 / 643 / 36	902 / 787 / 30	630 / 505 / 26	778 / 642 / 22	638 / 640 / 31	750 / 769 / 25	791 / 737 / 33	933 / 883 / 26	787 / 680 / 34	965 / 844 / 28	679 / 551 / 25	808 / 672 / 20	667 / 674 / 29	796 / 820 / 23	818 / 766 / 30	981 / 931 / 24	840 / 729 / 32	1017 / 893 / 26	679 / 551 / 25	808 / 672 / 20	667 / 674 / 29	796 / 820 / 23	818 / 766 / 30	981 / 931 / 24	840 / 729 / 32	1017 / 893 / 26	679 / 551 / 25	778 / 987 / 17	759 / 764 / 29	945 / 967 / 23	944 / 881 / 30	1146 / 1081 / 24	975 / 841 / 32	1196 / 1040 / 26								
5	3	575 / 707 / 21	700 / 879 / 17	680 / 676 / 29	812 / 823 / 23	834 / 772 / 30	1001 / 938 / 24	857 / 734 / 32	1038 / 899 / 26	617 / 766 / 19	743 / 939 / 16	734 / 735 / 27	865 / 881 / 22	893 / 830 / 28	1101 / 1035 / 23	920 / 791 / 30	1098 / 953 / 24	655 / 819 / 18	778 / 987 / 15	759 / 764 / 25	945 / 967 / 21	944 / 881 / 26	1146 / 1081 / 21	975 / 841 / 28	1196 / 1040 / 23	655 / 819 / 18	778 / 987 / 15	759 / 764 / 25	945 / 967 / 21	944 / 881 / 26	1146 / 1081 / 21	975 / 841 / 28	1196 / 1040 / 23	655 / 819 / 18	778 / 987 / 15	759 / 764 / 25	945 / 967 / 21	944 / 881 / 26	1146 / 1081 / 21	975 / 841 / 28	1196 / 1040 / 23								
10	1	494 / 372 / 40	591 / 468 / 33	510 / 478 / 53	603 / 587 / 43	620 / 552 / 55	732 / 669 / 44	615 / 509 / 53	748 / 634 / 44	530 / 408 / 38	630 / 505 / 31	535 / 509 / 49	638 / 628 / 40	660 / 593 / 52	791 / 727 / 42	655 / 548 / 49	787 / 670 / 40	553 / 432 / 35	679 / 551 / 29	567 / 545 / 46	667 / 662 / 37	694 / 629 / 48	844 / 780 / 40	689 / 580 / 46	840 / 719 / 38	679 / 551 / 29	808 / 672 / 24	667 / 674 / 46	796 / 820 / 37	818 / 766 / 48	981 / 931 / 40	840 / 729 / 46	1017 / 893 / 38	679 / 551 / 29	778 / 987 / 17	759 / 764 / 46	945 / 967 / 37	944 / 881 / 40	1146 / 1081 / 38	975 / 841 / 46	1196 / 1040 / 38								
10	2	591 / 468 / 33	719 / 589 / 27	603 / 598 / 43	720 / 733 / 35	732 / 678 / 44	876 / 824 / 36	748 / 643 / 44	902 / 787 / 35	630 / 505 / 31	778 / 642 / 26	638 / 640 / 40	750 / 769 / 32	791 / 737 / 42	933 / 883 / 33	787 / 680 / 40	965 / 844 / 33	679 / 551 / 29	808 / 672 / 24	667 / 674 / 46	796 / 820 / 30	818 / 766 / 48	981 / 931 / 40	840 / 729 / 46	1017 / 893 / 38	679 / 551 / 29	808 / 672 / 24	667 / 674 / 46	796 / 820 / 30	818 / 766 / 48	981 / 931 / 40	840 / 729 / 46	1017 / 893 / 38	679 / 551 / 29	778 / 987 / 17	759 / 764 / 46	945 / 967 / 37	944 / 881 / 40	1146 / 1081 / 38	975 / 841 / 46	1196 / 1040 / 38								
10	3	575 / 707 / 24	700 / 879 / 20	680 / 676 / 37	812 / 823 / 30	834 / 772 / 38	1001 / 938 / 31	857 / 734 / 38	1038 / 899 / 31	617 / 766 / 23	743 / 939 / 19	734 / 735 / 35	865 / 881 / 28	893 / 830 / 36	1101 / 1035 / 30	920 / 791 / 35	1098 / 953 / 28	655 / 819 / 22	778 / 987 / 17	759 / 764 / 32	945 / 967 / 27	944 / 881 / 33	1146 / 1081 / 27	975 / 841 / 33	1196 / 1040 / 27	655 / 819 / 22	778 / 987 / 17	759 / 764 / 32	945 / 967 / 27	944 / 881 / 33	1146 / 1081 / 27	975 / 841 / 33	1196 / 1040 / 27	655 / 819 / 22	778 / 987 / 17	759 / 764 / 32	945 / 967 / 27	944 / 881 / 33	1146 / 1081 / 27	975 / 841 / 33	1196 / 1040 / 27								
Wind Speed [mph]		170																180																															
0	1	594 / 470 / 28	707 / 578 / 23	593 / 577 / 29	708 / 708 / 23	740 / 675 / 30	891 / 827 / 24	736 / 623 / 33	887 / 762 / 27	620 / 496 / 26	748 / 616 / 22	630 / 618 / 27	744 / 748 / 22	782 / 718 / 28	930 / 867 / 23	778 / 662 / 31	960 / 827 / 26	620 / 496 / 26	748 / 616 / 22	630 / 618 / 27	744 / 748 / 22	782 / 718 / 28	930 / 867 / 23	778 / 662 / 31	960 / 827 / 26	620 / 496 / 26	748 / 616 / 22	630 / 618 / 27	744 / 748 / 22	782 / 718 / 28	930 / 867 / 23	778 / 662 / 31	960 / 827 / 26	620 / 496 / 26	748 / 616 / 22	630 / 618 / 27	744 / 748 / 22	782 / 718 / 28	930 / 867 / 23	778 / 662 / 31	960 / 827 / 26								
0	2	707 / 578 / 23	854 / 714 / 19	708 / 720 / 23	865 / 896 / 19	891 / 838 / 24	1061 / 1010 / 20	887 / 773 / 27	1102 / 970 / 22	748 / 616 / 22	924 / 776 / 18	744 / 762 / 22	898 / 934 / 18	930 / 878 / 23	1138 / 1086 / 19	960 / 839 / 26	1136 / 1001 / 20	748 / 616 / 22	924 / 776 / 18	744 / 762 / 22	898 / 934 / 18	930 / 878 / 23	1138 / 1086 / 19	960 / 839 / 26	1136 / 1001 / 20	748 / 616 / 22	924 / 776 / 18	744 / 762 / 22	898 / 934 / 18	930 / 878 / 23	1138 / 1086 / 19	960 / 839 / 26	1136 / 1001 / 20	748 / 616 / 22	924 / 776 / 18	744 / 762 / 22	898 / 934 / 18	930 / 878 / 23	1138 / 1086 / 19	960 / 839 / 26	1136 / 1001 / 20								
0	3	688 / 864 / 17	839 / 1070 / 14	826 / 837 / 21	983 / 1009 / 17	1024 / 959 / 21	1234 / 1165 / 17	1021 / 883 / 23	1231 / 1073 / 19	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 19	1054 / 1085 / 16	1058 / 993 / 20	1316 / 1245 / 16	1099 / 953 / 22	1313 / 1146 / 18	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 19	1054 / 1085 / 16	1058 / 993 / 20	1316 / 1245 / 16	1099 / 953 / 22	1313 / 1146 / 18	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 19	1054 / 1085 / 16	1058 / 993 / 20	1316 / 1245 / 16	1099 / 953 / 22	1313 / 1146 / 18	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 19	1054 / 1085 / 16	1058 / 993 / 20	1316 / 1245 / 16	1099 / 953 / 22	1313 / 1146 / 18								
5	1	594 / 470 / 28	707 / 578 / 23	593 / 577 / 33	708 / 708 / 27	740 / 675 / 36	891 / 827 / 29	736 / 623 / 36	887 / 762 / 30	620 / 496 / 26	748 / 616 / 22	630 / 618 / 32	744 / 748 / 25	782 / 718 / 34	930 / 867 / 27	778 / 662 / 35	960 / 827 / 29	620 / 496 / 26	748 / 616 / 22	630 / 618 / 32	744 / 748 / 25	782 / 718 / 34	930 / 867 / 27	778 / 662 / 35	960 / 827 / 29	620 / 496 / 26	748 / 616 / 22	630 / 618 / 32	744 / 748 / 25	782 / 718 / 34	930 / 867 / 27	778 / 662 / 35	960 / 827 / 29	620 / 496 / 26	748 / 616 / 22	630 / 618 / 32	744 / 748 / 25	782 / 718 / 34	930 / 867 / 27	778 / 662 / 35	960 / 827 / 29								
5	2	707 / 578 / 23	854 / 714 / 19	708 / 720 / 27	865 / 896 / 22	891 / 838 / 23	1061 / 1010 / 23	887 / 773 / 30	1102 / 970 / 25	748 / 616 / 22	924 / 776 / 18	744 / 762 / 25	898 / 934 / 21	930 / 878 / 27	1138 / 1086 / 22	960 / 839 / 29	1136 / 1001 / 23	748 / 616 / 22	924 / 776 / 18	744 / 762 / 25	898 / 934 / 21	930 / 878 / 27	1138 / 1086 / 22	960 / 839 / 29	1136 / 1001 / 23	748 / 616 / 22	924 / 776 / 18	744 / 762 / 25	898 / 934 / 21	930 / 878 / 27	1138 / 1086 / 22	960 / 839 / 29	1136 / 1001 / 23	748 / 616 / 22	924 / 776 / 18	744 / 762 / 25	898 / 934 / 21	930 / 878 / 27	1138 / 1086 / 22	960 / 839 / 29	1136 / 1001 / 23								
5	3	688 / 864 / 17	839 / 1070 / 14	826 / 837 / 24	983 / 1009 / 19	1024 / 959 / 25	1234 / 1165 / 21	1021 / 883 / 26	1231 / 1073 / 21	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 22	1054 / 1085 / 18	1058 / 993 / 20	1316 / 1245 / 20	1099 / 953 / 25	1313 / 1146 / 20	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 22	1054 / 1085 / 18	1058 / 993 / 20	1316 / 1245 / 20	1099 / 953 / 25	1313 / 1146 / 20	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 22	1054 / 1085 / 18	1058 / 993 / 20	1316 / 1245 / 20	1099 / 953 / 25	1313 / 1146 / 20	714 / 901 / 16	857 / 1096 / 13	862 / 877 / 22	1054 / 1085 / 18	1058 / 993 / 20	1316 / 1245 / 20	1099 / 953 / 25	1313 / 1146 / 20								
10	1	594 / 470 / 34	707 / 578 / 27	593 / 577 / 43	708 / 708 / 35	740 / 675 / 46	891 / 827 / 37	736 / 623 / 44	887 / 762 / 35	620 / 496 / 31	748 / 616 / 26	630 / 618 / 41	744 / 748 / 33	782 / 718 / 43	930 / 867 / 35	778 / 662 / 41	960 / 827 / 34	62																															

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	465 / 256 / 54	524 / 355 / 48	478 / 353 / 79	517 / 458 / 67	490 / 416 / 84	589 / 521 / 69	492 / 392 / 78	596 / 492 / 64	481 / 278 / 53	535 / 377 / 46	488 / 376 / 77	529 / 484 / 65	513 / 440 / 81	613 / 546 / 66	507 / 407 / 74	622 / 516 / 61	488 / 296 / 51	545 / 398 / 45	505 / 405 / 76	528 / 498 / 61	535 / 463 / 78	650 / 583 / 64	529 / 428 / 71	645 / 538 / 59
	2	524 / 355 / 48	574 / 451 / 40	517 / 466 / 67	574 / 566 / 54	589 / 528 / 69	718 / 661 / 57	596 / 499 / 64	713 / 611 / 52	535 / 377 / 46	598 / 474 / 38	518 / 483 / 63	595 / 591 / 51	613 / 554 / 66	741 / 686 / 54	622 / 523 / 61	757 / 651 / 51	545 / 398 / 45	620 / 496 / 37	528 / 507 / 61	614 / 614 / 49	635 / 577 / 63	760 / 707 / 51	645 / 546 / 59	778 / 671 / 48
	3	480 / 558 / 37	565 / 692 / 30	549 / 526 / 57	667 / 660 / 47	674 / 609 / 60	824 / 760 / 49	686 / 576 / 56	820 / 700 / 45	489 / 583 / 35	581 / 716 / 28	571 / 552 / 55	688 / 685 / 45	698 / 634 / 57	844 / 781 / 47	712 / 600 / 53	868 / 743 / 44	504 / 607 / 33	612 / 758 / 28	591 / 575 / 52	706 / 705 / 42	738 / 673 / 55	888 / 824 / 45	733 / 621 / 51	884 / 759 / 41
20	1	508 / 248 / 60	556 / 343 / 53	516 / 342 / 91	563 / 458 / 79	490 / 416 / 100	589 / 521 / 82	492 / 392 / 89	596 / 492 / 73	521 / 269 / 59	564 / 364 / 51	523 / 364 / 88	573 / 484 / 77	513 / 440 / 97	613 / 546 / 79	507 / 407 / 84	622 / 516 / 70	526 / 286 / 57	583 / 390 / 50	538 / 392 / 87	570 / 498 / 72	535 / 463 / 93	650 / 583 / 77	529 / 428 / 81	645 / 538 / 67
	2	556 / 343 / 53	611 / 451 / 46	563 / 466 / 79	584 / 566 / 63	589 / 528 / 82	718 / 661 / 68	596 / 499 / 73	713 / 611 / 59	564 / 364 / 51	622 / 474 / 44	562 / 483 / 75	595 / 591 / 60	613 / 554 / 79	741 / 686 / 65	622 / 523 / 70	757 / 651 / 58	583 / 390 / 50	631 / 496 / 42	570 / 507 / 72	614 / 614 / 58	635 / 577 / 75	760 / 707 / 61	645 / 546 / 67	778 / 671 / 55
	3	519 / 558 / 42	565 / 692 / 34	577 / 526 / 68	667 / 660 / 56	674 / 609 / 72	824 / 760 / 59	686 / 576 / 64	820 / 700 / 52	525 / 583 / 40	581 / 716 / 32	586 / 552 / 65	688 / 685 / 53	698 / 634 / 68	844 / 781 / 56	712 / 600 / 61	868 / 743 / 50	529 / 607 / 38	612 / 758 / 31	594 / 575 / 62	706 / 705 / 50	738 / 673 / 66	888 / 824 / 54	733 / 621 / 58	884 / 759 / 47
25	1	508 / 248 / 60	556 / 343 / 53	516 / 342 / 91	563 / 458 / 79	505 / 416 / 120	589 / 521 / 99	492 / 392 / 103	596 / 492 / 85	521 / 269 / 59	564 / 364 / 51	523 / 364 / 88	573 / 484 / 77	513 / 440 / 116	613 / 546 / 94	507 / 407 / 97	622 / 516 / 81	526 / 286 / 57	583 / 390 / 50	538 / 392 / 87	570 / 498 / 72	535 / 463 / 111	650 / 583 / 92	529 / 428 / 94	645 / 538 / 78
	2	556 / 343 / 53	611 / 451 / 46	563 / 466 / 79	584 / 566 / 63	589 / 528 / 99	718 / 661 / 82	596 / 499 / 85	713 / 611 / 69	564 / 364 / 51	622 / 474 / 44	562 / 483 / 75	595 / 591 / 60	613 / 554 / 94	741 / 686 / 77	622 / 523 / 81	757 / 651 / 67	583 / 390 / 50	631 / 496 / 42	570 / 507 / 72	614 / 614 / 58	635 / 577 / 75	760 / 707 / 73	645 / 546 / 78	778 / 671 / 63
	3	519 / 558 / 42	565 / 692 / 34	577 / 526 / 68	667 / 660 / 56	674 / 609 / 86	824 / 760 / 71	686 / 576 / 74	820 / 700 / 60	525 / 583 / 40	581 / 716 / 32	586 / 552 / 65	688 / 685 / 53	698 / 634 / 82	844 / 781 / 67	712 / 600 / 70	868 / 743 / 58	529 / 607 / 38	612 / 758 / 31	594 / 575 / 62	706 / 705 / 50	738 / 673 / 79	888 / 824 / 64	733 / 621 / 67	884 / 759 / 54
15	1	503 / 318 / 51	555 / 418 / 43	505 / 420 / 72	545 / 520 / 58	555 / 485 / 75	670 / 604 / 61	550 / 448 / 68	665 / 557 / 56	510 / 335 / 49	563 / 436 / 42	512 / 440 / 70	561 / 540 / 56	574 / 505 / 72	687 / 623 / 58	569 / 466 / 66	700 / 589 / 55	563 / 436 / 42	673 / 545 / 34	561 / 550 / 56	661 / 667 / 45	687 / 631 / 58	836 / 783 / 48	700 / 598 / 55	832 / 722 / 44
	2	555 / 418 / 43	655 / 527 / 36	545 / 529 / 58	647 / 650 / 47	670 / 612 / 61	799 / 745 / 49	665 / 566 / 56	819 / 709 / 47	563 / 436 / 42	673 / 545 / 34	561 / 550 / 56	661 / 667 / 45	687 / 631 / 58	836 / 783 / 48	700 / 598 / 55	832 / 722 / 44	543 / 661 / 31	649 / 811 / 25	639 / 629 / 49	776 / 781 / 40	792 / 728 / 51	935 / 872 / 41	788 / 671 / 47	966 / 833 / 38
	3	531 / 643 / 32	622 / 773 / 26	624 / 610 / 51	741 / 744 / 41	755 / 692 / 52	930 / 865 / 44	773 / 656 / 49	926 / 797 / 40	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 86	687 / 623 / 70	569 / 466 / 75	700 / 589 / 62	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 70	836 / 783 / 57	700 / 598 / 62	832 / 722 / 50
20	1	540 / 307 / 56	590 / 410 / 48	544 / 412 / 84	577 / 520 / 69	555 / 485 / 89	670 / 604 / 73	550 / 448 / 78	665 / 557 / 64	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 86	687 / 623 / 70	569 / 466 / 75	700 / 589 / 62	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 70	836 / 783 / 57	700 / 598 / 62	832 / 722 / 50
	2	590 / 410 / 48	655 / 527 / 41	577 / 529 / 69	647 / 650 / 56	670 / 612 / 73	799 / 745 / 59	665 / 566 / 64	819 / 709 / 53	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 61	935 / 872 / 49	788 / 671 / 53	966 / 833 / 44	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 61	935 / 872 / 49	788 / 671 / 53	966 / 833 / 44
	3	545 / 643 / 37	622 / 773 / 30	624 / 610 / 60	741 / 744 / 49	755 / 692 / 63	930 / 865 / 52	773 / 656 / 56	926 / 797 / 45	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 103	687 / 623 / 84	569 / 466 / 86	700 / 589 / 72	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 84	836 / 783 / 69	700 / 598 / 72	832 / 722 / 58
25	1	540 / 307 / 56	590 / 410 / 48	544 / 412 / 84	577 / 520 / 69	555 / 485 / 107	670 / 604 / 88	550 / 448 / 90	665 / 557 / 74	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 103	687 / 623 / 84	569 / 466 / 86	700 / 589 / 72	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 84	836 / 783 / 69	700 / 598 / 72	832 / 722 / 58
	2	590 / 410 / 48	655 / 527 / 41	577 / 529 / 69	647 / 650 / 56	670 / 612 / 88	799 / 745 / 71	665 / 566 / 74	819 / 709 / 61	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 73	935 / 872 / 58	788 / 671 / 61	966 / 833 / 51	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 73	935 / 872 / 58	788 / 671 / 61	966 / 833 / 51
	3	545 / 643 / 37	622 / 773 / 30	624 / 610 / 60	741 / 744 / 49	755 / 692 / 75	930 / 865 / 62	773 / 656 / 65	926 / 797 / 52	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 73	935 / 872 / 58	788 / 671 / 61	966 / 833 / 51	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 73	935 / 872 / 58	788 / 671 / 61	966 / 833 / 51
15	1	525 / 357 / 48	576 / 453 / 40	519 / 460 / 67	589 / 571 / 55	591 / 523 / 69	720 / 655 / 57	599 / 494 / 64	716 / 604 / 52	510 / 335 / 49	563 / 436 / 42	512 / 440 / 70	561 / 540 / 56	574 / 505 / 72	687 / 623 / 58	569 / 466 / 66	700 / 589 / 55	563 / 436 / 42	673 / 545 / 34	561 / 550 / 56	661 / 667 / 45	687 / 631 / 58	836 / 783 / 48	700 / 598 / 55	832 / 722 / 44
	2	576 / 453 / 40	688 / 561 / 32	576 / 568 / 54	691 / 701 / 44	702 / 647 / 55	844 / 792 / 45	716 / 613 / 52	868 / 755 / 42	543 / 661 / 31	649 / 811 / 25	639 / 629 / 49	776 / 781 / 40	792 / 728 / 51	935 / 872 / 41	788 / 671 / 47	966 / 833 / 38	543 / 661 / 31	649 / 811 / 25	639 / 629 / 49	776 / 781 / 40	792 / 728 / 51	935 / 872 / 41	788 / 671 / 47	966 / 833 / 38
	3	568 / 695 / 30	675 / 846 / 24	652 / 645 / 46	782 / 791 / 38	802 / 740 / 48	969 / 906 / 39	823 / 703 / 45	1003 / 867 / 37	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 86	687 / 623 / 70	569 / 466 / 75	700 / 589 / 62	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 70	836 / 783 / 57	700 / 598 / 62	832 / 722 / 50
20	1	557 / 344 / 53	613 / 453 / 46	565 / 460 / 79	600 / 571 / 65	591 / 523 / 82	720 / 655 / 68	599 / 494 / 73	716 / 604 / 59	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 86	687 / 623 / 70	569 / 466 / 75	700 / 589 / 62	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 70	836 / 783 / 57	700 / 598 / 62	832 / 722 / 50
	2	613 / 453 / 46	688 / 561 / 37	586 / 568 / 63	691 / 701 / 52	702 / 647 / 66	844 / 792 / 54	716 / 613 / 59	868 / 755 / 48	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 61	935 / 872 / 49	788 / 671 / 53	966 / 833 / 44	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 61	935 / 872 / 49	788 / 671 / 53	966 / 833 / 44
	3	568 / 695 / 34	675 / 846 / 28	652 / 645 / 55	782 / 791 / 44	802 / 740 / 57	969 / 906 / 47	823 / 703 / 52	1003 / 867 / 42	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 103	687 / 623 / 84	569 / 466 / 86	700 / 589 / 72	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 84	836 / 783 / 69	700 / 598 / 72	832 / 722 / 58
25	1	557 / 344 / 53	613 / 453 / 46	565 / 460 / 79	600 / 571 / 65	591 / 523 / 99	720 / 655 / 82	599 / 494 / 85	716 / 604 / 69	544 / 323 / 54	608 / 436 / 47	560 / 440 / 82	582 / 540 / 66	574 / 505 / 103	687 / 623 / 84	569 / 466 / 86	700 / 589 / 72	608 / 436 / 47	673 / 545 / 34	582 / 550 / 66	661 / 667 / 53	687 / 631 / 84	836 / 783 / 69	700 / 598 / 72	832 / 722 / 58
	2	613 / 453 / 46	688 / 561 / 37	586 / 568 / 63	691 / 701 / 52	702 / 647 / 79	844 / 792 / 64	716 / 613 / 69	868 / 755 / 56	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 73	935 / 872 / 58	788 / 671 / 61	966 / 833 / 51	547 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 47	792 / 728 / 73	935 / 872 / 58	788 / 671 / 61	966 / 833 / 51
	3	568 / 695 / 34	675 / 84																						

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																							
Wind Speed [mph]		140																150																160																							
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45											
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge													
		15	1	531/372/46	591/468/38	524/478/65	603/587/52	620/552/67	732/669/54	615/509/61	748/634/51	550/408/44	630/505/36	535/509/60	638/628/49	660/593/63	791/727/51	655/548/57	787/670/47	555/432/41	679/551/34	567/545/56	667/662/45	694/629/58	844/780/48	689/580/53	840/719/44	591/468/38	719/589/32	603/598/52	720/733/42	732/678/54	876/824/44	748/643/51	902/787/41	630/505/36	778/642/30	638/640/49	750/769/39	791/737/51	933/883/41	787/680/47	965/844/38	679/551/34	808/672/28	667/674/45	796/820/36	818/766/47	981/931/38	840/729/44	1017/893/36						
2	575/707/28		700/879/23	680/676/45	812/823/36	834/772/47	1001/938/38	857/734/44	1038/899/36	617/766/27	743/939/22	734/735/42	865/881/34	893/830/44	1101/1035/36	920/791/41	1098/953/33	655/819/25	778/987/20	759/764/39	945/967/33	944/881/41	1146/1081/33	975/841/38	1196/1040/32	575/707/28	700/879/23	680/676/45	812/823/36	834/772/47	1001/938/38	857/734/44	1038/899/36	617/766/27	743/939/22	734/735/42	865/881/34	893/830/44	1101/1035/36	920/791/41	1098/953/33	655/819/25	778/987/20	759/764/39	945/967/33	944/881/41	1146/1081/33	975/841/38	1196/1040/32								
3	571/366/52		617/468/44	569/478/77	603/587/62	620/552/81	732/669/65	615/509/70	748/634/58	586/400/49	634/505/41	573/509/71	638/628/58	660/593/75	791/727/61	655/548/65	787/670/53	599/432/46	679/551/39	586/545/66	667/662/53	694/629/70	844/780/57	689/580/61	840/719/50	617/468/44	719/589/36	603/598/62	720/733/50	732/678/65	876/824/52	748/643/58	902/787/47	634/505/41	778/642/34	638/640/58	750/769/46	791/737/61	933/883/49	787/680/53	965/844/44	679/551/39	808/672/31	667/674/53	796/820/43	818/766/56	981/931/45	840/729/50	1017/893/41								
20	1		571/366/52	617/468/44	569/478/77	603/587/62	620/552/81	732/669/65	615/509/70	748/634/58	586/400/49	634/505/41	573/509/71	638/628/58	660/593/75	791/727/61	655/548/65	787/670/53	599/432/46	679/551/39	586/545/66	667/662/53	694/629/70	844/780/57	689/580/61	840/719/50	617/468/44	719/589/36	603/598/62	720/733/50	732/678/65	876/824/52	748/643/58	902/787/47	634/505/41	778/642/34	638/640/58	750/769/46	791/737/61	933/883/49	787/680/53	965/844/44	679/551/39	808/672/31	667/674/53	796/820/43	818/766/56	981/931/45	840/729/50	1017/893/41							
2	575/707/32		700/879/27	680/676/53	812/823/43	834/772/56	1001/938/45	857/734/50	1038/899/41	617/766/31	743/939/25	734/735/50	865/881/40	893/830/52	1101/1035/43	920/791/47	1098/953/38	655/819/29	778/987/23	759/764/46	945/967/39	944/881/49	1146/1081/40	975/841/44	1196/1040/36	575/707/32	700/879/27	680/676/53	812/823/43	834/772/56	1001/938/45	857/734/50	1038/899/41	617/766/31	743/939/25	734/735/50	865/881/40	893/830/52	1101/1035/43	920/791/47	1098/953/38	655/819/29	778/987/23	759/764/46	945/967/39	944/881/49	1146/1081/40	975/841/44	1196/1040/36								
3	571/366/52		617/468/44	569/478/77	603/587/62	620/552/96	732/669/77	615/509/81	748/634/67	586/400/49	634/505/41	573/509/71	638/628/58	660/593/90	791/727/73	655/548/76	787/670/61	599/432/46	679/551/39	586/545/66	667/662/53	694/629/84	844/780/69	689/580/70	840/719/58	617/468/44	719/589/36	603/598/62	720/733/50	732/678/77	876/824/62	748/643/67	902/787/54	634/505/41	778/642/34	638/640/58	750/769/46	791/737/73	933/883/58	787/680/61	965/844/51	679/551/39	808/672/31	667/674/53	796/820/43	818/766/67	981/931/54	840/729/58	1017/893/47								
25	1		571/366/52	617/468/44	569/478/77	603/587/62	620/552/96	732/669/77	615/509/81	748/634/67	586/400/49	634/505/41	573/509/71	638/628/58	660/593/90	791/727/73	655/548/76	787/670/61	599/432/46	679/551/39	586/545/66	667/662/53	694/629/84	844/780/69	689/580/70	840/719/58	617/468/44	719/589/36	603/598/62	720/733/50	732/678/77	876/824/62	748/643/67	902/787/54	634/505/41	778/642/34	638/640/58	750/769/46	791/737/73	933/883/58	787/680/61	965/844/51	679/551/39	808/672/31	667/674/53	796/820/43	818/766/67	981/931/54	840/729/58	1017/893/47							
2	575/707/32		700/879/27	680/676/53	812/823/43	834/772/56	1001/938/45	857/734/50	1038/899/41	617/766/31	743/939/25	734/735/50	865/881/40	893/830/52	1101/1035/43	920/791/47	1098/953/38	655/819/29	778/987/23	759/764/46	945/967/39	944/881/49	1146/1081/40	975/841/44	1196/1040/36	575/707/32	700/879/27	680/676/53	812/823/43	834/772/56	1001/938/45	857/734/50	1038/899/41	617/766/31	743/939/25	734/735/50	865/881/40	893/830/52	1101/1035/43	920/791/47	1098/953/38	655/819/29	778/987/23	759/764/46	945/967/39	944/881/49	1146/1081/40	975/841/44	1196/1040/36								
3	571/366/52		617/468/44	569/478/77	603/587/62	620/552/96	732/669/77	615/509/81	748/634/67	586/400/49	634/505/41	573/509/71	638/628/58	660/593/90	791/727/73	655/548/76	787/670/61	599/432/46	679/551/39	586/545/66	667/662/53	694/629/84	844/780/69	689/580/70	840/719/58	617/468/44	719/589/36	603/598/62	720/733/50	732/678/77	876/824/62	748/643/67	902/787/54	634/505/41	778/642/34	638/640/58	750/769/46	791/737/73	933/883/58	787/680/61	965/844/51	679/551/39	808/672/31	667/674/53	796/820/43	818/766/67	981/931/54	840/729/58	1017/893/47								
15	1	594/470/39	707/578/32	593/577/52	708/708/42	740/675/55	891/827/45	736/623/51	887/762/41	620/496/37	748/616/30	630/618/50	744/748/40	782/718/52	930/867/42	778/662/48	960/827/40	620/496/37	748/616/30	630/618/50	744/748/40	782/718/52	930/867/42	778/662/48	960/827/40	707/578/32	854/714/26	708/720/42	865/896/35	891/838/45	1061/1010/36	887/773/41	1102/970/34	748/616/30	924/776/25	744/762/40	898/934/33	930/878/42	1138/1086/35	960/839/40	1136/1001/32	707/578/32	854/714/26	708/720/42	865/896/35	891/838/45	1061/1010/36	887/773/41	1102/970/34	748/616/30	924/776/25	744/762/40	898/934/33	930/878/42	1138/1086/35	960/839/40	1136/1001/32
	2	688/864/23	839/1070/19	826/837/38	983/1009/30	1024/959/39	1234/1165/32	1021/883/36	1231/1073/29	714/901/22	857/1096/18	862/877/35	1054/1085/29	1058/993/36	1316/1245/30	1099/953/34	1313/1146/28	688/864/23	839/1070/19	826/837/38	983/1009/30	1024/959/39	1234/1165/32	1021/883/36	1231/1073/29	688/864/23	839/1070/19	826/837/38	983/1009/30	1024/959/39	1234/1165/32	1021/883/36	1231/1073/29	714/901/22	857/1096/18	862/877/35	1054/1085/29	1058/993/36	1316/1245/30	1099/953/34	1313/1146/28	688/864/23	839/1070/19	826/837/38	983/1009/30	1024/959/39	1234/1165/32	1021/883/36	1231/1073/29								
	3	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	631/496/42	748/616/34	630/618/59	744/748/47	782/718/63	930/867/50	778/662/55	960/827/45	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	631/496/42	748/616/34	630/618/59	744/748/47	782/718/63	930/867/50	778/662/55	960/827/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47									
	20	1	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	631/496/42	748/616/34	630/618/59	744/748/47	782/718/63	930/867/50	778/662/55	960/827/45	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	631/496/42	748/616/34	630/618/59	744/748/47	782/718/63	930/867/50	778/662/55	960/827/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47								
	2	688/864/27	839/1070/22	826/837/44	983/1009/36	1024/959/47	1234/1165/38	1021/883/41	1231/1073/33	714/901/25	857/1096/20	862/877/41	1054/1085/34	1058/993/43	1316/1245/36	1099/953/39	1313/1146/31	688/864/27	839/1070/22	826/837/44	983/1009/36	1024/959/47	1234/1165/38	1021/883/41	1231/1073/33	688/864/27	839/1070/22	826/837/44	983/1009/36	1024/959/47	1234/1165/38	1021/883/41	1231/1073/33	714/901/25	857/1096/20	862/877/41	1054/1085/34	1058/993/43	1316/1245/36	1099/953/39	1313/1146/31	688/864/27	839/1070/22	826/837/44	983/1009/36	1024/959/47	1234/1165/38	1021/883/41	1231/1073/33								
	3	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	631/496/42	748/616/34	630/618/59	744/748/47	782/718/63	930/867/50	778/662/55	960/827/45	623/470/45	707/578/36	595/577/62	708/708/50	740/675/66	891/827/54	736/623/58	887/762/47	623/47																															

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		30	1	509 / 248 / 60	558 / 343 / 53	518 / 342 / 92	565 / 458 / 80	531 / 416 / 140	589 / 521 / 115	492 / 392 / 117	596 / 492 / 97	514 / 265 / 58	566 / 364 / 51	525 / 364 / 89	574 / 484 / 77	542 / 440 / 135	613 / 546 / 110	507 / 407 / 111	622 / 516 / 93	528 / 286 / 57	584 / 390 / 50	531 / 385 / 86	571 / 498 / 72	553 / 463 / 130	650 / 583 / 107	529 / 428 / 107
2	558 / 343 / 53		613 / 451 / 46	565 / 466 / 80	585 / 566 / 64	589 / 528 / 115	718 / 661 / 95	596 / 499 / 97	713 / 611 / 78	566 / 364 / 51	623 / 474 / 44	563 / 483 / 75	595 / 591 / 61	613 / 554 / 110	741 / 686 / 90	622 / 523 / 93	757 / 651 / 76	584 / 390 / 50	632 / 496 / 42	571 / 507 / 72	614 / 614 / 58	635 / 577 / 105	760 / 707 / 85	645 / 546 / 89	778 / 671 / 72	
3	521 / 558 / 42		565 / 692 / 34	578 / 526 / 68	667 / 660 / 56	674 / 609 / 100	824 / 760 / 83	686 / 576 / 84	820 / 700 / 68	526 / 583 / 40	581 / 716 / 33	587 / 552 / 65	688 / 685 / 53	698 / 634 / 95	844 / 781 / 78	712 / 600 / 80	868 / 743 / 66	530 / 607 / 38	612 / 758 / 32	595 / 575 / 62	706 / 705 / 50	738 / 673 / 92	888 / 824 / 75	733 / 621 / 76	884 / 759 / 62	
35	1		530 / 240 / 63	581 / 337 / 57	535 / 331 / 98	584 / 449 / 86	556 / 416 / 160	597 / 521 / 131	492 / 392 / 132	596 / 492 / 109	542 / 261 / 62	587 / 357 / 55	540 / 352 / 95	604 / 484 / 85	567 / 440 / 154	613 / 546 / 125	507 / 407 / 125	622 / 516 / 104	545 / 277 / 60	605 / 383 / 54	554 / 378 / 93	599 / 498 / 80	577 / 463 / 148	650 / 583 / 123	529 / 428 / 120	645 / 538 / 99
	2		581 / 337 / 57	642 / 451 / 50	584 / 457 / 86	610 / 566 / 70	597 / 528 / 131	718 / 661 / 108	596 / 499 / 109	713 / 611 / 88	587 / 357 / 55	651 / 474 / 47	592 / 483 / 83	618 / 591 / 67	613 / 554 / 125	741 / 686 / 103	622 / 523 / 104	757 / 651 / 86	605 / 383 / 54	659 / 496 / 45	599 / 507 / 80	624 / 614 / 64	635 / 577 / 120	760 / 707 / 97	645 / 546 / 99	778 / 671 / 81
	3		547 / 558 / 45	582 / 692 / 37	604 / 526 / 75	667 / 660 / 62	674 / 609 / 114	824 / 760 / 94	686 / 576 / 95	820 / 700 / 76	551 / 583 / 43	585 / 716 / 35	612 / 552 / 72	688 / 685 / 59	698 / 634 / 108	844 / 781 / 89	712 / 600 / 90	868 / 743 / 74	554 / 607 / 41	612 / 758 / 34	619 / 575 / 69	706 / 705 / 56	738 / 673 / 106	888 / 824 / 86	733 / 621 / 86	884 / 759 / 70
40	1		548 / 232 / 65	592 / 325 / 59	551 / 320 / 106	603 / 441 / 95	572 / 408 / 176	618 / 521 / 147	492 / 392 / 146	596 / 492 / 121	559 / 252 / 64	608 / 350 / 58	563 / 345 / 104	622 / 474 / 93	581 / 432 / 170	629 / 546 / 141	507 / 407 / 139	622 / 516 / 116	570 / 272 / 63	624 / 376 / 57	576 / 372 / 103	627 / 498 / 90	589 / 454 / 163	652 / 583 / 138	529 / 428 / 133	645 / 538 / 110
	2		592 / 325 / 59	657 / 442 / 52	603 / 449 / 77	635 / 566 / 62	618 / 528 / 117	718 / 661 / 94	596 / 499 / 95	713 / 611 / 79	608 / 350 / 51	679 / 474 / 51	622 / 483 / 73	641 / 591 / 59	629 / 554 / 111	741 / 686 / 91	622 / 523 / 91	757 / 651 / 93	624 / 376 / 57	685 / 496 / 49	627 / 507 / 90	646 / 614 / 72	637 / 577 / 135	760 / 707 / 109	645 / 546 / 110	778 / 671 / 90
	3		573 / 558 / 49	604 / 692 / 40	630 / 526 / 84	681 / 660 / 70	674 / 609 / 128	824 / 760 / 106	686 / 576 / 105	820 / 700 / 85	577 / 583 / 47	606 / 716 / 38	637 / 552 / 81	688 / 685 / 66	698 / 634 / 122	844 / 781 / 100	712 / 600 / 100	868 / 743 / 82	578 / 607 / 45	624 / 758 / 37	643 / 575 / 77	706 / 705 / 62	738 / 673 / 119	888 / 824 / 96	733 / 621 / 95	884 / 759 / 77
30	1	541 / 307 / 56	591 / 410 / 49	546 / 412 / 84	578 / 520 / 70	562 / 485 / 125	670 / 604 / 102	550 / 448 / 103	665 / 557 / 84	545 / 323 / 54	609 / 436 / 48	561 / 440 / 83	583 / 540 / 67	574 / 505 / 120	687 / 623 / 97	569 / 466 / 99	700 / 589 / 82	609 / 436 / 48	673 / 545 / 39	583 / 550 / 67	661 / 667 / 53	687 / 631 / 97	836 / 783 / 80	700 / 598 / 82	832 / 722 / 66	
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	3	546 / 643 / 37	622 / 773 / 30	624 / 610 / 61	741 / 744 / 49	755 / 692 / 88	930 / 865 / 73	773 / 656 / 74	926 / 797 / 60	548 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 48	792 / 728 / 85	935 / 872 / 68	788 / 671 / 70	966 / 833 / 58	548 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 48	792 / 728 / 85	935 / 872 / 68	788 / 671 / 70	966 / 833 / 58	
	35	1	557 / 297 / 59	610 / 402 / 52	568 / 405 / 91	605 / 520 / 77	585 / 485 / 142	670 / 604 / 117	550 / 448 / 116	665 / 557 / 95	570 / 318 / 58	627 / 427 / 51	572 / 424 / 88	609 / 540 / 73	593 / 505 / 137	687 / 623 / 111	569 / 466 / 111	700 / 589 / 93	627 / 427 / 51	685 / 545 / 42	609 / 550 / 73	661 / 667 / 59	687 / 631 / 111	836 / 783 / 91	700 / 598 / 93	832 / 722 / 74
		2	610 / 402 / 52	680 / 527 / 44	605 / 529 / 77	647 / 650 / 62	670 / 612 / 117	799 / 745 / 94	665 / 566 / 95	819 / 709 / 79	627 / 427 / 51	685 / 545 / 42	609 / 550 / 73	661 / 667 / 59	687 / 631 / 111	836 / 783 / 91	700 / 598 / 93	832 / 722 / 74	627 / 427 / 51	685 / 545 / 42	609 / 550 / 73	661 / 667 / 59	687 / 631 / 111	836 / 783 / 91	700 / 598 / 93	832 / 722 / 74
		3	570 / 643 / 40	622 / 773 / 32	639 / 610 / 67	741 / 744 / 54	755 / 692 / 100	930 / 865 / 83	773 / 656 / 83	926 / 797 / 67	570 / 661 / 38	649 / 811 / 31	643 / 629 / 64	776 / 781 / 52	792 / 728 / 97	935 / 872 / 77	788 / 671 / 79	966 / 833 / 65	570 / 661 / 38	649 / 811 / 31	643 / 629 / 64	776 / 781 / 52	792 / 728 / 97	935 / 872 / 77	788 / 671 / 79	966 / 833 / 65
	40	1	581 / 292 / 62	627 / 394 / 54	579 / 391 / 99	632 / 520 / 86	608 / 485 / 160	670 / 604 / 131	550 / 448 / 128	665 / 557 / 105	582 / 306 / 60	643 / 419 / 53	592 / 417 / 97	635 / 540 / 82	615 / 505 / 154	687 / 623 / 125	569 / 466 / 123	700 / 589 / 103	643 / 419 / 53	710 / 545 / 46	635 / 550 / 82	667 / 667 / 66	687 / 631 / 125	836 / 783 / 103	700 / 598 / 103	832 / 722 / 82
		2	627 / 394 / 54	706 / 527 / 48	632 / 529 / 86	666 / 650 / 70	670 / 612 / 131	799 / 745 / 106	665 / 566 / 105	819 / 709 / 87	643 / 419 / 53	710 / 545 / 46	635 / 550 / 82	667 / 667 / 66	687 / 631 / 125	836 / 783 / 103	700 / 598 / 103	832 / 722 / 82	643 / 419 / 53	710 / 545 / 46	635 / 550 / 82	667 / 667 / 66	687 / 631 / 125	836 / 783 / 103	700 / 598 / 103	832 / 722 / 82
		3	593 / 643 / 43	622 / 773 / 35	663 / 610 / 75	741 / 744 / 61	755 / 692 / 112	930 / 865 / 93	773 / 656 / 93	926 / 797 / 75	592 / 661 / 41	649 / 811 / 34	665 / 629 / 72	776 / 781 / 59	792 / 728 / 109	935 / 872 / 87	788 / 671 / 87	966 / 833 / 72	592 / 661 / 41	649 / 811 / 34	665 / 629 / 72	776 / 781 / 59	792 / 728 / 109	935 / 872 / 87	788 / 671 / 87	966 / 833 / 72
30	1	559 / 344 / 53	614 / 453 / 46	566 / 460 / 80	601 / 571 / 65	591 / 523 / 115	720 / 655 / 95	599 / 494 / 97	716 / 604 / 78	545 / 323 / 54	609 / 436 / 48	561 / 440 / 83	583 / 540 / 67	574 / 505 / 120	687 / 623 / 97	569 / 466 / 99	700 / 589 / 82	609 / 436 / 48	673 / 545 / 39	583 / 550 / 67	661 / 667 / 53	687 / 631 / 97	836 / 783 / 80	700 / 598 / 82	832 / 722 / 66	
	2	614 / 453 / 46	688 / 561 / 37	587 / 568 / 64	691 / 701 / 52	702 / 647 / 92	844 / 792 / 75	716 / 613 / 78	868 / 755 / 64	609 / 436 / 48	673 / 545 / 39	583 / 550 / 67	661 / 667 / 53	687 / 631 / 97	836 / 783 / 80	700 / 598 / 82	832 / 722 / 66	609 / 436 / 48	673 / 545 / 39	583 / 550 / 67	661 / 667 / 53	687 / 631 / 97	836 / 783 / 80	700 / 598 / 82	832 / 722 / 66	
	3	568 / 695 / 34	675 / 846 / 28	652 / 645 / 55	782 / 791 / 45	802 / 740 / 80	969 / 906 / 65	823 / 703 / 68	1003 / 867 / 56	548 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 48	792 / 728 / 85	935 / 872 / 68	788 / 671 / 70	966 / 833 / 58	548 / 661 / 35	649 / 811 / 29	639 / 629 / 58	776 / 781 / 48	792 / 728 / 85	935 / 872 / 68	788 / 671 / 70	966 / 833 / 58	
	35	1	582 / 338 / 57	643 / 453 / 50	586 / 451 / 86	626 / 571 / 72	599 / 523 / 131	720 / 655 / 108	599 / 494 / 109	716 / 604 / 88	570 / 318 / 58	627 / 427 / 51	572 / 424 / 88	609 / 540 / 73	593 / 505 / 137	687 / 623 / 111	569 / 466 / 111	700 / 589 / 93	627 / 427 / 51	685 / 545 / 42	609 / 550 / 73	661 / 667 / 59	687 / 631 / 111	836 / 783 / 91	700 / 598 / 93	832 / 722 / 74
		2	643 / 453 / 50	688 / 561 / 40	612 / 568 / 70	691 / 701 / 57	702 / 647 / 106	844 / 792 / 86	716 / 613 / 88	868 / 755 / 72	627 / 427 / 51	685 / 545 / 42	609 / 550 / 73	661 / 667 / 59	687 / 631 / 111	836 / 783 / 91	700 / 598 / 93	832 / 722 / 74	627 / 427 / 51	685 / 545 / 42	609 / 550 / 73	661 / 667 / 59	687 / 631 / 111	836 / 783 / 91	700 / 598 / 93	832 / 722 / 74
		3	584 / 695 / 37	675 / 846 / 30	652 / 645 / 61	782 / 791 / 49	802 / 740 / 91	969 / 906 / 74	823 / 703 / 76	1003 / 867 / 63	570 / 661 / 38	649 / 811 / 31	643 / 629 / 64	776 / 781 / 52	792 / 728 / 97	935 / 872 / 77	788 / 671 / 79	966 / 833 / 65	570 / 661 / 38	649 / 811 / 31	643 / 629 / 64	776 / 781 / 52	792 / 728 / 97	935 / 872 / 77	788 / 671 / 79	966 / 833 / 65
	40	1	593 / 326 / 59	658 / 444 / 52	605 / 443 / 95	651 / 571 / 81	620 / 523 / 147	720 / 655 / 122	599 / 494 / 121	716 / 604 / 98	582 / 306 / 60	643 / 419 / 53	592 / 417 / 97	635 / 540 / 82	615 / 505 / 154	687 / 623 / 125	569 / 466 / 123	700 / 589 / 103	643 / 419 / 53	710 / 545 / 46	635 / 550 / 82	667 / 667 / 66	687 / 631 / 125	836 / 783 / 103	700 / 598 / 103	832 / 722 / 82
		2	658 / 444 / 52	711 / 561 / 43	636 / 568 / 79	691 / 701 / 64	702 / 647 / 119	844 / 792 / 96	716 / 613 / 98	868 / 755 / 80	643 / 419 / 53	710 / 545 / 46	635 / 550 / 82	667 / 667 / 66	687 / 631 / 125	836 / 783 / 103	700 / 598 / 103	832 / 722 / 82	643 / 419 / 53	710 / 545 / 46						

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		30	1	572 / 366 / 52	618 / 468 / 44	570 / 478 / 77	604 / 587 / 62	620 / 552 / 112	732 / 669 / 90	615 / 509 / 93	748 / 634 / 76	588 / 400 / 49	636 / 505 / 41	575 / 509 / 71	638 / 628 / 58	660 / 593 / 105	791 / 727 / 85	655 / 548 / 86	787 / 670 / 70	601 / 432 / 47	679 / 551 / 39	587 / 545 / 67	667 / 662 / 53	694 / 629 / 97	844 / 780 / 80	689 / 580 / 80	840 / 719 / 66	617 / 509 / 71	638 / 628 / 58	660 / 593 / 105	791 / 727 / 85	655 / 548 / 86	787 / 670 / 70	601 / 432 / 47	679 / 551 / 39	587 / 545 / 67	667 / 662 / 53	694 / 629 / 97	844 / 780 / 80	689 / 580 / 80	840 / 719 / 66								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																																																
Wind Speed [mph]		95								100								105																																																																
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																																																										
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																							
45	1	574 / 229 / 112	612 / 318 / 100	574 / 314 / 151	621 / 432 / 135	586 / 401 / 197	639 / 521 / 168	492 / 392 / 161	596 / 492 / 133	584 / 248 / 110	627 / 343 / 98	586 / 339 / 148	638 / 465 / 132	594 / 424 / 190	649 / 546 / 161	507 / 407 / 152	622 / 516 / 127	594 / 267 / 108	642 / 368 / 97	598 / 365 / 145	642 / 488 / 127	613 / 454 / 186	672 / 583 / 157	529 / 428 / 147	645 / 538 / 121																																																									
	2	612 / 318 / 100	670 / 432 / 89	621 / 440 / 135	659 / 566 / 114	639 / 528 / 168	718 / 661 / 139	596 / 499 / 133	713 / 611 / 107	627 / 343 / 98	691 / 464 / 87	638 / 473 / 132	665 / 591 / 108	649 / 554 / 161	741 / 686 / 132	622 / 523 / 127	757 / 651 / 105	642 / 368 / 97	712 / 496 / 85	642 / 497 / 127	668 / 614 / 103	657 / 577 / 153	760 / 707 / 124	645 / 546 / 121	778 / 671 / 99																																																									
	3	600 / 558 / 85	626 / 692 / 70	657 / 526 / 122	703 / 660 / 101	678 / 609 / 146	824 / 760 / 121	686 / 576 / 116	820 / 700 / 93	602 / 583 / 81	626 / 716 / 66	663 / 552 / 116	708 / 685 / 95	698 / 634 / 139	844 / 781 / 113	712 / 600 / 110	868 / 743 / 90	602 / 607 / 77	644 / 758 / 64	667 / 575 / 111	710 / 705 / 90	738 / 673 / 135	888 / 824 / 110	733 / 621 / 105	884 / 759 / 85																																																									
	50	1	588 / 221 / 117	631 / 312 / 107	596 / 309 / 161	637 / 424 / 144	600 / 394 / 211	660 / 521 / 183	492 / 392 / 175	596 / 492 / 145	596 / 239 / 115	644 / 337 / 105	607 / 333 / 158	653 / 456 / 141	606 / 416 / 203	669 / 546 / 175	507 / 407 / 166	622 / 516 / 139	605 / 258 / 113	658 / 361 / 103	606 / 352 / 152	669 / 488 / 138	624 / 445 / 199	692 / 583 / 171	529 / 428 / 160	645 / 538 / 132																																																								
		2	631 / 312 / 107	683 / 423 / 94	637 / 431 / 144	684 / 566 / 124	660 / 528 / 183	719 / 661 / 151	596 / 499 / 145	713 / 611 / 117	644 / 337 / 105	702 / 454 / 92	653 / 464 / 141	688 / 591 / 118	669 / 554 / 175	741 / 686 / 143	622 / 523 / 139	757 / 651 / 114	658 / 361 / 103	721 / 484 / 90	669 / 497 / 138	690 / 614 / 112	676 / 577 / 167	760 / 707 / 135	645 / 546 / 132	778 / 671 / 108																																																								
		3	626 / 558 / 92	647 / 692 / 75	683 / 526 / 132	724 / 660 / 109	696 / 609 / 159	824 / 760 / 132	686 / 576 / 126	820 / 700 / 102	627 / 583 / 88	647 / 716 / 71	688 / 552 / 127	728 / 685 / 104	704 / 634 / 151	844 / 781 / 124	712 / 600 / 120	868 / 743 / 99	626 / 607 / 84	664 / 758 / 69	691 / 575 / 121	730 / 705 / 98	738 / 673 / 147	888 / 824 / 120	733 / 621 / 114	884 / 759 / 93																																																								
	60	1	632 / 213 / 130	665 / 300 / 118	624 / 292 / 177	667 / 407 / 160	624 / 379 / 236	687 / 510 / 209	507 / 392 / 204	596 / 492 / 169	638 / 230 / 128	676 / 323 / 116	633 / 315 / 173	680 / 437 / 157	640 / 408 / 232	709 / 546 / 204	511 / 407 / 194	622 / 516 / 162	645 / 248 / 126	688 / 346 / 114	642 / 338 / 170	694 / 468 / 154	656 / 436 / 227	714 / 569 / 195	529 / 428 / 187	645 / 538 / 154																																																								
		2	665 / 300 / 118	721 / 414 / 106	667 / 414 / 160	733 / 566 / 144	687 / 517 / 209	754 / 661 / 176	596 / 499 / 169	713 / 611 / 136	676 / 323 / 116	738 / 443 / 104	680 / 445 / 157	735 / 591 / 137	709 / 554 / 204	760 / 686 / 167	622 / 523 / 162	757 / 651 / 133	688 / 346 / 114	755 / 473 / 102	694 / 476 / 154	735 / 614 / 130	714 / 577 / 195	763 / 707 / 158	645 / 546 / 154	778 / 671 / 126																																																								
		3	679 / 558 / 106	691 / 692 / 87	704 / 503 / 147	768 / 660 / 127	733 / 609 / 186	824 / 760 / 153	686 / 576 / 147	820 / 700 / 119	678 / 583 / 102	688 / 716 / 82	721 / 539 / 144	770 / 685 / 120	739 / 634 / 176	844 / 781 / 144	712 / 600 / 140	868 / 743 / 115	675 / 607 / 97	704 / 758 / 80	739 / 575 / 140	769 / 705 / 114	763 / 673 / 172	888 / 824 / 139	733 / 621 / 133	884 / 759 / 108																																																								
45	1	593 / 281 / 104	643 / 386 / 93	598 / 384 / 140	659 / 520 / 124	619 / 475 / 179	679 / 604 / 150	550 / 448 / 141	665 / 557 / 116	603 / 301 / 102	658 / 410 / 91	610 / 409 / 137	660 / 540 / 119	637 / 505 / 175	687 / 623 / 143	569 / 466 / 135	700 / 589 / 113	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 7.5</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">7.5 - 15</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">15 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">30 - 45</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>								ASCE Group Zone		Panal Angle	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3	7.5 - 15	1 = 1	2 = 2	3 = 3	15 - 30	1 = 1	2 = 2	3 = 3	30 - 45	1 = 1	2 = 2	3 = 3																																					
	ASCE Group Zone																																																																																	
	Panal Angle	Mono Slope																																																																																
	0 - 7.5	1 = 1																																																																																
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2	643 / 386 / 93	715 / 515 / 81	659 / 529 / 124	687 / 650 / 101	679 / 612 / 150	799 / 745 / 121	665 / 566 / 116	819 / 709 / 96	658 / 410 / 91	734 / 545 / 79	660 / 550 / 119	687 / 667 / 95	687 / 631 / 143	836 / 783 / 117	700 / 598 / 113	832 / 722 / 90																																																																		
3	617 / 643 / 75	640 / 773 / 60	686 / 610 / 108	741 / 744 / 87	755 / 692 / 128	930 / 865 / 106	773 / 656 / 102	926 / 797 / 82	614 / 661 / 72	655 / 811 / 58	687 / 629 / 103	776 / 781 / 85	792 / 728 / 124	935 / 872 / 99	788 / 671 / 96	966 / 833 / 79																																																																		
50	1	614 / 276 / 111	672 / 386 / 100	617 / 376 / 149	671 / 509 / 132	641 / 475 / 195	698 / 604 / 163	550 / 448 / 154	665 / 557 / 126	623 / 295 / 109	671 / 401 / 96	628 / 401 / 147	686 / 540 / 129	645 / 494 / 187	701 / 623 / 155	569 / 466 / 148																	700 / 589 / 123																																																	
	2	672 / 386 / 100	740 / 515 / 88	671 / 518 / 132	709 / 650 / 109	698 / 612 / 163	799 / 745 / 132	665 / 566 / 126	819 / 709 / 105	671 / 401 / 96	759 / 545 / 86	686 / 550 / 129	708 / 667 / 104	701 / 631 / 155	836 / 783 / 128	700 / 598 / 123																	832 / 722 / 99																																																	
	3	640 / 643 / 82	659 / 773 / 65	709 / 610 / 118	750 / 744 / 95	755 / 692 / 139	930 / 865 / 116	773 / 656 / 111	926 / 797 / 89	637 / 661 / 78	673 / 811 / 63	709 / 629 / 112	776 / 781 / 92	792 / 728 / 135	935 / 872 / 108	788 / 671 / 105																	966 / 833 / 86																																																	
60	1	652 / 266 / 123	699 / 369 / 111	650 / 362 / 167	708 / 498 / 150	658 / 456 / 218	735 / 604 / 190	550 / 448 / 179	665 / 557 / 147	659 / 284 / 121	711 / 393 / 109	659 / 385 / 163	721 / 528 / 147	674 / 484 / 213	737 / 623 / 181	569 / 466 / 172																	700 / 589 / 144																																																	
	2	699 / 369 / 111	772 / 503 / 99	708 / 507 / 150	753 / 650 / 127	735 / 612 / 190	799 / 745 / 153	665 / 566 / 147	819 / 709 / 122	711 / 393 / 109	789 / 532 / 97	721 / 538 / 147	749 / 667 / 120	737 / 631 / 181	836 / 783 / 149	700 / 598 / 144																	832 / 722 / 115																																																	
	3	687 / 643 / 94	696 / 773 / 75	756 / 610 / 137	788 / 744 / 110	765 / 692 / 162	930 / 865 / 135	773 / 656 / 129	926 / 797 / 104	681 / 661 / 90	709 / 811 / 73	754 / 629 / 130	807 / 781 / 107	792 / 728 / 158	935 / 872 / 125	788 / 671 / 122																	966 / 833 / 101																																																	
45	1	613 / 320 / 100	672 / 434 / 89	622 / 434 / 135	676 / 571 / 116	641 / 523 / 168	720 / 655 / 139	599 / 494 / 133	716 / 604 / 107	603 / 301 / 102	658 / 410 / 91	610 / 409 / 137	660 / 540 / 119	637 / 505 / 175	687 / 623 / 143	569 / 466 / 135																	700 / 589 / 113																																																	
	2	672 / 434 / 89	735 / 561 / 75	661 / 568 / 114	704 / 701 / 93	702 / 647 / 135	844 / 792 / 110	716 / 613 / 107	868 / 755 / 88	658 / 410 / 91	734 / 545 / 79	660 / 550 / 119	687 / 667 / 95	687 / 631 / 143	836 / 783 / 117	700 / 598 / 113	832 / 722 / 90																																																																	
	3	627 / 695 / 70	675 / 846 / 56	686 / 645 / 98	782 / 791 / 79	802 / 740 / 117	969 / 906 / 95	823 / 703 / 93	1003 / 867 / 76	614 / 661 / 72	655 / 811 / 58	687 / 629 / 103	776 / 781 / 85	792 / 728 / 124	935 / 872 / 99	788 / 671 / 96	966 / 833 / 79																																																																	
	50	1	632 / 314 / 107	684 / 425 / 94	638 / 426 / 144	701 / 571 / 127	662 / 523 / 183	721 / 655 / 151	599 / 494 / 145	716 / 604 / 117	623 / 295 / 109	671 / 401 / 96	628 / 401 / 147	686 / 540 / 129	645 / 494 / 187	701 / 623 / 155	569 / 466 / 148																	700 / 589 / 123																																																
		2	684 / 425 / 94	758 / 561 / 82	685 / 568 / 124	724 / 701 / 101	702 / 647 / 147	844 / 792 / 120	716 / 613 / 117	868 / 755 / 96	671 / 401 / 96	759 / 545 / 86	686 / 550 / 129	708 / 667 / 104	701 / 631 / 155	836 / 783 / 128	700 / 598 / 123																	832 / 722 / 99																																																
		3	649 / 695 / 75	686 / 846 / 61	707 / 645 / 106	782 / 791 / 86	802 / 740 / 128	969 / 906 / 104	823 / 703 / 102	1003 / 867 / 83	637 / 661 / 78	673 / 811 / 63	709 / 629 / 112	776 / 781 / 92	792 / 728 / 135	935 / 872 / 108	788 / 671 / 105																	966 / 833 / 86																																																
	60	1	666 / 301 / 118	722 / 415 / 106	668 / 409 / 160	735 / 558 / 144	689 / 512 / 209	756 / 655 / 176	599 / 494 / 169	716 / 604 / 136	659 / 284 / 121	711 / 393 / 109	659 / 385 / 163	721 / 528 / 147	674 / 484 / 213	737 / 623 / 181	569 / 466 / 172																	700 / 589 / 144																																																
		2	722 / 415 / 106	805 / 561 / 94	735 / 568 / 144	764 / 701 / 117	736 / 647 / 172	844 / 792 / 139	716 / 613 / 136	868 / 755 / 111	711 / 393 / 109	789 / 532 / 97	721 / 538 / 147	749 / 667 / 120	737 / 631 / 181	836 / 783 / 149	700 / 598 / 144																	832 / 722 / 115																																																
		3	692 / 695 / 87	721 / 846 / 70	749 / 645 / 124	798 / 791 / 100	802 / 740 / 149	969 / 906 / 121	823 / 703 / 119	1003 / 867 / 97	681 / 661 / 90	709 / 811 / 73	754 / 629 / 130	807 / 781 / 107	792 / 728 / 158	935 / 872 / 125	788 / 671 / 122																	966 / 833 / 101																																																

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																																			
Wind Speed [mph]		140																150																160																			
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45							
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																		
45	1	623 / 339 / 98	686 / 458 / 87	634 / 459 / 132	676 / 587 / 111	658 / 552 / 164	732 / 669 / 132	615 / 509 / 127	748 / 634 / 105	642 / 377 / 95	713 / 505 / 83	657 / 509 / 127	686 / 628 / 103	675 / 593 / 153	791 / 727 / 124	655 / 548 / 119	787 / 670 / 96	661 / 414 / 91	739 / 551 / 79	664 / 545 / 119	692 / 662 / 95	694 / 629 / 143	844 / 780 / 117	689 / 580 / 110	840 / 719 / 90	50	2	686 / 458 / 87	752 / 589 / 74	676 / 598 / 111	721 / 733 / 90	732 / 678 / 132	876 / 824 / 106	748 / 643 / 105	902 / 787 / 85	713 / 505 / 83	785 / 642 / 70	686 / 640 / 103	750 / 769 / 82	791 / 737 / 124	933 / 883 / 99	787 / 680 / 96	965 / 844 / 79	739 / 551 / 79	808 / 672 / 64	692 / 674 / 95	796 / 820 / 77	818 / 766 / 113	981 / 931 / 92	840 / 729 / 90	1017 / 893 / 74		
	3	621 / 707 / 66	700 / 879 / 54	702 / 676 / 95	812 / 823 / 77	834 / 772 / 113	1001 / 938 / 92	857 / 734 / 90	1038 / 899 / 74	642 / 766 / 62	743 / 939 / 50	734 / 735 / 90	865 / 881 / 72	893 / 830 / 106	1101 / 1035 / 88	920 / 791 / 85	1098 / 953 / 68	660 / 819 / 58	778 / 987 / 47	759 / 764 / 82	945 / 967 / 69	944 / 881 / 99	1146 / 1081 / 81	975 / 841 / 79	1196 / 1040 / 65		60	1	641 / 332 / 105	697 / 448 / 92	649 / 450 / 141	700 / 587 / 121	679 / 552 / 179	732 / 669 / 143	615 / 509 / 139	748 / 634 / 114	658 / 369 / 100	722 / 494 / 88	670 / 498 / 135	709 / 628 / 112	695 / 593 / 167	791 / 727 / 135	655 / 548 / 129	787 / 670 / 105	675 / 405 / 96	745 / 537 / 84	690 / 545 / 129	712 / 662 / 104	706 / 629 / 155	844 / 780 / 128	689 / 580 / 120	840 / 719 / 99	
	2	697 / 448 / 92	775 / 589 / 80	700 / 598 / 121	740 / 733 / 98	732 / 678 / 143	876 / 824 / 116	748 / 643 / 114	902 / 787 / 93	722 / 494 / 88	807 / 642 / 75	709 / 640 / 112	750 / 769 / 89	791 / 737 / 135	933 / 883 / 108	787 / 680 / 105	965 / 844 / 86	745 / 537 / 84	811 / 672 / 69	712 / 674 / 104	796 / 820 / 84	818 / 766 / 124	981 / 931 / 100	840 / 729 / 99	1017 / 893 / 80			170	3	642 / 707 / 71	700 / 879 / 59	722 / 676 / 104	812 / 823 / 84	834 / 772 / 124	1001 / 938 / 100	857 / 734 / 99	1038 / 899 / 80	662 / 766 / 67	743 / 939 / 55	751 / 735 / 98	865 / 881 / 78	893 / 830 / 116	1101 / 1035 / 96	920 / 791 / 93	1098 / 953 / 74	678 / 819 / 63	778 / 987 / 50	759 / 764 / 89	945 / 967 / 75	944 / 881 / 108	1146 / 1081 / 88	975 / 841 / 86	1196 / 1040 / 71
1	673 / 319 / 116	733 / 438 / 104	676 / 432 / 157	748 / 587 / 140	704 / 539 / 204	753 / 669 / 167	615 / 509 / 162	748 / 634 / 133	701 / 362 / 114	754 / 482 / 99	693 / 477 / 150	753 / 628 / 130	733 / 593 / 195	791 / 727 / 158	655 / 548 / 151	787 / 670 / 122	714 / 397 / 109	774 / 524 / 94	725 / 533 / 147	754 / 662 / 120	742 / 629 / 181	844 / 780 / 149	689 / 580 / 140	840 / 719 / 115	180	2			733 / 438 / 104	821 / 589 / 92	748 / 598 / 140	779 / 733 / 114	753 / 678 / 167	876 / 824 / 135	748 / 643 / 133	902 / 787 / 108	754 / 482 / 99	850 / 642 / 87	753 / 640 / 130	781 / 769 / 104	791 / 737 / 158	933 / 883 / 125	787 / 680 / 122	965 / 844 / 101	774 / 524 / 94	851 / 672 / 80	754 / 674 / 120	801 / 820 / 97	818 / 766 / 144	981 / 931 / 116	840 / 729 / 115	1017 / 893 / 94	
3	683 / 707 / 82	732 / 879 / 68	764 / 676 / 120	813 / 823 / 97	834 / 772 / 144	1001 / 938 / 116	857 / 734 / 115	1038 / 899 / 94	700 / 766 / 78	750 / 939 / 63	790 / 735 / 114	865 / 881 / 90	893 / 830 / 135	1101 / 1035 / 112	920 / 791 / 108	1098 / 953 / 86	714 / 819 / 73	778 / 987 / 58	787 / 764 / 104	945 / 967 / 87	944 / 881 / 125	1146 / 1081 / 102	975 / 841 / 101	1196 / 1040 / 83																													
45	1	679 / 450 / 87	743 / 578 / 74	668 / 577 / 111	712 / 708 / 90	740 / 675 / 135	891 / 827 / 110	736 / 623 / 105	887 / 762 / 85	712 / 496 / 85	763 / 616 / 70	685 / 618 / 106	744 / 748 / 85	782 / 718 / 128	930 / 867 / 102	778 / 662 / 99	960 / 827 / 82	50	2	743 / 578 / 74	854 / 714 / 60	712 / 720 / 90	865 / 896 / 74	891 / 838 / 110		1061 / 1010 / 88	887 / 773 / 85	1102 / 970 / 71	763 / 616 / 70	924 / 776 / 58	744 / 762 / 85	898 / 934 / 69	930 / 878 / 102	1138 / 1086 / 84	960 / 839 / 82	1136 / 1001 / 65	60	3	688 / 864 / 54	839 / 1070 / 45	826 / 837 / 79	983 / 1009 / 64	1024 / 959 / 95	1234 / 1165 / 77	1021 / 883 / 74	1231 / 1073 / 60	714 / 901 / 50	857 / 1096 / 41	862 / 877 / 74	1054 / 1085 / 61	1058 / 993 / 88	1316 / 1245 / 73	1099 / 953 / 71
	1	706 / 450 / 94	766 / 578 / 80	692 / 577 / 121	731 / 708 / 98	740 / 675 / 147	891 / 827 / 120	736 / 623 / 114	887 / 762 / 93	721 / 484 / 90	784 / 616 / 75	708 / 618 / 115	747 / 748 / 92	782 / 718 / 139	930 / 867 / 112	778 / 662 / 108	960 / 827 / 89		190	2	766 / 578 / 80	854 / 714 / 65	731 / 720 / 98	865 / 896 / 81	891 / 838 / 120	1061 / 1010 / 96	887 / 773 / 93	1102 / 970 / 77	784 / 616 / 75	924 / 776 / 63	747 / 762 / 92	898 / 934 / 75	930 / 878 / 112	1138 / 1086 / 92	960 / 839 / 89	1136 / 1001 / 71																	
	3	690 / 864 / 59	839 / 1070 / 48	826 / 837 / 86	983 / 1009 / 69	1024 / 959 / 104	1234 / 1165 / 84	1021 / 883 / 80	1231 / 1073 / 65	714 / 901 / 55	857 / 1096 / 44	862 / 877 / 81	1054 / 1085 / 66	1058 / 993 / 96	1316 / 1245 / 80	1099 / 953 / 77	1313 / 1146 / 62																																				
1	727 / 430 / 104	812 / 578 / 92	740 / 577 / 140	770 / 708 / 114	765 / 675 / 172	891 / 827 / 139	736 / 623 / 133	887 / 762 / 108	755 / 473 / 102	828 / 616 / 87	754 / 618 / 134	783 / 748 / 107	785 / 718 / 162	930 / 867 / 130	778 / 662 / 126	960 / 827 / 104	200	2		812 / 578 / 92	870 / 714 / 75	770 / 720 / 114	865 / 896 / 94	891 / 838 / 139	1061 / 1010 / 112	887 / 773 / 108	1102 / 970 / 90	828 / 616 / 87	924 / 776 / 73	783 / 762 / 107	898 / 934 / 87	930 / 878 / 130	1138 / 1086 / 107	960 / 839 / 104	1136 / 1001 / 83																		
3	723 / 864 / 68	839 / 1070 / 56	831 / 837 / 100	983 / 1009 / 80	1024 / 959 / 121	1234 / 1165 / 98	1021 / 883 / 94	1231 / 1073 / 76	728 / 901 / 63	857 / 1096 / 51	862 / 877 / 94	1054 / 1085 / 77	1058 / 993 / 112	1316 / 1245 / 93	1099 / 953 / 90	1313 / 1146 / 72																																					
45	1	727 / 529 / 81	784 / 650 / 66	700 / 656 / 101	801 / 809 / 82	819 / 755 / 121	960 / 898 / 95	816 / 696 / 93	994 / 859 / 76	741 / 560 / 77	841 / 700 / 64	712 / 690 / 95	828 / 840 / 77	851 / 788 / 113	1021 / 957 / 92	875 / 749 / 90		1059 / 917 / 74	50	2	784 / 650 / 66	958 / 809 / 54	775 / 797 / 79	960 / 1002 / 66	960 / 910 / 95	1157 / 1106 / 77	994 / 871 / 76	1209 / 1068 / 62	841 / 700 / 64	1022 / 865 / 52	828 / 855 / 77	977 / 1022 / 61	1021 / 970 / 92	1219 / 1168 / 73	1059 / 930 / 74	1278 / 1130 / 60																	
	3	763 / 966 / 49	908 / 1164 / 39	889 / 909 / 69	1070 / 1105 / 56	1128 / 1062 / 84	1391 / 1319 / 70	1174 / 1020 / 68	1389 / 1214 / 54	809 / 1029 / 47	954 / 1226 / 37	946 / 969 / 66	1128 / 1167 / 53	1194 / 1126 / 81	1459 / 1385 / 66	1191 / 1037 / 62	1457 / 1275 / 51	60		1	735 / 517 / 86	799 / 650 / 71	722 / 656 / 109	801 / 809 / 89	819 / 755 / 132	960 / 898 / 104	816 / 696 / 102	994 / 859 / 83	765 / 560 / 84	841 / 700 / 69	733 / 690 / 104	828 / 840 / 84	851 / 788 / 124	1021 / 957 / 100	875 / 749 / 99	1059 / 917 / 80																	
	2	799 / 650 / 71	958 / 809 / 59	775 / 797 / 86	960 / 1002 / 72	960 / 910 / 104	1157 / 1106 / 84	994 / 871 / 83	1209 / 1068 / 68	841 / 700 / 69	1022 / 865 / 57	828 / 855 / 84	977 / 1022 / 66	1021 / 970 / 100	1219 / 1168 / 80	1059 / 930 / 80	1278 / 1130 / 65			190	3	763 / 966 / 53	908 / 1164 / 42	889 / 909 / 75	1070 / 1105 / 61	1128 / 1062 / 92	1391 / 1319 / 76	1174 / 1020 / 74	1389 / 1214 / 59	809 / 1029 / 50	954 / 1226 / 40	946 / 969 / 72	1128 / 1167 / 58	1194 / 1126 / 88	1459 / 1385 / 72	1191 / 1037 / 68	1457 / 1275 / 56																
1	765 / 504 / 97	840 / 650 / 82	765 / 656 / 127	819 / 809 / 104	819 / 755 / 153	960 / 898 / 121	816 / 696 / 119	994 / 859 / 97	793 / 546 / 94	875 / 700 / 80	774 / 690 / 120	828 / 840 / 97	851 / 788 / 144	1021 / 957 / 116	875 / 749 / 115	1059 / 917 / 94	200		2		840 / 650 / 82	958 / 809 / 68	792 / 797 / 100	960 / 1002 / 84	960 / 910 / 121	1157 / 1106 / 98	994 / 871 / 97	1209 / 1068 / 79	875 / 700 / 80	1022 / 865 / 65	828 / 855 / 97	977 / 1022 / 77	1021 / 970 / 116	1219 / 1168 / 93	1059 / 930 / 94	1278 / 1130 / 76																	
3	763 / 966 / 61	908 / 1164 / 49	889 / 909 / 87	1070 / 1105 / 70	1128 / 1062 / 107	1391 / 1319 / 88	1174 / 1020 / 86	1389 / 1214 / 68	809 / 1029 / 58	954 / 1226 / 46	946 / 969 / 84	1128 / 1167 / 67	1194 / 1126 / 102	1459 / 1385 / 84	1191 / 1037 / 79	1457 / 1275 / 65																																					

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
70	1	671 / 205 / 142	694 / 288 / 129	659 / 281 / 194	706 / 398 / 179	658 / 371 / 266	713 / 498 / 234	529 / 392 / 234	596 / 492 / 193	676 / 222 / 140	704 / 310 / 126	666 / 303 / 190	718 / 428 / 175	658 / 391 / 256	733 / 534 / 229	532 / 407 / 221	622 / 516 / 184	681 / 239 / 137	729 / 339 / 126	672 / 325 / 186	730 / 457 / 171	673 / 419 / 250	735 / 555 / 218	543 / 428 / 213	645 / 538 / 176	
	2	694 / 288 / 129	756 / 404 / 118	706 / 406 / 179	764 / 552 / 160	713 / 505 / 234	789 / 661 / 202	596 / 499 / 193	713 / 611 / 156	704 / 310 / 126	771 / 433 / 115	718 / 436 / 175	782 / 591 / 156	733 / 541 / 229	793 / 686 / 192	622 / 523 / 184	757 / 651 / 152	729 / 339 / 126	786 / 462 / 112	730 / 466 / 171	780 / 614 / 148	735 / 563 / 218	794 / 707 / 181	645 / 546 / 176	778 / 671 / 144	
	3	732 / 558 / 121	734 / 692 / 99	737 / 492 / 163	811 / 660 / 144	769 / 609 / 213	835 / 760 / 176	686 / 576 / 168	820 / 700 / 135	728 / 583 / 115	729 / 716 / 93	753 / 527 / 160	811 / 685 / 137	774 / 634 / 202	844 / 781 / 165	712 / 600 / 160	868 / 743 / 131	723 / 607 / 110	743 / 758 / 91	768 / 561 / 156	807 / 705 / 129	797 / 673 / 197	888 / 824 / 160	733 / 621 / 152	884 / 759 / 123	
	1	705 / 197 / 153	735 / 282 / 141	689 / 270 / 209	728 / 381 / 192	675 / 356 / 290	736 / 487 / 259	541 / 385 / 258	597 / 492 / 217	708 / 213 / 150	743 / 303 / 138	708 / 297 / 209	737 / 409 / 188	688 / 383 / 284	754 / 521 / 253	553 / 407 / 249	622 / 516 / 207	711 / 229 / 147	750 / 324 / 135	714 / 319 / 205	747 / 437 / 183	700 / 410 / 278	773 / 555 / 247	563 / 428 / 240	645 / 538 / 198	
	2	735 / 282 / 141	789 / 395 / 129	728 / 388 / 192	793 / 539 / 175	736 / 494 / 259	824 / 661 / 229	597 / 499 / 217	713 / 611 / 175	743 / 303 / 138	802 / 423 / 126	737 / 417 / 188	808 / 577 / 171	754 / 528 / 253	826 / 686 / 217	622 / 523 / 207	757 / 651 / 171	750 / 324 / 135	815 / 451 / 123	747 / 445 / 183	824 / 614 / 166	773 / 563 / 247	825 / 707 / 205	645 / 546 / 198	778 / 671 / 161	
	3	768 / 545 / 132	777 / 692 / 110	768 / 480 / 179	832 / 642 / 158	786 / 594 / 235	866 / 760 / 199	686 / 576 / 189	820 / 700 / 152	779 / 583 / 129	770 / 716 / 104	781 / 514 / 175	852 / 685 / 154	809 / 634 / 229	866 / 781 / 187	712 / 600 / 180	868 / 743 / 148	771 / 607 / 123	783 / 758 / 101	795 / 548 / 171	846 / 705 / 145	831 / 673 / 223	891 / 824 / 181	733 / 621 / 171	884 / 759 / 138	
	1	735 / 189 / 163	756 / 270 / 149	730 / 265 / 227	762 / 373 / 208	705 / 349 / 317	757 / 476 / 283	553 / 378 / 282	615 / 492 / 241	736 / 204 / 159	779 / 296 / 149	733 / 285 / 222	770 / 400 / 203	716 / 375 / 310	774 / 509 / 276	573 / 407 / 276	627 / 516 / 230	737 / 220 / 156	785 / 317 / 146	736 / 305 / 217	778 / 427 / 199	727 / 401 / 303	791 / 542 / 270	583 / 428 / 266	645 / 538 / 220	
	2	756 / 270 / 149	820 / 385 / 139	762 / 380 / 208	819 / 526 / 189	757 / 482 / 283	836 / 644 / 250	615 / 499 / 241	713 / 611 / 195	779 / 296 / 149	831 / 413 / 136	770 / 407 / 203	833 / 562 / 184	774 / 516 / 276	859 / 686 / 243	627 / 523 / 230	757 / 651 / 190	785 / 317 / 146	842 / 439 / 132	778 / 435 / 199	846 / 598 / 180	791 / 549 / 270	857 / 707 / 229	645 / 546 / 220	778 / 671 / 179	
	3	800 / 532 / 142	821 / 692 / 122	796 / 469 / 194	874 / 642 / 175	801 / 578 / 256	896 / 760 / 223	686 / 576 / 210	820 / 700 / 169	810 / 570 / 139	811 / 716 / 115	808 / 502 / 189	893 / 685 / 170	822 / 617 / 250	894 / 781 / 209	712 / 600 / 200	868 / 743 / 164	819 / 607 / 136	823 / 758 / 112	820 / 534 / 184	885 / 705 / 161	842 / 655 / 243	919 / 824 / 202	733 / 621 / 190	884 / 759 / 154	
70	1	686 / 255 / 134	738 / 361 / 123	679 / 347 / 182	742 / 487 / 167	687 / 446 / 245	754 / 589 / 213	553 / 448 / 205	665 / 557 / 168	691 / 272 / 132	748 / 384 / 121	701 / 377 / 182	754 / 516 / 163	700 / 473 / 240	773 / 623 / 208	569 / 466 / 197	700 / 589 / 164									
	2	738 / 361 / 123	801 / 490 / 110	742 / 496 / 167	796 / 650 / 144	754 / 597 / 213	817 / 745 / 176	665 / 566 / 168	819 / 709 / 140	748 / 384 / 121	816 / 519 / 107	754 / 525 / 163	790 / 667 / 137	773 / 631 / 208	838 / 783 / 171	700 / 598 / 164	832 / 722 / 131									
	3	734 / 643 / 107	734 / 773 / 85	784 / 596 / 152	826 / 744 / 126	797 / 692 / 187	930 / 865 / 155	773 / 656 / 148	926 / 797 / 119	726 / 661 / 101	745 / 811 / 82	799 / 629 / 148	843 / 781 / 122	818 / 728 / 181	935 / 872 / 144	788 / 671 / 140	966 / 833 / 115									
	1	714 / 245 / 144	757 / 345 / 132	719 / 340 / 200	757 / 465 / 179	713 / 436 / 272	791 / 589 / 241	572 / 448 / 230	665 / 557 / 189	733 / 267 / 144	765 / 366 / 129	724 / 362 / 196	784 / 504 / 179	725 / 463 / 265	809 / 623 / 235	580 / 466 / 221	700 / 589 / 184									
	2	757 / 345 / 132	828 / 478 / 120	757 / 473 / 179	839 / 650 / 162	791 / 597 / 241	847 / 745 / 199	665 / 566 / 189	819 / 709 / 157	765 / 366 / 129	841 / 505 / 117	784 / 513 / 179	831 / 667 / 154	809 / 631 / 235	867 / 783 / 193	700 / 598 / 184	832 / 722 / 148									
	3	781 / 643 / 120	771 / 773 / 95	809 / 581 / 166	864 / 744 / 141	829 / 692 / 211	930 / 865 / 175	773 / 656 / 166	926 / 797 / 134	770 / 661 / 113	781 / 811 / 92	822 / 613 / 162	880 / 781 / 137	849 / 728 / 205	935 / 872 / 163	788 / 671 / 157	966 / 833 / 129									
	1	755 / 240 / 156	790 / 337 / 142	740 / 326 / 213	785 / 454 / 194	738 / 427 / 297	807 / 575 / 263	591 / 448 / 256	665 / 557 / 210	756 / 255 / 152	796 / 358 / 139	760 / 354 / 213	813 / 492 / 194	748 / 452 / 290	823 / 607 / 256	598 / 466 / 246	700 / 589 / 205									
	2	790 / 337 / 142	853 / 466 / 129	785 / 462 / 194	860 / 633 / 175	807 / 582 / 263	877 / 745 / 223	665 / 566 / 210	819 / 709 / 174	796 / 358 / 139	863 / 492 / 125	813 / 501 / 194	872 / 667 / 170	823 / 615 / 256	897 / 783 / 216	700 / 598 / 205	832 / 722 / 164									
	3	828 / 643 / 132	808 / 773 / 105	831 / 566 / 180	901 / 744 / 156	862 / 692 / 236	942 / 865 / 196	773 / 656 / 184	926 / 797 / 149	815 / 661 / 125	818 / 811 / 102	842 / 597 / 175	917 / 781 / 151	881 / 728 / 229	935 / 872 / 182	788 / 671 / 174	966 / 833 / 144									
70	1	695 / 289 / 129	758 / 406 / 118	708 / 400 / 179	766 / 545 / 160	714 / 500 / 234	791 / 655 / 202	599 / 494 / 193	716 / 604 / 156	691 / 272 / 132	748 / 384 / 121	701 / 377 / 182	754 / 516 / 163	700 / 473 / 240	773 / 623 / 208	569 / 466 / 197	700 / 589 / 164									
	2	758 / 406 / 118	830 / 546 / 104	766 / 555 / 160	804 / 701 / 133	770 / 647 / 197	844 / 792 / 160	716 / 613 / 156	868 / 755 / 127	748 / 384 / 121	816 / 519 / 107	754 / 525 / 163	790 / 667 / 137	773 / 631 / 208	838 / 783 / 171	700 / 598 / 164	832 / 722 / 131									
	3	736 / 695 / 99	756 / 846 / 80	792 / 645 / 141	832 / 791 / 114	813 / 740 / 171	969 / 906 / 139	823 / 703 / 135	1003 / 867 / 111	726 / 661 / 101	745 / 811 / 82	799 / 629 / 148	843 / 781 / 122	818 / 728 / 181	935 / 872 / 144	788 / 671 / 140	966 / 833 / 115									
	1	736 / 283 / 141	790 / 396 / 129	729 / 383 / 192	794 / 532 / 175	737 / 489 / 259	826 / 655 / 229	599 / 494 / 217	716 / 604 / 175	733 / 267 / 144	765 / 366 / 129	724 / 362 / 196	784 / 504 / 179	725 / 463 / 265	809 / 623 / 235	580 / 466 / 221	700 / 589 / 184									
	2	790 / 396 / 129	853 / 532 / 113	794 / 542 / 175	844 / 701 / 149	804 / 647 / 223	858 / 792 / 181	716 / 613 / 175	868 / 755 / 143	765 / 366 / 129	841 / 505 / 117	784 / 513 / 179	831 / 667 / 154	809 / 631 / 235	867 / 783 / 193	700 / 598 / 184	832 / 722 / 148									
	3	779 / 695 / 110	791 / 846 / 89	834 / 645 / 158	867 / 791 / 128	842 / 740 / 193	969 / 906 / 157	823 / 703 / 152	1003 / 867 / 125	770 / 661 / 113	781 / 811 / 92	822 / 613 / 162	880 / 781 / 137	849 / 728 / 205	935 / 872 / 163	788 / 671 / 157	966 / 833 / 129									
	1	757 / 271 / 149	821 / 387 / 139	763 / 375 / 208	821 / 519 / 189	759 / 478 / 283	838 / 638 / 250	617 / 494 / 241	716 / 604 / 195	756 / 255 / 152	796 / 358 / 139	760 / 354 / 213	813 / 492 / 194	748 / 452 / 290	823 / 607 / 256	598 / 466 / 246	700 / 589 / 205									
	2	821 / 387 / 139	873 / 517 / 122	821 / 528 / 189	884 / 701 / 166	838 / 647 / 250	886 / 792 / 202	716 / 613 / 195	868 / 755 / 159	796 / 358 / 139	863 / 492 / 125	813 / 501 / 194	872 / 667 / 170	823 / 615 / 256	897 / 783 / 216	700 / 598 / 205	832 / 722 / 164									
	3	822 / 695 / 122	826 / 846 / 98	853 / 628 / 170	901 / 791 / 142	871 / 740 / 216	969 / 906 / 175	823 / 703 / 169	1003 / 867 / 138	815 / 661 / 125	818 / 811 / 102	842 / 597 / 175	917 / 781 / 151	881 / 728 / 229	935 / 872 / 182	788 / 671 / 174	966 / 833 / 144									

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								70in x 41in								Load: Up / Down / Side , lbs																											
Wind Speed [mph]		140								150								160																											
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																					
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																				
		70	1	715 / 312 / 129	767 / 428 / 115	715 / 422 / 175	777 / 573 / 156	728 / 527 / 229	787 / 669 / 192	615 / 509 / 184	748 / 634 / 152	725 / 346 / 123	784 / 470 / 110	728 / 467 / 167	798 / 628 / 148	754 / 579 / 218	817 / 727 / 181	655 / 548 / 172	787 / 670 / 140	751 / 388 / 121	820 / 524 / 107	758 / 521 / 163	795 / 662 / 137	778 / 629 / 208	844 / 780 / 171	689 / 580 / 160	840 / 719 / 131																		
2	767 / 428 / 115		844 / 573 / 101	777 / 584 / 156	818 / 733 / 129	787 / 678 / 192	876 / 824 / 155	748 / 643 / 152	902 / 787 / 123	784 / 470 / 110	869 / 625 / 96	798 / 640 / 148	816 / 769 / 118	817 / 737 / 181	933 / 883 / 144	787 / 680 / 140	965 / 844 / 115	820 / 524 / 107	890 / 672 / 91	795 / 674 / 137	834 / 820 / 110	818 / 766 / 165	981 / 931 / 133	840 / 729 / 131	1017 / 893 / 107																				
3	724 / 707 / 93		766 / 879 / 77	805 / 676 / 137	846 / 823 / 110	834 / 772 / 165	1001 / 938 / 133	857 / 734 / 131	1038 / 899 / 107	739 / 766 / 88	781 / 939 / 71	829 / 735 / 129	870 / 881 / 103	893 / 830 / 155	1101 / 1035 / 128	920 / 791 / 123	1098 / 953 / 99	750 / 819 / 82	790 / 987 / 66	822 / 764 / 118	945 / 967 / 99	944 / 881 / 144	1146 / 1081 / 117	975 / 841 / 115	1196 / 1040 / 95																				
80	1	739 / 299 / 138	798 / 418 / 126	734 / 404 / 188	803 / 559 / 171	749 / 515 / 253	820 / 669 / 217	615 / 509 / 207	748 / 634 / 171	762 / 339 / 135	811 / 458 / 120	761 / 456 / 183	821 / 612 / 162	772 / 565 / 241	848 / 727 / 205	655 / 548 / 194	787 / 670 / 157	768 / 370 / 129	845 / 510 / 117	769 / 497 / 175	836 / 662 / 154	793 / 613 / 229	873 / 780 / 193	689 / 580 / 180	840 / 719 / 148																				
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	3	765 / 707 / 104	800 / 879 / 86	846 / 676 / 154	879 / 823 / 124	859 / 772 / 187	1001 / 938 / 151	857 / 734 / 148	1038 / 899 / 120	777 / 766 / 98	812 / 939 / 80	868 / 735 / 145	900 / 881 / 115	893 / 830 / 175	1101 / 1035 / 145	920 / 791 / 138	1098 / 953 / 111	786 / 819 / 92	819 / 987 / 74	858 / 764 / 132	951 / 967 / 111	944 / 881 / 163	1146 / 1081 / 133	975 / 841 / 129	1196 / 1040 / 106																				
90	1	776 / 293 / 149	827 / 407 / 136	766 / 395 / 203	828 / 545 / 184	769 / 503 / 276	853 / 669 / 243	622 / 509 / 230	748 / 634 / 190	778 / 323 / 142	836 / 447 / 129	791 / 445 / 199	842 / 596 / 175	789 / 551 / 263	880 / 727 / 229	655 / 548 / 215	787 / 670 / 174	799 / 361 / 139	868 / 497 / 125	796 / 485 / 189	877 / 662 / 170	828 / 613 / 256	903 / 780 / 216	689 / 580 / 200	840 / 719 / 164																				
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		70in x 41in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	810 / 286 / 160	853 / 397 / 145	796 / 386 / 218	850 / 531 / 197	787 / 490 / 298	861 / 650 / 261	639 / 509 / 253	748 / 634 / 208	809 / 316 / 152	859 / 435 / 137	819 / 435 / 213	884 / 596 / 192	824 / 551 / 291	911 / 727 / 253	658 / 548 / 237	787 / 670 / 192	828 / 353 / 148	887 / 484 / 134	842 / 485 / 208	893 / 644 / 182	840 / 597 / 276	932 / 780 / 238	689 / 580 / 220	840 / 719 / 180
	2	853 / 397 / 145	925 / 542 / 130	850 / 541 / 197	935 / 733 / 177	861 / 659 / 261	928 / 824 / 216	748 / 643 / 208	902 / 787 / 169	859 / 435 / 137	938 / 589 / 123	884 / 607 / 192	923 / 769 / 161	911 / 737 / 253	952 / 883 / 201	787 / 680 / 192	965 / 844 / 158	887 / 484 / 134	979 / 652 / 119	893 / 655 / 182	933 / 820 / 151	903 / 766 / 231	981 / 931 / 186	840 / 729 / 180	1017 / 893 / 147
	3	847 / 707 / 126	867 / 879 / 104	902 / 657 / 182	946 / 823 / 151	915 / 772 / 231	1001 / 938 / 186	857 / 734 / 180	1038 / 899 / 147	854 / 766 / 119	875 / 939 / 97	945 / 735 / 177	962 / 881 / 140	941 / 830 / 216	1101 / 1035 / 179	920 / 791 / 169	1098 / 953 / 135	858 / 819 / 111	877 / 987 / 89	929 / 764 / 161	1011 / 967 / 135	960 / 881 / 201	1146 / 1081 / 164	975 / 841 / 158	1196 / 1040 / 130

Wind Speed [mph]		170								180																											
100	1	847 / 390 / 145	916 / 533 / 130	844 / 522 / 197	926 / 708 / 177	877 / 657 / 268	949 / 827 / 224	736 / 623 / 208	887 / 762 / 169	866 / 428 / 141	945 / 582 / 126	866 / 572 / 192	930 / 748 / 166	888 / 697 / 253	959 / 867 / 209	778 / 662 / 197	960 / 827 / 163	916 / 533 / 130	1019 / 714 / 115	926 / 720 / 177	974 / 896 / 145	949 / 838 / 224	1061 / 1010 / 179	887 / 773 / 169	1102 / 970 / 141	945 / 582 / 126	1024 / 751 / 108	930 / 762 / 166	975 / 934 / 135	959 / 878 / 209	1138 / 1086 / 172	960 / 839 / 163	1136 / 1001 / 130				
	2	858 / 864 / 104	911 / 1070 / 86	968 / 837 / 156	1016 / 1009 / 125	1024 / 959 / 194	1234 / 1165 / 157	1021 / 883 / 147	1231 / 1073 / 119	853 / 901 / 97	900 / 1096 / 78	971 / 877 / 145	1057 / 1085 / 120	1058 / 993 / 179	1316 / 1245 / 149	1099 / 953 / 141	1313 / 1146 / 113																				
	3																																				

Wind Speed [mph]		190								200																											
100	1	886 / 466 / 137	945 / 612 / 119	889 / 622 / 187	961 / 809 / 161	923 / 755 / 246	963 / 898 / 194	816 / 696 / 186	994 / 859 / 152	905 / 504 / 134	971 / 658 / 115	912 / 671 / 182	958 / 840 / 151	928 / 788 / 231	1021 / 957 / 186	875 / 749 / 180	1059 / 917 / 147	945 / 612 / 119	1061 / 809 / 104	930 / 797 / 156	1010 / 1002 / 130	963 / 910 / 194	1157 / 1106 / 157	994 / 871 / 152	1209 / 1068 / 124	971 / 658 / 115	1097 / 865 / 100	958 / 855 / 151	1000 / 1022 / 120	1021 / 970 / 186	1219 / 1168 / 149	1059 / 930 / 147	1278 / 1130 / 119				
	2	878 / 966 / 93	926 / 1164 / 74	969 / 909 / 135	1070 / 1105 / 109	1128 / 1062 / 172	1391 / 1319 / 142	1174 / 1020 / 135	1389 / 1214 / 107	901 / 1029 / 89	954 / 1226 / 71	1000 / 969 / 130	1128 / 1167 / 104	1194 / 1126 / 164	1459 / 1385 / 134	1191 / 1037 / 124	1457 / 1275 / 102																				
	3																																				

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge														
0	1	320 / 202 / 43	404 / 284 / 39	342 / 279 / 48	433 / 384 / 42	421 / 342 / 51	516 / 443 / 43	414 / 317 / 56	509 / 409 / 47	335 / 218 / 42	424 / 304 / 37	359 / 299 / 46	455 / 409 / 41	442 / 364 / 50	540 / 468 / 42	442 / 343 / 55	534 / 432 / 45	356 / 237 / 41	450 / 328 / 37	376 / 318 / 45	467 / 425 / 39	463 / 386 / 48	562 / 491 / 40	456 / 357 / 52	556 / 454 / 44
	2	404 / 284 / 39	502 / 379 / 33	433 / 391 / 42	508 / 486 / 34	516 / 449 / 43	616 / 557 / 35	509 / 416 / 47	625 / 526 / 39	424 / 304 / 37	515 / 394 / 32	447 / 410 / 40	531 / 512 / 33	540 / 474 / 42	641 / 582 / 34	534 / 439 / 45	651 / 551 / 38	450 / 328 / 37	537 / 415 / 30	467 / 433 / 39	539 / 525 / 31	562 / 498 / 40	662 / 605 / 32	556 / 461 / 44	674 / 573 / 36
	3	418 / 477 / 31	491 / 587 / 25	492 / 455 / 37	574 / 555 / 30	589 / 520 / 38	702 / 637 / 31	583 / 480 / 41	716 / 603 / 34	436 / 503 / 30	509 / 612 / 24	505 / 472 / 35	596 / 581 / 28	613 / 545 / 36	745 / 679 / 30	608 / 503 / 39	740 / 627 / 33	443 / 517 / 28	524 / 635 / 23	525 / 496 / 34	616 / 604 / 27	636 / 569 / 35	765 / 701 / 28	631 / 525 / 38	783 / 665 / 32
5	1	320 / 202 / 43	404 / 284 / 39	342 / 279 / 56	433 / 384 / 49	421 / 342 / 63	516 / 443 / 54	414 / 317 / 64	509 / 409 / 54	335 / 218 / 42	424 / 304 / 37	359 / 299 / 54	455 / 409 / 48	442 / 364 / 62	540 / 468 / 52	442 / 343 / 63	534 / 432 / 52	356 / 237 / 41	450 / 328 / 37	376 / 318 / 52	467 / 425 / 45	463 / 386 / 60	562 / 491 / 50	456 / 357 / 60	556 / 454 / 50
	2	404 / 284 / 39	502 / 379 / 33	433 / 391 / 49	508 / 486 / 40	516 / 449 / 54	616 / 557 / 44	509 / 416 / 54	625 / 526 / 45	424 / 304 / 37	515 / 394 / 32	447 / 410 / 47	531 / 512 / 38	540 / 474 / 52	641 / 582 / 42	534 / 439 / 52	651 / 551 / 43	450 / 328 / 37	537 / 415 / 30	467 / 433 / 45	539 / 525 / 36	562 / 498 / 50	662 / 605 / 40	556 / 461 / 50	674 / 573 / 41
	3	418 / 477 / 31	491 / 587 / 25	492 / 455 / 43	574 / 555 / 35	589 / 520 / 47	702 / 637 / 38	583 / 480 / 47	716 / 603 / 39	436 / 503 / 30	509 / 612 / 24	505 / 472 / 41	596 / 581 / 33	613 / 545 / 45	745 / 679 / 37	608 / 503 / 45	740 / 627 / 37	443 / 517 / 28	524 / 635 / 23	525 / 496 / 39	616 / 604 / 31	636 / 569 / 43	765 / 701 / 35	631 / 525 / 43	783 / 665 / 36
10	1	374 / 197 / 50	431 / 284 / 46	385 / 275 / 71	443 / 384 / 64	421 / 342 / 83	516 / 443 / 70	414 / 317 / 78	509 / 409 / 66	386 / 215 / 49	442 / 304 / 45	399 / 299 / 70	456 / 409 / 62	442 / 364 / 80	540 / 468 / 67	442 / 343 / 77	534 / 432 / 63	399 / 233 / 49	460 / 328 / 44	408 / 318 / 68	467 / 425 / 59	463 / 386 / 77	562 / 491 / 65	456 / 357 / 73	556 / 454 / 61
	2	431 / 284 / 46	502 / 379 / 40	443 / 391 / 64	508 / 486 / 52	516 / 449 / 70	616 / 557 / 57	509 / 416 / 66	625 / 526 / 55	442 / 304 / 45	515 / 394 / 38	448 / 410 / 61	531 / 512 / 50	540 / 474 / 67	641 / 582 / 54	534 / 439 / 63	651 / 551 / 52	460 / 328 / 44	537 / 415 / 36	467 / 433 / 59	539 / 525 / 47	562 / 498 / 65	662 / 605 / 52	556 / 461 / 61	674 / 573 / 50
	3	418 / 477 / 37	491 / 587 / 30	492 / 455 / 56	574 / 555 / 45	589 / 520 / 61	702 / 637 / 49	583 / 480 / 57	716 / 603 / 48	436 / 503 / 35	509 / 612 / 28	505 / 472 / 53	596 / 581 / 43	613 / 545 / 58	745 / 679 / 48	608 / 503 / 55	740 / 627 / 45	443 / 517 / 33	524 / 635 / 27	525 / 496 / 51	616 / 604 / 41	636 / 569 / 56	765 / 701 / 45	631 / 525 / 52	783 / 665 / 44
0	1	371 / 252 / 40	469 / 346 / 36	397 / 343 / 44	486 / 448 / 38	482 / 406 / 46	583 / 513 / 39	475 / 376 / 51	578 / 474 / 42	391 / 271 / 40	478 / 358 / 34	413 / 361 / 43	494 / 460 / 36	500 / 426 / 45	602 / 534 / 37	494 / 394 / 49	597 / 493 / 40	469 / 346 / 36	556 / 435 / 29	477 / 448 / 37	570 / 559 / 30	583 / 520 / 39	698 / 642 / 31	578 / 481 / 42	694 / 592 / 34
	2	469 / 346 / 36	556 / 435 / 29	477 / 448 / 37	570 / 559 / 30	583 / 520 / 39	698 / 642 / 31	578 / 481 / 42	694 / 592 / 34	478 / 358 / 34	587 / 462 / 29	494 / 469 / 36	586 / 579 / 29	602 / 541 / 37	715 / 659 / 30	597 / 500 / 40	729 / 625 / 33	458 / 539 / 27	551 / 672 / 22	544 / 518 / 32	649 / 640 / 26	655 / 590 / 33	804 / 740 / 27	666 / 557 / 37	800 / 682 / 30
	3	458 / 539 / 27	551 / 672 / 22	544 / 518 / 32	649 / 640 / 26	655 / 590 / 33	804 / 740 / 27	666 / 557 / 37	800 / 682 / 30	482 / 571 / 26	562 / 689 / 21	561 / 539 / 31	664 / 658 / 25	689 / 624 / 32	817 / 754 / 26	685 / 575 / 35	839 / 717 / 29	371 / 252 / 40	469 / 346 / 36	397 / 343 / 52	486 / 448 / 44	482 / 406 / 58	583 / 513 / 48	475 / 376 / 58	578 / 474 / 48
5	1	371 / 252 / 40	469 / 346 / 36	397 / 343 / 52	486 / 448 / 44	482 / 406 / 58	583 / 513 / 48	475 / 376 / 58	578 / 474 / 48	391 / 271 / 40	478 / 358 / 34	413 / 361 / 50	494 / 460 / 42	500 / 426 / 56	602 / 534 / 46	494 / 394 / 56	597 / 493 / 46	469 / 346 / 36	556 / 435 / 29	477 / 448 / 43	570 / 559 / 35	583 / 520 / 48	698 / 642 / 39	578 / 481 / 48	694 / 592 / 39
	2	469 / 346 / 36	556 / 435 / 29	477 / 448 / 43	570 / 559 / 35	583 / 520 / 48	698 / 642 / 39	578 / 481 / 48	694 / 592 / 39	478 / 358 / 34	587 / 462 / 29	494 / 469 / 42	586 / 579 / 34	602 / 541 / 46	715 / 659 / 37	597 / 500 / 46	729 / 625 / 38	458 / 539 / 27	551 / 672 / 22	544 / 518 / 38	649 / 640 / 31	655 / 590 / 41	804 / 740 / 42	666 / 557 / 42	800 / 682 / 34
	3	458 / 539 / 27	551 / 672 / 22	544 / 518 / 38	649 / 640 / 31	655 / 590 / 41	804 / 740 / 42	666 / 557 / 42	800 / 682 / 34	482 / 571 / 26	562 / 689 / 21	561 / 539 / 36	664 / 658 / 29	689 / 624 / 40	817 / 754 / 32	685 / 575 / 40	839 / 717 / 33	412 / 252 / 48	470 / 346 / 42	422 / 343 / 67	486 / 448 / 57	482 / 406 / 75	583 / 513 / 62	475 / 376 / 71	578 / 474 / 59
10	1	412 / 252 / 48	470 / 346 / 42	422 / 343 / 67	486 / 448 / 57	482 / 406 / 75	583 / 513 / 62	475 / 376 / 71	578 / 474 / 59	426 / 271 / 47	478 / 358 / 40	430 / 361 / 65	494 / 460 / 54	500 / 426 / 72	602 / 534 / 59	494 / 394 / 68	597 / 493 / 56	470 / 346 / 42	556 / 435 / 35	477 / 448 / 56	570 / 559 / 46	583 / 520 / 62	698 / 642 / 51	578 / 481 / 59	694 / 592 / 48
	2	470 / 346 / 42	556 / 435 / 35	477 / 448 / 56	570 / 559 / 46	583 / 520 / 62	698 / 642 / 51	578 / 481 / 59	694 / 592 / 48	478 / 358 / 40	587 / 462 / 34	494 / 469 / 54	586 / 579 / 44	602 / 541 / 59	715 / 659 / 48	597 / 500 / 56	729 / 625 / 46	458 / 539 / 32	551 / 672 / 26	544 / 518 / 49	649 / 640 / 40	655 / 590 / 53	804 / 740 / 44	666 / 557 / 51	800 / 682 / 42
	3	458 / 539 / 32	551 / 672 / 26	544 / 518 / 49	649 / 640 / 40	655 / 590 / 53	804 / 740 / 44	666 / 557 / 51	800 / 682 / 42	482 / 571 / 31	562 / 689 / 25	561 / 539 / 47	664 / 658 / 38	689 / 624 / 52	817 / 754 / 42	685 / 575 / 49	839 / 717 / 40	405 / 285 / 39	503 / 381 / 33	435 / 386 / 42	510 / 479 / 34	518 / 445 / 43	619 / 552 / 35	511 / 411 / 47	614 / 509 / 39
0	1	405 / 285 / 39	503 / 381 / 33	435 / 386 / 42	510 / 479 / 34	518 / 445 / 43	619 / 552 / 35	511 / 411 / 47	614 / 509 / 39	391 / 271 / 40	478 / 358 / 34	413 / 361 / 43	494 / 460 / 36	500 / 426 / 45	602 / 534 / 37	494 / 394 / 49	597 / 493 / 40	405 / 285 / 39	503 / 381 / 33	435 / 386 / 49	510 / 479 / 40	518 / 445 / 54	619 / 552 / 44	511 / 411 / 54	614 / 509 / 44
	2	503 / 381 / 33	604 / 479 / 27	510 / 488 / 34	601 / 597 / 28	619 / 559 / 35	748 / 693 / 29	614 / 517 / 39	744 / 640 / 32	478 / 358 / 34	587 / 462 / 29	494 / 469 / 36	586 / 579 / 29	602 / 541 / 37	715 / 659 / 30	597 / 500 / 40	729 / 625 / 33	493 / 589 / 25	587 / 723 / 20	577 / 557 / 30	695 / 691 / 24	704 / 640 / 31	852 / 789 / 25	718 / 606 / 34	876 / 750 / 28
	3	493 / 589 / 25	587 / 723 / 20	577 / 557 / 30	695 / 691 / 24	704 / 640 / 31	852 / 789 / 25	718 / 606 / 34	876 / 750 / 28	482 / 571 / 26	562 / 689 / 21	561 / 539 / 31	664 / 658 / 25	689 / 624 / 32	817 / 754 / 26	685 / 575 / 35	839 / 717 / 29	405 / 285 / 39	503 / 381 / 33	435 / 386 / 49	510 / 479 / 40	518 / 445 / 54	619 / 552 / 44	511 / 411 / 54	614 / 509 / 44
5	1	405 / 285 / 39	503 / 381 / 33	435 / 386 / 49	510 / 479 / 40	518 / 445 / 54	619 / 552 / 44	511 / 411 / 54	614 / 509 / 44	391 / 271 / 40	478 / 358 / 34	413 / 361 / 50	494 / 460 / 42	500 / 426 / 56	602 / 534 / 46	494 / 394 / 56	597 / 493 / 46	503 / 381 / 33	604 / 479 / 27	510 / 488 / 40	601 / 597 / 32	619 / 559 / 44	748 / 693 / 36	614 / 517 / 44	744 / 640 / 36
	2	503 / 381 / 33	604 / 479 / 27	510 / 488 / 40	601 / 597 / 32	619 / 559 / 44	748 / 693 / 36	614 / 517 / 44	744 / 640 / 36	478 / 358 / 34	587 / 462 / 29	494 / 469 / 42	586 / 579 / 34	602 / 541 / 46	715 / 659 / 37	597 / 500 / 46	729 / 625 / 38	493 / 589 / 25	587 / 723 / 20	577 / 557 / 35	695 / 691 / 28	704 / 640 / 38	852 / 789 / 31	718 / 606 / 39	876 / 750 / 32
	3	493 / 589 / 25	587 / 723 / 20	577 / 557 / 35	695 / 691 / 28	704 / 640 / 38	852 / 789 / 31	718 / 606 / 39	876 / 750 / 32	482 / 571 / 26	562 / 689 / 21	561 / 539 / 36	664 / 658 / 29	689 / 624 / 40	817 / 754 / 32	685 / 575 / 40	839 / 717 / 33	432 / 285 / 46	503 / 381 / 40	445 / 386 / 64	510 / 479 / 52	518 / 445 / 70	619 / 552 / 57	511 / 411 / 66	614 / 509 / 54
10	1	432 / 285 / 46	503 / 381 / 40	445 / 386 / 64	510 / 479 / 52	518 / 445 / 70	619 / 552 / 57	511 / 411 / 66	614 / 509 / 54	426 / 271 / 47	478 / 358 / 40	430 / 361 / 65	494 / 460 / 54	500 / 426 / 72	602 / 534 / 59	494 / 394 / 68	597 / 493 / 56	503 / 381 / 40	604 / 479 / 33	510 / 488 / 52	601 / 597 / 42	619 / 559 / 57	748 / 693 / 47	614 / 517 / 54	744 / 640 / 44
	2	503 / 381 / 40	604 / 479 / 33	510 / 488 / 52	601 / 597 / 42	619 / 559 / 57	748 / 693 / 47	614 / 517 / 54	744 / 640 / 44	478 / 358 / 40	587 / 462 / 34	494 / 469 / 54	586 / 579 / 44	602 / 541 / 59	715 / 659 / 48	597 / 500 / 56	729 / 625 / 46	493 / 589 / 30	587 / 723 / 24	577 / 557 / 45	695 / 691 / 37	704 / 640 / 49	852 / 789 / 40	718 / 606 / 48	

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
0	1	426 / 304 / 38	519 / 397 / 32	450 / 404 / 41	525 / 497 / 33	534 / 462 / 42	648 / 581 / 35	528 / 427 / 45	643 / 536 / 38	459 / 337 / 36	546 / 425 / 30	477 / 437 / 38	561 / 538 / 31	573 / 502 / 39	688 / 623 / 32	567 / 464 / 43	684 / 574 / 35	483 / 361 / 34	580 / 457 / 28	499 / 465 / 36	592 / 575 / 29	608 / 539 / 37	721 / 657 / 30	602 / 498 / 40	736 / 622 / 33
	2	519 / 397 / 32	619 / 494 / 26	525 / 506 / 33	628 / 628 / 27	633 / 575 / 34	758 / 705 / 27	643 / 544 / 38	776 / 670 / 31	546 / 425 / 30	657 / 531 / 25	548 / 536 / 30	663 / 669 / 25	671 / 615 / 31	816 / 763 / 26	684 / 583 / 35	838 / 726 / 29	580 / 457 / 28	707 / 577 / 23	592 / 585 / 29	690 / 701 / 23	721 / 666 / 30	868 / 816 / 24	736 / 632 / 33	893 / 778 / 27
	3	503 / 605 / 24	611 / 756 / 20	590 / 573 / 28	704 / 703 / 23	736 / 671 / 30	885 / 822 / 24	732 / 619 / 33	882 / 757 / 26	545 / 662 / 23	634 / 790 / 18	624 / 614 / 26	757 / 762 / 22	773 / 710 / 27	946 / 882 / 23	792 / 674 / 31	943 / 813 / 25	567 / 696 / 21	670 / 841 / 17	670 / 664 / 25	805 / 814 / 20	825 / 762 / 26	997 / 933 / 21	847 / 724 / 29	1032 / 893 / 24
5	1	426 / 304 / 38	519 / 397 / 32	450 / 404 / 48	525 / 497 / 38	534 / 462 / 52	648 / 581 / 43	528 / 427 / 52	643 / 536 / 43	459 / 337 / 36	546 / 425 / 30	477 / 437 / 45	561 / 538 / 36	573 / 502 / 49	688 / 623 / 40	567 / 464 / 49	684 / 574 / 40	483 / 361 / 34	580 / 457 / 28	499 / 465 / 42	592 / 575 / 34	608 / 539 / 46	721 / 657 / 37	602 / 498 / 46	736 / 622 / 38
	2	519 / 397 / 32	619 / 494 / 26	525 / 506 / 38	628 / 628 / 31	633 / 575 / 42	758 / 705 / 34	643 / 544 / 43	776 / 670 / 35	546 / 425 / 30	657 / 531 / 25	548 / 536 / 35	663 / 669 / 29	671 / 615 / 39	816 / 763 / 32	684 / 583 / 40	838 / 726 / 33	580 / 457 / 28	707 / 577 / 23	592 / 585 / 34	690 / 701 / 27	721 / 666 / 37	868 / 816 / 30	736 / 632 / 38	893 / 778 / 31
	3	503 / 605 / 24	611 / 756 / 20	590 / 573 / 33	704 / 703 / 27	736 / 671 / 37	885 / 822 / 30	732 / 619 / 37	882 / 757 / 30	545 / 662 / 23	634 / 790 / 18	624 / 614 / 31	757 / 762 / 25	773 / 710 / 34	946 / 882 / 28	792 / 674 / 35	943 / 813 / 28	567 / 696 / 21	670 / 841 / 17	670 / 664 / 29	805 / 814 / 24	825 / 762 / 32	997 / 933 / 26	847 / 724 / 33	1032 / 893 / 27
10	1	446 / 304 / 45	519 / 397 / 38	452 / 404 / 62	525 / 497 / 50	534 / 462 / 67	648 / 581 / 56	528 / 427 / 63	643 / 536 / 52	465 / 337 / 43	546 / 425 / 35	477 / 437 / 58	561 / 538 / 47	573 / 502 / 63	688 / 623 / 52	567 / 464 / 60	684 / 574 / 49	483 / 361 / 40	580 / 457 / 33	499 / 465 / 54	592 / 575 / 44	608 / 539 / 59	721 / 657 / 48	602 / 498 / 56	736 / 622 / 46
	2	519 / 397 / 38	619 / 494 / 31	525 / 506 / 50	628 / 628 / 41	633 / 575 / 54	758 / 705 / 44	643 / 544 / 52	776 / 670 / 43	546 / 425 / 35	657 / 531 / 29	548 / 536 / 46	663 / 669 / 38	671 / 615 / 51	816 / 763 / 42	684 / 583 / 49	838 / 726 / 40	580 / 457 / 33	707 / 577 / 28	592 / 585 / 44	690 / 701 / 35	721 / 666 / 48	868 / 816 / 39	736 / 632 / 46	893 / 778 / 38
	3	503 / 605 / 28	611 / 756 / 24	590 / 573 / 43	704 / 703 / 35	736 / 671 / 48	885 / 822 / 39	732 / 619 / 45	882 / 757 / 37	545 / 662 / 27	634 / 790 / 21	624 / 614 / 40	757 / 762 / 33	773 / 710 / 44	946 / 882 / 36	792 / 674 / 43	943 / 813 / 34	567 / 696 / 25	670 / 841 / 20	670 / 664 / 38	805 / 814 / 31	825 / 762 / 42	997 / 933 / 34	847 / 724 / 40	1032 / 893 / 33

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	425 / 191 / 57	474 / 275 / 52	432 / 267 / 84	489 / 378 / 77	425 / 342 / 102	516 / 443 / 86	414 / 317 / 92	509 / 409 / 77	430 / 206 / 55	491 / 299 / 51	438 / 286 / 82	508 / 409 / 76	442 / 364 / 99	540 / 468 / 83	442 / 343 / 90	534 / 432 / 75	441 / 223 / 54	507 / 322 / 50	451 / 309 / 80	509 / 425 / 72	463 / 386 / 95	562 / 491 / 80	456 / 357 / 86	556 / 454 / 72
	2	474 / 275 / 52	537 / 379 / 46	489 / 385 / 77	520 / 486 / 63	516 / 449 / 86	616 / 557 / 70	509 / 416 / 77	625 / 526 / 65	491 / 299 / 51	539 / 394 / 44	499 / 410 / 74	532 / 512 / 61	540 / 474 / 83	641 / 582 / 67	534 / 439 / 75	651 / 551 / 62	507 / 322 / 50	549 / 415 / 42	509 / 433 / 72	539 / 525 / 57	562 / 498 / 80	662 / 605 / 64	556 / 461 / 72	674 / 573 / 59
	3	463 / 477 / 43	491 / 587 / 35	519 / 455 / 68	574 / 555 / 55	589 / 520 / 75	702 / 637 / 61	583 / 480 / 67	716 / 603 / 56	471 / 503 / 41	509 / 612 / 33	520 / 472 / 64	596 / 581 / 52	613 / 545 / 72	745 / 679 / 59	608 / 503 / 65	740 / 627 / 53	467 / 517 / 39	524 / 635 / 32	530 / 496 / 62	616 / 604 / 50	636 / 569 / 68	765 / 701 / 56	631 / 525 / 62	783 / 665 / 52
	1	466 / 183 / 62	514 / 267 / 58	468 / 255 / 95	524 / 366 / 88	458 / 342 / 126	516 / 443 / 106	414 / 317 / 107	509 / 409 / 90	475 / 200 / 61	529 / 289 / 57	479 / 277 / 94	532 / 389 / 85	470 / 364 / 122	540 / 468 / 102	442 / 343 / 105	534 / 432 / 87	485 / 216 / 60	534 / 307 / 55	490 / 299 / 92	548 / 418 / 84	481 / 386 / 118	562 / 491 / 98	456 / 357 / 100	556 / 454 / 84
	2	514 / 267 / 58	566 / 366 / 51	524 / 373 / 88	564 / 486 / 75	516 / 449 / 106	616 / 557 / 87	509 / 416 / 90	625 / 526 / 75	529 / 289 / 57	586 / 394 / 50	532 / 396 / 85	573 / 512 / 72	540 / 474 / 102	641 / 582 / 83	534 / 439 / 87	651 / 551 / 72	534 / 307 / 55	595 / 415 / 48	548 / 426 / 84	569 / 525 / 68	562 / 498 / 98	662 / 605 / 79	556 / 461 / 84	674 / 573 / 69
	3	510 / 477 / 49	527 / 587 / 40	566 / 455 / 81	588 / 555 / 65	589 / 520 / 92	702 / 637 / 75	583 / 480 / 79	716 / 603 / 65	515 / 503 / 47	532 / 612 / 38	565 / 472 / 76	598 / 581 / 62	613 / 545 / 89	745 / 679 / 73	608 / 503 / 75	740 / 627 / 62	510 / 517 / 44	536 / 635 / 36	573 / 496 / 73	616 / 604 / 59	636 / 569 / 85	765 / 701 / 69	631 / 525 / 72	783 / 665 / 60
	1	466 / 183 / 62	514 / 267 / 58	468 / 255 / 95	524 / 366 / 88	484 / 336 / 149	535 / 443 / 128	414 / 317 / 125	509 / 409 / 106	475 / 200 / 61	529 / 289 / 57	479 / 277 / 94	532 / 389 / 85	502 / 364 / 146	548 / 468 / 123	442 / 343 / 123	534 / 432 / 102	485 / 216 / 60	534 / 307 / 55	490 / 299 / 92	548 / 418 / 84	512 / 386 / 142	562 / 491 / 118	456 / 357 / 118	556 / 454 / 98
	2	514 / 267 / 58	566 / 366 / 51	524 / 373 / 88	564 / 486 / 75	535 / 449 / 128	616 / 557 / 104	509 / 416 / 106	625 / 526 / 88	529 / 289 / 57	586 / 394 / 50	532 / 396 / 85	573 / 512 / 72	548 / 474 / 123	641 / 582 / 99	534 / 439 / 102	651 / 551 / 84	534 / 307 / 55	595 / 415 / 48	548 / 426 / 84	569 / 525 / 68	562 / 498 / 118	662 / 605 / 95	556 / 461 / 98	674 / 573 / 80
	3	510 / 477 / 49	527 / 587 / 40	566 / 455 / 81	588 / 555 / 65	589 / 520 / 111	702 / 637 / 90	583 / 480 / 92	716 / 603 / 77	515 / 503 / 47	532 / 612 / 38	565 / 472 / 76	598 / 581 / 62	613 / 545 / 106	745 / 679 / 88	608 / 503 / 88	740 / 627 / 73	510 / 517 / 44	536 / 635 / 36	573 / 496 / 73	616 / 604 / 59	636 / 569 / 102	765 / 701 / 83	631 / 525 / 84	783 / 665 / 71
20	1	452 / 241 / 54	515 / 340 / 49	464 / 332 / 79	517 / 448 / 69	482 / 406 / 92	583 / 513 / 76	475 / 376 / 83	578 / 474 / 69	464 / 259 / 53	522 / 358 / 47	477 / 356 / 78	516 / 460 / 66	500 / 426 / 89	602 / 534 / 73	494 / 394 / 80	597 / 493 / 66	ASCE Group Zone							
	2	515 / 340 / 49	558 / 435 / 41	508 / 448 / 68	570 / 559 / 56	583 / 520 / 76	698 / 642 / 62	578 / 481 / 69	694 / 592 / 56	522 / 358 / 47	587 / 462 / 40	516 / 469 / 66	586 / 579 / 53	602 / 541 / 73	715 / 659 / 59	597 / 500 / 66	729 / 625 / 55	Panal Angle							
	3	473 / 539 / 37	551 / 672 / 31	544 / 518 / 60	649 / 640 / 48	655 / 590 / 65	804 / 740 / 54	666 / 557 / 60	800 / 682 / 49	488 / 571 / 36	562 / 689 / 29	561 / 539 / 57	664 / 658 / 46	689 / 624 / 64	817 / 754 / 51	685 / 575 / 57	839 / 717 / 47	Mono Slope							
	1	495 / 233 / 59	549 / 329 / 54	502 / 322 / 91	555 / 440 / 81	491 / 406 / 114	583 / 513 / 94	475 / 376 / 97	578 / 474 / 80	505 / 251 / 58	563 / 351 / 53	514 / 345 / 89	561 / 460 / 78	500 / 426 / 110	602 / 534 / 90	494 / 394 / 94	597 / 493 / 77	0 - 7.5							
	2	549 / 329 / 54	602 / 435 / 46	555 / 448 / 81	589 / 559 / 66	583 / 520 / 94	698 / 642 / 77	578 / 481 / 80	694 / 592 / 65	563 / 351 / 53	621 / 462 / 45	561 / 469 / 78	594 / 579 / 63	602 / 541 / 90	715 / 659 / 73	597 / 500 / 77	729 / 625 / 64	7.5 - 15							
	3	513 / 539 / 43	553 / 672 / 35	580 / 518 / 71	649 / 640 / 57	655 / 590 / 81	804 / 740 / 67	666 / 557 / 70	800 / 682 / 57	527 / 571 / 42	562 / 689 / 33	586 / 539 / 68	664 / 658 / 54	689 / 624 / 79	817 / 754 / 63	685 / 575 / 67	839 / 717 / 55	15 - 30							
	1	495 / 233 / 59	549 / 329 / 54	502 / 322 / 91	555 / 440 / 81	521 / 406 / 137	583 / 513 / 113	475 / 376 / 114	578 / 474 / 94	505 / 251 / 58	563 / 351 / 53	514 / 345 / 89	561 / 460 / 78	529 / 426 / 132	602 / 534 / 109	494 / 394 / 110	597 / 493 / 90	30 - 45							
	2	549 / 329 / 54	602 / 435 / 46	555 / 448 / 81	589 / 559 / 66	583 / 520 / 113	698 / 642 / 92	578 / 481 / 94	694 / 592 / 77	563 / 351 / 53	621 / 462 / 45	561 / 469 / 78	594 / 579 / 63	602 / 541 / 109	715 / 659 / 88	597 / 500 / 90	729 / 625 / 75								
	3	513 / 539 / 43	553 / 672 / 35	580 / 518 / 71	649 / 640 / 57	655 / 590 / 97	804 / 740 / 81	666 / 557 / 82	800 / 682 / 67	527 / 571 / 42	562 / 689 / 33	586 / 539 / 68	664 / 658 / 54	689 / 624 / 95	817 / 754 / 76	685 / 575 / 79	839 / 717 / 65								
25	1	476 / 277 / 52	538 / 381 / 46	490 / 380 / 77	522 / 479 / 63	518 / 445 / 86	619 / 552 / 70	511 / 411 / 77	614 / 509 / 63	464 / 259 / 53	522 / 358 / 47	477 / 356 / 78	516 / 460 / 66	500 / 426 / 89	602 / 534 / 73	494 / 394 / 80	597 / 493 / 66								
	2	538 / 381 / 46	604 / 479 / 38	522 / 488 / 63	601 / 597 / 51	619 / 559 / 70	748 / 693 / 57	614 / 517 / 63	744 / 640 / 52	522 / 358 / 47	587 / 462 / 40	516 / 469 / 66	586 / 579 / 53	602 / 541 / 73	715 / 659 / 59	597 / 500 / 66	729 / 625 / 55								
	3	493 / 589 / 35	587 / 723 / 28	577 / 557 / 55	695 / 691 / 45	704 / 640 / 61	852 / 789 / 50	718 / 606 / 56	876 / 750 / 46	488 / 571 / 36	562 / 689 / 29	561 / 539 / 57	664 / 658 / 46	689 / 624 / 64	817 / 754 / 51	685 / 575 / 57	839 / 717 / 47								
	1	515 / 268 / 58	568 / 367 / 51	526 / 367 / 88	565 / 479 / 75	518 / 445 / 106	619 / 552 / 87	511 / 411 / 90	614 / 509 / 74	505 / 251 / 58	563 / 351 / 53	514 / 345 / 89	561 / 460 / 78	500 / 426 / 110	602 / 534 / 90	494 / 394 / 94	597 / 493 / 77								
	2	568 / 367 / 51	626 / 479 / 43	565 / 488 / 75	601 / 597 / 60	619 / 559 / 87	748 / 693 / 71	614 / 517 / 74	744 / 640 / 60	563 / 351 / 53	621 / 462 / 45	561 / 469 / 78	594 / 579 / 63	602 / 541 / 90	715 / 659 / 73	597 / 500 / 77	729 / 625 / 64								
	3	528 / 589 / 40	587 / 723 / 32	590 / 557 / 65	695 / 691 / 53	704 / 640 / 75	852 / 789 / 61	718 / 606 / 65	876 / 750 / 54	527 / 571 / 42	562 / 689 / 33	586 / 539 / 68	664 / 658 / 54	689 / 624 / 79	817 / 754 / 63	685 / 575 / 67	839 / 717 / 55								
	1	515 / 268 / 58	568 / 367 / 51	526 / 367 / 88	565 / 479 / 75	536 / 445 / 128	619 / 552 / 104	511 / 411 / 106	614 / 509 / 86	505 / 251 / 58	563 / 351 / 53	514 / 345 / 89	561 / 460 / 78	529 / 426 / 132	602 / 534 / 109	494 / 394 / 110	597 / 493 / 90								
	2	568 / 367 / 51	626 / 479 / 43	565 / 488 / 75	601 / 597 / 60	619 / 559 / 104	748 / 693 / 85	614 / 517 / 86	744 / 640 / 71	563 / 351 / 53	621 / 462 / 45	561 / 469 / 78	594 / 579 / 63	602 / 541 / 109	715 / 659 / 88	597 / 500 / 90	729 / 625 / 75								
	3	528 / 589 / 40	587 / 723 / 32	590 / 557 / 65	695 / 691 / 53	704 / 640 / 90	852 / 789 / 73	718 / 606 / 77	876 / 750 / 63	527 / 571 / 42	562 / 689 / 33	586 / 539 / 68	664 / 658 / 54	689 / 624 / 95	817 / 754 / 76	685 / 575 / 79	839 / 717 / 65								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
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	3 = 3

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---------	------------	------------	---------

Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
15	1	487 / 295 / 51	544 / 397 / 45	504 / 404 / 76	527 / 497 / 61	534 / 462 / 83	648 / 581 / 68	528 / 427 / 75	643 / 536 / 62	511 / 331 / 50	553 / 425 / 41	513 / 437 / 71	561 / 538 / 57	573 / 502 / 78	688 / 623 / 64	567 / 464 / 70	684 / 574 / 57	526 / 361 / 47	580 / 457 / 39	519 / 465 / 66	592 / 575 / 53	608 / 539 / 73	721 / 657 / 59	602 / 498 / 66	736 / 622 / 55	
	2	544 / 397 / 45	619 / 494 / 36	527 / 506 / 61	628 / 628 / 50	633 / 575 / 67	758 / 705 / 54	643 / 544 / 62	776 / 670 / 50	553 / 425 / 41	657 / 531 / 34	548 / 536 / 56	663 / 669 / 46	671 / 615 / 62	816 / 763 / 51	684 / 583 / 57	838 / 726 / 47	580 / 457 / 39	707 / 577 / 32	592 / 585 / 53	690 / 701 / 42	721 / 666 / 59	868 / 816 / 48	736 / 632 / 55	893 / 778 / 45	
	3	503 / 605 / 33	611 / 756 / 27	590 / 573 / 52	704 / 703 / 42	736 / 671 / 59	885 / 822 / 48	732 / 619 / 53	882 / 757 / 43	545 / 662 / 32	634 / 790 / 25	624 / 614 / 48	757 / 762 / 40	773 / 710 / 54	946 / 882 / 45	792 / 674 / 50	943 / 813 / 40	567 / 696 / 29	670 / 841 / 23	670 / 664 / 46	805 / 814 / 37	825 / 762 / 51	997 / 933 / 42	847 / 724 / 47	1032 / 893 / 39	
20	1	525 / 285 / 57	582 / 389 / 50	538 / 390 / 87	569 / 497 / 72	534 / 462 / 102	648 / 581 / 85	528 / 427 / 87	643 / 536 / 72	546 / 320 / 55	598 / 425 / 47	552 / 429 / 82	585 / 538 / 68	573 / 502 / 96	688 / 623 / 79	567 / 464 / 82	684 / 574 / 67	556 / 349 / 52	612 / 457 / 44	564 / 465 / 78	598 / 575 / 63	608 / 539 / 90	721 / 657 / 73	602 / 498 / 77	736 / 622 / 64	
	2	582 / 389 / 50	630 / 494 / 42	569 / 506 / 72	628 / 628 / 59	633 / 575 / 83	758 / 705 / 67	643 / 544 / 72	776 / 670 / 59	598 / 425 / 47	657 / 531 / 39	572 / 536 / 66	663 / 669 / 54	671 / 615 / 77	816 / 763 / 63	684 / 583 / 67	838 / 726 / 55	612 / 457 / 44	707 / 577 / 37	598 / 585 / 63	690 / 701 / 50	721 / 666 / 73	868 / 816 / 59	736 / 632 / 64	893 / 778 / 52	
	3	528 / 605 / 38	611 / 756 / 31	593 / 573 / 62	704 / 703 / 50	736 / 671 / 73	885 / 822 / 59	732 / 619 / 62	882 / 757 / 50	552 / 662 / 36	634 / 790 / 29	624 / 614 / 57	757 / 762 / 47	773 / 710 / 67	946 / 882 / 55	792 / 674 / 59	943 / 813 / 47	567 / 696 / 33	670 / 841 / 27	670 / 664 / 54	805 / 814 / 44	825 / 762 / 63	997 / 933 / 51	847 / 724 / 55	1032 / 893 / 45	
25	1	525 / 285 / 57	582 / 389 / 50	538 / 390 / 87	569 / 497 / 72	534 / 462 / 123	648 / 581 / 102	528 / 427 / 102	643 / 536 / 84	546 / 320 / 55	598 / 425 / 47	552 / 429 / 82	585 / 538 / 68	573 / 502 / 116	688 / 623 / 95	567 / 464 / 96	684 / 574 / 79	556 / 349 / 52	612 / 457 / 44	564 / 465 / 78	598 / 575 / 63	608 / 539 / 109	721 / 657 / 88	602 / 498 / 90	736 / 622 / 75	
	2	582 / 389 / 50	630 / 494 / 42	569 / 506 / 72	628 / 628 / 59	633 / 575 / 99	758 / 705 / 81	643 / 544 / 84	776 / 670 / 69	598 / 425 / 47	657 / 531 / 39	572 / 536 / 66	663 / 669 / 54	671 / 615 / 92	816 / 763 / 76	684 / 583 / 79	838 / 726 / 65	612 / 457 / 44	707 / 577 / 37	598 / 585 / 63	690 / 701 / 50	721 / 666 / 88	868 / 816 / 71	736 / 632 / 75	893 / 778 / 61	
	3	528 / 605 / 38	611 / 756 / 31	593 / 573 / 62	704 / 703 / 50	736 / 671 / 73	885 / 822 / 59	732 / 619 / 62	882 / 757 / 50	552 / 662 / 36	634 / 790 / 29	624 / 614 / 57	757 / 762 / 47	773 / 710 / 67	946 / 882 / 55	792 / 674 / 59	943 / 813 / 47	567 / 696 / 33	670 / 841 / 27	670 / 664 / 54	805 / 814 / 44	825 / 762 / 63	997 / 933 / 51	847 / 724 / 55	1032 / 893 / 45	
15	1	538 / 390 / 45	622 / 497 / 37	532 / 498 / 62	618 / 606 / 50	638 / 571 / 68	767 / 703 / 56	633 / 527 / 62	763 / 649 / 50	549 / 415 / 42	648 / 522 / 35	551 / 527 / 58	655 / 647 / 47	679 / 612 / 65	809 / 745 / 53	674 / 565 / 59	829 / 708 / 49									
	2	622 / 497 / 37	754 / 620 / 31	618 / 617 / 50	730 / 747 / 40	767 / 713 / 56	912 / 861 / 45	763 / 658 / 50	941 / 822 / 42	648 / 522 / 35	797 / 660 / 29	655 / 659 / 47	765 / 786 / 37	809 / 755 / 53	947 / 897 / 42	829 / 718 / 49	981 / 859 / 39									
	3	601 / 742 / 27	727 / 917 / 23	713 / 711 / 44	845 / 860 / 35	871 / 808 / 48	1037 / 974 / 38	896 / 769 / 45	1077 / 934 / 36	630 / 784 / 26	753 / 953 / 21	751 / 754 / 41	911 / 931 / 34	909 / 846 / 45	1113 / 1047 / 37	938 / 808 / 42	1158 / 1006 / 35									
20	1	576 / 382 / 50	636 / 497 / 43	574 / 498 / 73	618 / 606 / 59	638 / 571 / 85	767 / 703 / 69	633 / 527 / 72	763 / 649 / 59	595 / 415 / 48	648 / 522 / 40	582 / 527 / 69	655 / 647 / 56	679 / 612 / 81	809 / 745 / 65	674 / 565 / 69	829 / 708 / 57									
	2	636 / 497 / 43	754 / 620 / 35	618 / 617 / 59	730 / 747 / 47	767 / 713 / 69	912 / 861 / 55	763 / 658 / 59	941 / 822 / 49	648 / 522 / 40	797 / 660 / 33	655 / 659 / 56	765 / 786 / 44	809 / 755 / 65	947 / 897 / 51	829 / 718 / 57	981 / 859 / 45									
	3	601 / 742 / 31	727 / 917 / 26	713 / 711 / 52	845 / 860 / 41	871 / 808 / 59	1037 / 974 / 47	896 / 769 / 52	1077 / 934 / 42	630 / 784 / 29	753 / 953 / 24	751 / 754 / 49	911 / 931 / 40	909 / 846 / 55	1113 / 1047 / 45	938 / 808 / 49	1158 / 1006 / 40									
15	1	570 / 447 / 41	684 / 556 / 33	571 / 552 / 55	688 / 685 / 45	698 / 634 / 61	844 / 781 / 50	712 / 600 / 56	868 / 743 / 46	590 / 467 / 38	717 / 587 / 32	601 / 585 / 52	718 / 718 / 42	730 / 667 / 57	873 / 811 / 46	746 / 632 / 53	900 / 773 / 43									
	2	684 / 556 / 33	834 / 695 / 27	688 / 697 / 45	821 / 848 / 36	844 / 792 / 50	1013 / 962 / 40	868 / 754 / 46	1051 / 923 / 38	717 / 587 / 32	866 / 725 / 26	718 / 731 / 42	845 / 876 / 34	873 / 822 / 46	1076 / 1025 / 38	900 / 784 / 43	1118 / 984 / 36									
	3	654 / 818 / 24	803 / 1021 / 20	783 / 790 / 39	938 / 961 / 31	975 / 910 / 43	1184 / 1117 / 35	971 / 839 / 39	1181 / 1028 / 32	697 / 877 / 23	851 / 1085 / 19	809 / 821 / 36	996 / 1024 / 30	998 / 935 / 40	1251 / 1182 / 34	1035 / 896 / 38	1248 / 1088 / 30									
20	1	612 / 447 / 46	684 / 556 / 38	586 / 552 / 65	688 / 685 / 53	698 / 634 / 75	844 / 781 / 61	712 / 600 / 65	868 / 743 / 54	616 / 467 / 43	717 / 587 / 36	601 / 585 / 62	718 / 718 / 50	730 / 667 / 71	873 / 811 / 57	746 / 632 / 62	900 / 773 / 50									
	2	684 / 556 / 38	834 / 695 / 31	688 / 697 / 53	821 / 848 / 43	844 / 792 / 61	1013 / 962 / 49	868 / 754 / 54	1051 / 923 / 44	717 / 587 / 36	866 / 725 / 29	718 / 731 / 50	845 / 876 / 40	873 / 822 / 57	1076 / 1025 / 47	900 / 784 / 50	1118 / 984 / 42									
	3	654 / 818 / 28	803 / 1021 / 23	783 / 790 / 46	938 / 961 / 37	975 / 910 / 53	1184 / 1117 / 44	971 / 839 / 45	1181 / 1028 / 37	697 / 877 / 27	851 / 1085 / 22	809 / 821 / 43	996 / 1024 / 36	998 / 935 / 49	1251 / 1182 / 42	1035 / 896 / 44	1248 / 1088 / 35									
25	1	612 / 447 / 46	684 / 556 / 38	586 / 552 / 65	688 / 685 / 53	698 / 634 / 90	844 / 781 / 73	712 / 600 / 77	868 / 743 / 63	616 / 467 / 43	717 / 587 / 36	601 / 585 / 62	718 / 718 / 50	730 / 667 / 85	873 / 811 / 69	746 / 632 / 73	900 / 773 / 59									
	2	684 / 556 / 38	834 / 695 / 31	688 / 697 / 53	821 / 848 / 43	844 / 792 / 73	1013 / 962 / 59	868 / 754 / 63	1051 / 923 / 51	717 / 587 / 36	866 / 725 / 29	718 / 731 / 50	845 / 876 / 40	873 / 822 / 69	1076 / 1025 / 57	900 / 784 / 59	1118 / 984 / 49									
	3	654 / 818 / 28	803 / 1021 / 23	783 / 790 / 46	938 / 961 / 37	975 / 910 / 53	1184 / 1117 / 44	971 / 839 / 45	1181 / 1028 / 37	697 / 877 / 27	851 / 1085 / 22	809 / 821 / 43	996 / 1024 / 36	998 / 935 / 49	1251 / 1182 / 42	1035 / 896 / 44	1248 / 1088 / 35									

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
30	1	490 / 180 / 65	534 / 262 / 60	490 / 251 / 102	543 / 360 / 94	508 / 331 / 171	563 / 443 / 149	414 / 317 / 144	509 / 409 / 121	499 / 196 / 64	548 / 284 / 59	500 / 273 / 100	549 / 382 / 91	517 / 352 / 166	574 / 468 / 144	442 / 343 / 142	534 / 432 / 117	508 / 213 / 63	552 / 301 / 57	511 / 295 / 98	564 / 411 / 89	524 / 373 / 160	585 / 491 / 138	456 / 357 / 135	556 / 454 / 112	
	2	534 / 262 / 60	581 / 359 / 53	543 / 366 / 94	587 / 486 / 81	563 / 449 / 149	616 / 557 / 122	509 / 416 / 121	625 / 526 / 101	548 / 284 / 59	600 / 387 / 52	549 / 389 / 91	596 / 512 / 78	574 / 474 / 144	641 / 582 / 116	534 / 439 / 117	651 / 551 / 97	552 / 301 / 57	607 / 407 / 50	564 / 418 / 89	590 / 525 / 73	585 / 498 / 138	662 / 605 / 111	556 / 461 / 112	674 / 573 / 92	
	3	535 / 477 / 52	547 / 587 / 42	580 / 446 / 86	608 / 555 / 70	595 / 520 / 130	702 / 637 / 105	583 / 480 / 106	716 / 603 / 88	539 / 503 / 50	552 / 612 / 40	588 / 472 / 83	617 / 581 / 67	613 / 545 / 124	745 / 679 / 102	608 / 503 / 101	740 / 627 / 83	532 / 517 / 47	554 / 635 / 38	596 / 496 / 80	623 / 604 / 64	636 / 569 / 119	765 / 701 / 97	631 / 525 / 97	783 / 665 / 81	
	35	1	517 / 175 / 69	556 / 254 / 64	523 / 247 / 114	561 / 348 / 103	523 / 320 / 189	580 / 434 / 167	415 / 317 / 162	509 / 409 / 137	525 / 190 / 68	568 / 275 / 62	532 / 268 / 112	575 / 375 / 101	538 / 346 / 186	590 / 459 / 161	442 / 343 / 160	534 / 432 / 132	542 / 210 / 68	581 / 296 / 61	542 / 290 / 110	579 / 396 / 98	545 / 366 / 180	611 / 491 / 158	456 / 357 / 152	556 / 454 / 127
		2	556 / 254 / 64	605 / 352 / 57	561 / 354 / 103	620 / 486 / 92	580 / 441 / 167	629 / 557 / 139	509 / 416 / 137	625 / 526 / 114	568 / 275 / 62	623 / 380 / 56	575 / 382 / 101	627 / 512 / 89	590 / 465 / 161	641 / 582 / 133	534 / 439 / 132	651 / 551 / 109	581 / 296 / 61	628 / 399 / 54	579 / 403 / 98	620 / 525 / 83	611 / 498 / 158	662 / 605 / 126	556 / 461 / 127	674 / 573 / 104
		3	570 / 477 / 57	575 / 587 / 46	603 / 438 / 96	637 / 555 / 80	619 / 520 / 149	702 / 637 / 120	583 / 480 / 119	716 / 603 / 99	573 / 503 / 55	579 / 612 / 44	610 / 463 / 92	644 / 581 / 76	630 / 545 / 142	745 / 679 / 117	608 / 503 / 114	740 / 627 / 94	564 / 517 / 52	580 / 635 / 42	628 / 496 / 90	649 / 604 / 72	639 / 569 / 136	765 / 701 / 111	631 / 525 / 109	783 / 665 / 91
	40	1	551 / 172 / 119	585 / 249 / 109	545 / 240 / 160	587 / 341 / 147	545 / 315 / 215	596 / 426 / 189	429 / 317 / 180	509 / 409 / 152	558 / 187 / 117	585 / 265 / 106	554 / 260 / 158	589 / 362 / 142	550 / 335 / 208	616 / 459 / 186	448 / 343 / 178	534 / 432 / 147	565 / 203 / 115	596 / 285 / 104	562 / 280 / 155	602 / 389 / 140	564 / 360 / 204	624 / 482 / 179	456 / 357 / 169	556 / 454 / 141
		2	585 / 249 / 109	628 / 345 / 98	587 / 348 / 147	640 / 476 / 132	596 / 432 / 189	651 / 557 / 160	509 / 416 / 152	625 / 526 / 127	585 / 265 / 106	645 / 372 / 96	589 / 369 / 142	645 / 502 / 126	616 / 465 / 186	661 / 582 / 153	534 / 439 / 147	651 / 551 / 121	596 / 285 / 104	648 / 391 / 92	602 / 396 / 140	649 / 525 / 121	624 / 488 / 179	668 / 605 / 146	556 / 461 / 141	674 / 573 / 116
		3	605 / 477 / 100	604 / 587 / 81	613 / 422 / 134	665 / 555 / 116	643 / 520 / 171	702 / 637 / 139	583 / 480 / 133	716 / 603 / 110	607 / 503 / 96	606 / 612 / 77	630 / 454 / 132	671 / 581 / 111	653 / 545 / 164	745 / 679 / 135	608 / 503 / 127	740 / 627 / 105	596 / 517 / 90	606 / 635 / 73	647 / 486 / 129	675 / 604 / 105	661 / 569 / 157	765 / 701 / 128	631 / 525 / 121	783 / 665 / 102
30	1	517 / 230 / 62	566 / 323 / 56	522 / 317 / 97	569 / 432 / 86	541 / 399 / 157	594 / 513 / 133	475 / 376 / 130	578 / 474 / 108	526 / 247 / 61	580 / 345 / 55	533 / 339 / 95	585 / 460 / 84	548 / 418 / 152	602 / 534 / 127	494 / 394 / 126	597 / 493 / 103	ASCE Group Zone	Panal Angle	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3		
	2	566 / 323 / 56	625 / 435 / 49	569 / 440 / 86	609 / 559 / 72	594 / 520 / 133	698 / 642 / 108	578 / 481 / 108	694 / 592 / 88	580 / 345 / 55	644 / 462 / 48	585 / 469 / 84	613 / 579 / 68	602 / 541 / 127	715 / 659 / 102	597 / 500 / 103	729 / 625 / 86									
	3	535 / 539 / 45	571 / 672 / 37	602 / 518 / 76	649 / 640 / 62	655 / 590 / 113	804 / 740 / 94	666 / 557 / 95	800 / 682 / 77	548 / 571 / 44	570 / 689 / 35	607 / 539 / 73	664 / 658 / 59	689 / 624 / 111	817 / 754 / 89	685 / 575 / 90	839 / 717 / 74									
	35	1	541 / 222 / 66	582 / 312 / 59	543 / 306 / 106	593 / 424 / 96	561 / 392 / 177	619 / 513 / 152	475 / 376 / 147	578 / 474 / 122	549 / 238 / 65	595 / 333 / 58	552 / 328 / 105	607 / 451 / 94	566 / 411 / 171	625 / 534 / 145	494 / 394 / 142				597 / 493 / 117					
		2	582 / 312 / 59	645 / 426 / 53	593 / 432 / 96	638 / 559 / 81	619 / 520 / 152	698 / 642 / 123	578 / 481 / 122	694 / 592 / 99	595 / 333 / 58	662 / 453 / 52	607 / 460 / 94	641 / 579 / 78	625 / 541 / 145	715 / 659 / 117	597 / 500 / 117				729 / 625 / 96					
		3	565 / 539 / 49	596 / 672 / 41	633 / 518 / 87	669 / 640 / 71	655 / 590 / 130	804 / 740 / 108	666 / 557 / 107	800 / 682 / 86	578 / 571 / 48	594 / 689 / 39	636 / 539 / 83	671 / 658 / 67	689 / 624 / 126	817 / 754 / 101	685 / 575 / 102				839 / 717 / 84					
	40	1	572 / 219 / 113	607 / 306 / 102	571 / 301 / 153	615 / 416 / 137	579 / 385 / 200	643 / 513 / 175	475 / 376 / 164	578 / 474 / 135	579 / 234 / 111	619 / 326 / 100	579 / 322 / 150	628 / 443 / 134	583 / 403 / 193	649 / 534 / 168	494 / 394 / 158				597 / 493 / 130					
		2	607 / 306 / 102	664 / 417 / 90	615 / 423 / 137	667 / 559 / 119	643 / 520 / 175	698 / 642 / 142	578 / 481 / 135	694 / 592 / 110	619 / 326 / 100	679 / 443 / 88	628 / 451 / 134	669 / 579 / 113	649 / 541 / 168	715 / 659 / 135	597 / 500 / 130				729 / 625 / 107					
		3	595 / 539 / 87	621 / 672 / 71	650 / 508 / 124	695 / 640 / 103	668 / 590 / 149	804 / 740 / 124	666 / 557 / 119	800 / 682 / 96	608 / 571 / 85	618 / 689 / 67	666 / 539 / 121	695 / 658 / 98	689 / 624 / 146	817 / 754 / 117	685 / 575 / 113				839 / 717 / 93					
30	1	535 / 264 / 60	582 / 361 / 53	544 / 361 / 94	589 / 479 / 81	564 / 445 / 149	619 / 552 / 122	511 / 411 / 121	614 / 509 / 99	526 / 247 / 61	580 / 345 / 55	533 / 339 / 95	585 / 460 / 84	548 / 418 / 152	602 / 534 / 127	494 / 394 / 126	597 / 493 / 103	ASCE Group Zone	Panal Angle	Mono Slope	15 - 30	1 = 1	2 = 2	3 = 3		
	2	582 / 361 / 53	648 / 479 / 46	589 / 488 / 81	616 / 597 / 65	619 / 559 / 122	748 / 693 / 100	614 / 517 / 99	744 / 640 / 81	580 / 345 / 55	644 / 462 / 48	585 / 469 / 84	613 / 579 / 68	602 / 541 / 127	715 / 659 / 102	597 / 500 / 103	729 / 625 / 86									
	3	548 / 589 / 42	587 / 723 / 34	610 / 557 / 70	695 / 691 / 57	704 / 640 / 105	852 / 789 / 86	718 / 606 / 88	876 / 750 / 72	548 / 571 / 44	570 / 689 / 35	607 / 539 / 73	664 / 658 / 59	689 / 624 / 111	817 / 754 / 89	685 / 575 / 90	839 / 717 / 74									
	35	1	557 / 255 / 64	607 / 354 / 57	562 / 349 / 103	621 / 479 / 92	581 / 436 / 167	630 / 552 / 139	511 / 411 / 137	614 / 509 / 112	549 / 238 / 65	595 / 333 / 58	552 / 328 / 105	607 / 451 / 94	566 / 411 / 171	625 / 534 / 145	494 / 394 / 142				597 / 493 / 117					
		2	607 / 354 / 57	664 / 469 / 49	621 / 488 / 92	642 / 597 / 74	630 / 559 / 139	748 / 693 / 114	614 / 517 / 112	744 / 640 / 91	595 / 333 / 58	662 / 453 / 52	607 / 460 / 94	641 / 579 / 78	625 / 541 / 145	715 / 659 / 117	597 / 500 / 117				729 / 625 / 96					
		3	577 / 589 / 46	607 / 723 / 37	638 / 557 / 80	695 / 691 / 65	704 / 640 / 120	852 / 789 / 98	718 / 606 / 99	876 / 750 / 81	578 / 571 / 48	594 / 689 / 39	636 / 539 / 83	671 / 658 / 67	689 / 624 / 126	817 / 754 / 101	685 / 575 / 102				839 / 717 / 84					
	40	1	586 / 250 / 109	630 / 347 / 98	588 / 343 / 147	628 / 460 / 129	597 / 428 / 189	653 / 552 / 160	511 / 411 / 152	614 / 509 / 124	579 / 234 / 111	619 / 326 / 100	579 / 322 / 150	628 / 443 / 134	583 / 403 / 193	649 / 534 / 168	494 / 394 / 158				597 / 493 / 130					
		2	630 / 347 / 98	695 / 469 / 87	628 / 469 / 129	669 / 597 / 108	653 / 559 / 160	748 / 693 / 131	614 / 517 / 124	744 / 640 / 102	619 / 326 / 100	679 / 443 / 88	628 / 451 / 134	669 / 579 / 113	649 / 541 / 168	715 / 659 / 135	597 / 500 / 130				729 / 625 / 107					
		3	605 / 589 / 81	631 / 723 / 65	667 / 557 / 116	713 / 691 / 95	704 / 640 / 139	852 / 789 / 113	718 / 606 / 110	876 / 750 / 90	608 / 571 / 85	618 / 689 / 67	666 / 539 / 121	695 / 658 / 98	689 / 624 / 146	817 / 754 / 117	685 / 575 / 113				839 / 717 / 93					

Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	545 / 281 / 59	596 / 382 / 52	545 / 377 / 91	591 / 497 / 78	570 / 462 / 144	648 / 581 / 119	528 / 427 / 117	643 / 536 / 97	564 / 315 / 57	622 / 425 / 50	567 / 421 / 87	606 / 538 / 73	589 / 502 / 135	688 / 623 / 111	567 / 464 / 110	684 / 574 / 90	572 / 342 / 54	634 / 457 / 47	588 / 465 / 84	618 / 575 / 68	608 / 539 / 127	721 / 657 / 102	602 / 498 / 103	736 / 622 / 86
	2	596 / 382 / 52	651 / 494 / 44	591 / 506 / 78	633 / 628 / 64	633 / 575 / 116	758 / 705 / 94	643 / 544 / 97	776 / 670 / 79	622 / 425 / 50	667 / 531 / 41	593 / 536 / 72	663 / 669 / 59	671 / 615 / 108	816 / 763 / 89	684 / 583 / 90	838 / 726 / 74	634 / 457 / 47	707 / 577 / 39	618 / 585 / 68	690 / 701 / 54	721 / 666 / 102	868 / 816 / 83	736 / 632 / 86	893 / 778 / 70
	3	547 / 605 / 40	611 / 756 / 33	612 / 573 / 67	704 / 703 / 54	736 / 671 / 102	885 / 822 / 83	732 / 619 / 83	882 / 757 / 68	570 / 662 / 38	634 / 790 / 30	626 / 614 / 62	757 / 762 / 51	773 / 710 / 94	946 / 882 / 78	792 / 674 / 79	943 / 813 / 63	574 / 696 / 35	670 / 841 / 28	670 / 664 / 59	805 / 814 / 48	825 / 762 / 89	997 / 933 / 72	847 / 724 / 74	1032 / 893 / 61
	1	565 / 271 / 62	619 / 375 / 56	572 / 371 / 101	623 / 497 / 89	597 / 462 / 164	649 / 581 / 136	528 / 427 / 132	643 / 536 / 109	581 / 304 / 60	643 / 416 / 54	591 / 414 / 98	636 / 538 / 83	615 / 502 / 155	688 / 623 / 126	567 / 464 / 124	684 / 574 / 102	598 / 336 / 58	666 / 457 / 52	610 / 456 / 94	645 / 575 / 78	630 / 539 / 145	721 / 657 / 117	602 / 498 / 117	736 / 622 / 96
	2	619 / 375 / 56	681 / 494 / 48	623 / 506 / 89	658 / 628 / 72	634 / 575 / 133	758 / 705 / 108	643 / 544 / 109	776 / 670 / 89	643 / 416 / 54	695 / 531 / 45	622 / 536 / 81	671 / 669 / 67	671 / 615 / 123	816 / 763 / 101	684 / 583 / 102	838 / 726 / 84	666 / 457 / 52	723 / 577 / 43	645 / 585 / 78	690 / 701 / 62	721 / 666 / 117	868 / 816 / 95	736 / 632 / 96	893 / 778 / 79
	3	574 / 605 / 44	620 / 756 / 36	639 / 573 / 76	704 / 703 / 62	736 / 671 / 117	885 / 822 / 95	732 / 619 / 94	882 / 757 / 76	596 / 662 / 42	634 / 790 / 33	651 / 614 / 71	757 / 762 / 58	773 / 710 / 108	946 / 882 / 89	792 / 674 / 89	943 / 813 / 71	598 / 696 / 39	670 / 841 / 31	676 / 664 / 67	805 / 814 / 54	825 / 762 / 101	997 / 933 / 82	847 / 724 / 84	1032 / 893 / 69
	1	593 / 266 / 108	641 / 367 / 96	597 / 364 / 145	641 / 486 / 126	612 / 453 / 186	671 / 581 / 157	528 / 427 / 147	643 / 536 / 121	607 / 298 / 104	662 / 408 / 92	603 / 398 / 137	665 / 538 / 121	627 / 492 / 175	688 / 623 / 146	567 / 464 / 138	684 / 574 / 113	621 / 330 / 100	683 / 447 / 88	632 / 447 / 134	673 / 575 / 113	653 / 539 / 168	721 / 657 / 135	602 / 498 / 130	736 / 622 / 107
	2	641 / 367 / 96	710 / 494 / 85	641 / 495 / 126	684 / 628 / 105	655 / 575 / 153	758 / 705 / 124	643 / 544 / 121	776 / 670 / 99	662 / 408 / 92	723 / 531 / 79	651 / 536 / 119	694 / 669 / 98	671 / 615 / 142	816 / 763 / 117	684 / 583 / 113	838 / 726 / 93	683 / 447 / 88	749 / 577 / 75	673 / 585 / 113	699 / 701 / 90	721 / 666 / 135	868 / 816 / 110	736 / 632 / 107	893 / 778 / 88
	3	601 / 605 / 77	643 / 756 / 64	666 / 573 / 111	709 / 703 / 90	736 / 671 / 135	885 / 822 / 110	732 / 619 / 105	882 / 757 / 85	621 / 662 / 73	644 / 790 / 58	676 / 614 / 103	757 / 762 / 84	773 / 710 / 124	946 / 882 / 102	792 / 674 / 99	943 / 813 / 79	621 / 696 / 67	670 / 841 / 54	700 / 664 / 98	805 / 814 / 79	825 / 762 / 117	997 / 933 / 95	847 / 724 / 93	1032 / 893 / 76
Wind Speed [mph]		170								180															
30	1	590 / 375 / 52	658 / 497 / 45	597 / 498 / 80	625 / 606 / 64	638 / 571 / 119	767 / 703 / 97	633 / 527 / 97	763 / 649 / 79	607 / 407 / 50	664 / 522 / 42	603 / 527 / 75	655 / 647 / 61	679 / 612 / 113	809 / 745 / 91	674 / 565 / 92	829 / 708 / 77								
	2	658 / 497 / 45	754 / 620 / 37	625 / 617 / 64	730 / 747 / 51	767 / 713 / 97	912 / 861 / 78	763 / 658 / 79	941 / 822 / 65	664 / 522 / 42	797 / 660 / 35	655 / 659 / 61	765 / 786 / 48	809 / 755 / 91	947 / 897 / 72	829 / 718 / 77	981 / 859 / 61								
	3	601 / 742 / 33	727 / 917 / 27	713 / 711 / 56	845 / 860 / 45	871 / 808 / 83	1037 / 974 / 67	896 / 769 / 70	1077 / 934 / 56	630 / 784 / 31	753 / 953 / 25	751 / 754 / 53	911 / 931 / 43	909 / 846 / 78	1113 / 1047 / 64	938 / 808 / 65	1158 / 1006 / 54								
	1	613 / 368 / 56	688 / 497 / 49	629 / 498 / 90	651 / 606 / 72	641 / 571 / 136	767 / 703 / 111	633 / 527 / 109	763 / 649 / 89	628 / 399 / 54	692 / 522 / 46	633 / 527 / 85	669 / 647 / 69	679 / 612 / 130	809 / 745 / 104	674 / 565 / 104	829 / 708 / 86								
	2	688 / 497 / 49	754 / 620 / 41	651 / 617 / 72	730 / 747 / 58	767 / 713 / 111	912 / 861 / 89	763 / 658 / 89	941 / 822 / 74	692 / 522 / 46	797 / 660 / 39	669 / 659 / 69	765 / 786 / 54	809 / 755 / 104	947 / 897 / 82	829 / 718 / 86	981 / 859 / 69								
	3	613 / 742 / 36	727 / 917 / 30	713 / 711 / 63	845 / 860 / 51	871 / 808 / 95	1037 / 974 / 76	896 / 769 / 79	1077 / 934 / 64	630 / 784 / 34	753 / 953 / 28	751 / 754 / 60	911 / 931 / 49	909 / 846 / 89	1113 / 1047 / 73	938 / 808 / 74	1158 / 1006 / 61								
	1	635 / 361 / 96	703 / 486 / 85	648 / 488 / 129	676 / 606 / 105	663 / 571 / 157	767 / 703 / 128	633 / 527 / 121	763 / 649 / 99	648 / 391 / 92	721 / 522 / 81	663 / 527 / 124	693 / 647 / 100	685 / 612 / 149	809 / 745 / 120	674 / 565 / 116	829 / 708 / 96								
	2	703 / 486 / 85	773 / 620 / 71	676 / 617 / 105	730 / 747 / 84	767 / 713 / 128	912 / 861 / 102	763 / 658 / 99	941 / 822 / 82	721 / 522 / 81	797 / 660 / 67	693 / 659 / 100	765 / 786 / 79	809 / 755 / 120	947 / 897 / 95	829 / 718 / 96	981 / 859 / 76								
	3	635 / 742 / 64	727 / 917 / 52	721 / 711 / 92	845 / 860 / 74	871 / 808 / 110	1037 / 974 / 88	896 / 769 / 88	1077 / 934 / 71	646 / 784 / 60	753 / 953 / 48	751 / 754 / 87	911 / 931 / 71	909 / 846 / 102	1113 / 1047 / 84	938 / 808 / 82	1158 / 1006 / 68								
Wind Speed [mph]		190								200															
30	1	623 / 438 / 48	684 / 556 / 40	606 / 552 / 70	688 / 685 / 57	698 / 634 / 105	844 / 781 / 86	712 / 600 / 88	868 / 743 / 72	638 / 467 / 46	717 / 587 / 38	620 / 585 / 67	718 / 718 / 54	730 / 667 / 100	873 / 811 / 80	746 / 632 / 83	900 / 773 / 68								
	2	684 / 556 / 40	834 / 695 / 33	688 / 697 / 57	821 / 848 / 46	844 / 792 / 86	1013 / 962 / 69	868 / 754 / 72	1051 / 923 / 59	717 / 587 / 38	866 / 725 / 31	718 / 731 / 54	845 / 876 / 43	873 / 822 / 80	1076 / 1025 / 67	900 / 784 / 68	1118 / 984 / 56								
	3	654 / 818 / 29	803 / 1021 / 24	783 / 790 / 49	938 / 961 / 40	975 / 910 / 75	1184 / 1117 / 61	971 / 839 / 61	1181 / 1028 / 50	697 / 877 / 28	851 / 1085 / 23	809 / 821 / 46	996 / 1024 / 38	998 / 935 / 69	1251 / 1182 / 58	1035 / 896 / 59	1248 / 1088 / 48								
	1	655 / 438 / 53	710 / 556 / 44	634 / 552 / 80	688 / 685 / 65	698 / 634 / 120	844 / 781 / 98	712 / 600 / 99	868 / 743 / 81	669 / 467 / 51	725 / 587 / 42	647 / 585 / 76	718 / 718 / 62	730 / 667 / 114	873 / 811 / 92	746 / 632 / 94	900 / 773 / 76								
	2	710 / 556 / 44	834 / 695 / 36	688 / 697 / 65	821 / 848 / 53	844 / 792 / 98	1013 / 962 / 79	868 / 754 / 81	1051 / 923 / 66	725 / 587 / 42	866 / 725 / 34	718 / 731 / 62	845 / 876 / 49	873 / 822 / 92	1076 / 1025 / 76	900 / 784 / 76	1118 / 984 / 64								
	3	654 / 818 / 32	803 / 1021 / 27	783 / 790 / 56	938 / 961 / 45	975 / 910 / 86	1184 / 1117 / 70	971 / 839 / 69	1181 / 1028 / 56	697 / 877 / 31	851 / 1085 / 26	809 / 821 / 53	996 / 1024 / 44	998 / 935 / 79	1251 / 1182 / 67	1035 / 896 / 66	1248 / 1088 / 54								
	1	674 / 429 / 90	737 / 556 / 77	663 / 552 / 116	708 / 685 / 95	698 / 634 / 139	844 / 781 / 113	712 / 600 / 110	868 / 743 / 90	685 / 457 / 87	750 / 587 / 73	674 / 585 / 111	719 / 718 / 90	730 / 667 / 131	873 / 811 / 106	746 / 632 / 105	900 / 773 / 85								
	2	737 / 556 / 77	834 / 695 / 64	708 / 697 / 95	821 / 848 / 77	844 / 792 / 113	1013 / 962 / 91	868 / 754 / 90	1051 / 923 / 74	750 / 587 / 73	866 / 725 / 60	719 / 731 / 90	845 / 876 / 71	873 / 822 / 106	1076 / 1025 / 88	900 / 784 / 85	1118 / 984 / 71								
	3	654 / 818 / 56	803 / 1021 / 46	783 / 790 / 82	938 / 961 / 66	975 / 910 / 99	1184 / 1117 / 80	971 / 839 / 76	1181 / 1028 / 62	697 / 877 / 54	851 / 1085 / 44	809 / 821 / 77	996 / 1024 / 63	998 / 935 / 91	1251 / 1182 / 77	1035 / 896 / 74	1248 / 1088 / 60								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs									
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
45	1	574 / 166 / 126	602 / 241 / 116	565 / 232 / 171	601 / 329 / 156	565 / 310 / 233	611 / 418 / 205	443 / 317 / 199	509 / 409 / 168	580 / 181 / 124	611 / 260 / 113	572 / 251 / 168	612 / 355 / 153	569 / 329 / 225	630 / 450 / 201	462 / 343 / 196	534 / 432 / 162	585 / 196 / 122	621 / 280 / 111	580 / 271 / 165	624 / 381 / 150	583 / 354 / 221	636 / 472 / 193	466 / 357 / 186	556 / 454 / 155		
	2	602 / 241 / 116	650 / 339 / 105	601 / 335 / 156	659 / 467 / 142	611 / 424 / 205	674 / 557 / 177	509 / 416 / 168	625 / 526 / 140	611 / 260 / 113	665 / 365 / 103	612 / 362 / 153	662 / 491 / 136	630 / 456 / 201	683 / 582 / 169	534 / 439 / 162	651 / 551 / 134	621 / 280 / 111	666 / 383 / 99	624 / 389 / 150	679 / 525 / 133	636 / 478 / 193	689 / 605 / 161	556 / 461 / 155	674 / 573 / 128		
	3	628 / 468 / 107	632 / 587 / 88	633 / 413 / 145	693 / 555 / 127	653 / 509 / 185	709 / 637 / 153	583 / 480 / 146	716 / 603 / 121	641 / 503 / 105	633 / 612 / 84	649 / 445 / 142	698 / 581 / 122	676 / 545 / 181	745 / 679 / 149	608 / 503 / 140	740 / 627 / 115	628 / 517 / 99	632 / 635 / 80	664 / 476 / 139	701 / 604 / 116	684 / 569 / 173	765 / 701 / 141	631 / 525 / 134	783 / 665 / 112		
	1	594 / 161 / 132	627 / 236 / 123	593 / 228 / 183	624 / 323 / 167	575 / 299 / 245	625 / 410 / 219	456 / 317 / 217	509 / 409 / 183	599 / 175 / 130	636 / 255 / 121	599 / 247 / 180	634 / 349 / 164	587 / 323 / 241	643 / 441 / 215	475 / 343 / 214	534 / 432 / 177	603 / 189 / 128	645 / 275 / 119	606 / 266 / 176	645 / 374 / 161	600 / 347 / 237	661 / 472 / 210	479 / 357 / 204	556 / 454 / 170		
	2	627 / 236 / 123	670 / 332 / 112	624 / 329 / 167	676 / 457 / 151	625 / 416 / 219	697 / 557 / 193	509 / 416 / 183	625 / 526 / 153	636 / 255 / 121	684 / 357 / 110	634 / 355 / 164	678 / 481 / 145	643 / 447 / 215	704 / 582 / 184	534 / 439 / 177	651 / 551 / 146	645 / 275 / 119	683 / 375 / 105	645 / 381 / 161	693 / 514 / 142	661 / 478 / 210	710 / 605 / 175	556 / 461 / 170	674 / 573 / 139		
	3	649 / 459 / 114	661 / 318 / 96	652 / 405 / 154	721 / 555 / 139	677 / 509 / 202	729 / 637 / 167	583 / 480 / 160	716 / 603 / 133	661 / 493 / 112	660 / 612 / 91	667 / 436 / 151	725 / 581 / 132	684 / 533 / 193	756 / 679 / 162	608 / 503 / 153	740 / 627 / 126	660 / 517 / 107	657 / 635 / 87	681 / 466 / 148	726 / 604 / 126	706 / 569 / 188	765 / 701 / 153	631 / 525 / 146	783 / 665 / 122		
	1	638 / 153 / 145	662 / 223 / 135	633 / 216 / 202	666 / 311 / 187	610 / 288 / 278	663 / 402 / 252	476 / 312 / 250	529 / 409 / 214	640 / 166 / 143	668 / 241 / 132	637 / 234 / 198	674 / 335 / 184	621 / 311 / 273	665 / 423 / 242	495 / 337 / 246	541 / 432 / 206	643 / 179 / 140	674 / 259 / 130	641 / 252 / 195	683 / 359 / 180	632 / 334 / 268	681 / 452 / 237	505 / 357 / 238	556 / 454 / 199		
	2	662 / 223 / 135	706 / 318 / 124	666 / 317 / 187	707 / 438 / 169	663 / 407 / 252	725 / 544 / 221	529 / 416 / 214	625 / 526 / 179	668 / 241 / 132	718 / 342 / 122	674 / 341 / 184	721 / 470 / 165	665 / 429 / 242	748 / 582 / 216	541 / 439 / 206	651 / 551 / 171	674 / 259 / 130	729 / 366 / 119	683 / 366 / 180	734 / 502 / 162	681 / 458 / 237	751 / 605 / 206	556 / 461 / 199	674 / 573 / 163		
	3	689 / 440 / 127	718 / 587 / 111	686 / 389 / 173	743 / 530 / 154	709 / 497 / 232	768 / 637 / 196	583 / 480 / 187	716 / 603 / 155	698 / 473 / 124	714 / 612 / 106	698 / 418 / 169	760 / 567 / 151	713 / 521 / 221	794 / 679 / 191	608 / 503 / 179	740 / 627 / 147	708 / 506 / 122	709 / 635 / 101	710 / 446 / 165	778 / 604 / 147	733 / 556 / 216	796 / 701 / 180	631 / 525 / 171	783 / 665 / 143		
45	1	591 / 211 / 120	631 / 300 / 109	587 / 291 / 162	636 / 408 / 147	596 / 378 / 217	654 / 503 / 189	476 / 376 / 180	578 / 474 / 149	597 / 226 / 118	641 / 320 / 107	594 / 311 / 159	648 / 434 / 145	599 / 396 / 209	673 / 534 / 185	494 / 394 / 174	597 / 493 / 143										
	2	631 / 300 / 109	681 / 408 / 97	636 / 415 / 147	696 / 559 / 130	654 / 510 / 189	711 / 642 / 157	578 / 481 / 149	694 / 592 / 121	641 / 320 / 107	695 / 433 / 95	648 / 442 / 145	696 / 579 / 124	673 / 541 / 185	715 / 659 / 149	597 / 500 / 143	729 / 625 / 118										
	3	626 / 539 / 95	646 / 672 / 78	680 / 508 / 136	720 / 640 / 113	689 / 590 / 165	804 / 740 / 137	666 / 557 / 131	800 / 682 / 106	637 / 571 / 93	641 / 689 / 74	680 / 527 / 130	719 / 658 / 107	710 / 624 / 161	817 / 754 / 129	685 / 575 / 124	839 / 717 / 103										
	1	608 / 204 / 126	654 / 294 / 116	612 / 286 / 173	656 / 400 / 158	613 / 371 / 232	664 / 492 / 202	489 / 376 / 197	578 / 474 / 163	623 / 222 / 126	662 / 314 / 114	618 / 305 / 170	667 / 425 / 154	614 / 388 / 223	681 / 522 / 197	498 / 394 / 190	597 / 493 / 156										
	2	654 / 294 / 116	696 / 399 / 103	656 / 407 / 158	709 / 547 / 139	664 / 499 / 202	731 / 642 / 171	578 / 481 / 163	694 / 592 / 133	662 / 314 / 114	709 / 424 / 101	667 / 433 / 154	724 / 579 / 136	681 / 529 / 197	733 / 659 / 162	597 / 500 / 156	729 / 625 / 129										
	3	656 / 539 / 103	671 / 672 / 85	695 / 497 / 145	745 / 640 / 123	710 / 590 / 180	804 / 740 / 149	666 / 557 / 143	800 / 682 / 116	667 / 571 / 101	665 / 689 / 80	709 / 527 / 142	743 / 658 / 117	730 / 624 / 175	817 / 754 / 140	685 / 575 / 136	839 / 717 / 112										
	1	657 / 196 / 140	694 / 283 / 130	645 / 270 / 191	691 / 384 / 176	642 / 357 / 263	696 / 481 / 232	514 / 376 / 230	578 / 474 / 191	660 / 210 / 138	701 / 301 / 127	662 / 294 / 191	700 / 408 / 173	653 / 380 / 257	712 / 510 / 227	523 / 394 / 222	597 / 493 / 183										
	2	694 / 283 / 130	740 / 390 / 116	691 / 391 / 176	748 / 534 / 158	696 / 488 / 232	772 / 642 / 201	578 / 481 / 191	694 / 592 / 155	701 / 301 / 127	752 / 414 / 114	700 / 416 / 173	761 / 566 / 154	712 / 517 / 227	771 / 659 / 191	597 / 500 / 183	729 / 625 / 151										
	3	717 / 539 / 119	721 / 672 / 98	721 / 475 / 162	795 / 640 / 143	752 / 590 / 211	820 / 740 / 175	666 / 557 / 167	800 / 682 / 135	727 / 571 / 116	712 / 689 / 93	733 / 504 / 158	790 / 658 / 136	772 / 624 / 206	817 / 754 / 165	685 / 575 / 159	839 / 717 / 131										
45	1	603 / 242 / 116	651 / 340 / 105	602 / 331 / 156	660 / 460 / 142	612 / 420 / 205	676 / 552 / 177	511 / 411 / 168	614 / 509 / 137	597 / 226 / 118	641 / 320 / 107	594 / 311 / 159	648 / 434 / 145	599 / 396 / 209	673 / 534 / 185	494 / 394 / 174	597 / 493 / 143										
	2	651 / 340 / 105	709 / 458 / 93	660 / 469 / 142	695 / 597 / 119	676 / 559 / 177	748 / 693 / 145	614 / 517 / 137	744 / 640 / 112	641 / 320 / 107	695 / 433 / 95	648 / 442 / 145	696 / 579 / 124	673 / 541 / 185	715 / 659 / 149	597 / 500 / 143	729 / 625 / 118										
	3	634 / 589 / 88	654 / 723 / 72	695 / 557 / 127	736 / 691 / 104	711 / 640 / 153	852 / 789 / 125	718 / 606 / 121	876 / 750 / 100	637 / 571 / 93	641 / 689 / 74	680 / 527 / 130	719 / 658 / 107	710 / 624 / 161	817 / 754 / 129	685 / 575 / 124	839 / 717 / 103										
	1	628 / 237 / 123	671 / 333 / 112	625 / 325 / 167	677 / 451 / 151	626 / 412 / 219	699 / 552 / 193	511 / 411 / 183	614 / 509 / 150	623 / 222 / 126	662 / 314 / 114	618 / 305 / 170	667 / 425 / 154	614 / 388 / 223	681 / 522 / 197	498 / 394 / 190	597 / 493 / 156										
	2	671 / 333 / 112	722 / 448 / 98	677 / 459 / 151	722 / 597 / 129	699 / 559 / 193	753 / 693 / 158	614 / 517 / 150	744 / 640 / 122	662 / 314 / 114	709 / 424 / 101	667 / 433 / 154	724 / 579 / 136	681 / 529 / 197	733 / 659 / 162	597 / 500 / 156	729 / 625 / 129										
	3	662 / 589 / 96	677 / 723 / 78	723 / 557 / 139	759 / 691 / 114	731 / 640 / 167	852 / 789 / 136	718 / 606 / 133	876 / 750 / 109	667 / 571 / 101	665 / 689 / 80	709 / 527 / 142	743 / 658 / 117	730 / 624 / 175	817 / 754 / 140	685 / 575 / 136	839 / 717 / 112										
	1	662 / 224 / 135	708 / 320 / 124	667 / 312 / 187	708 / 432 / 169	664 / 403 / 252	727 / 539 / 221	530 / 411 / 214	614 / 509 / 175	660 / 210 / 138	701 / 301 / 127	662 / 294 / 191	700 / 408 / 173	653 / 380 / 257	712 / 510 / 227	523 / 394 / 222	597 / 493 / 183										
	2	708 / 320 / 124	762 / 438 / 111	708 / 440 / 169	774 / 597 / 151	727 / 546 / 221	790 / 693 / 185	614 / 517 / 175	744 / 640 / 143	701 / 301 / 127	752 / 414 / 114	700 / 416 / 173	761 / 566 / 154	712 / 517 / 227	771 / 659 / 191	597 / 500 / 183	729 / 625 / 151										
	3	719 / 589 / 111	723 / 723 / 90	744 / 532 / 154	805 / 691 / 132	770 / 640 / 196	852 / 789 / 160	718 / 606 / 155	876 / 750 / 127	727 / 571 / 116	712 / 689 / 93	733 / 504 / 158	790 / 658 / 136	772 / 624 / 206	817 / 754 / 165	685 / 575 / 159	839 / 717 / 131										

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	609 / 257 / 113	661 / 360 / 103	609 / 351 / 153	658 / 476 / 136	625 / 444 / 201	693 / 581 / 173	528 / 427 / 162	643 / 536 / 134	620 / 287 / 109	680 / 399 / 99	624 / 391 / 147	680 / 526 / 130	652 / 492 / 193	709 / 623 / 161	567 / 464 / 152	684 / 574 / 124	644 / 323 / 107	699 / 438 / 95	638 / 430 / 142	700 / 575 / 124	677 / 539 / 185	721 / 657 / 149	602 / 498 / 143	736 / 622 / 118	
	2	661 / 360 / 103	723 / 483 / 90	658 / 485 / 136	710 / 628 / 116	677 / 575 / 169	758 / 705 / 137	643 / 544 / 134	776 / 670 / 109	680 / 399 / 99	750 / 531 / 86	680 / 536 / 130	718 / 669 / 107	691 / 615 / 157	816 / 763 / 129	684 / 583 / 124	838 / 726 / 103	699 / 438 / 95	775 / 577 / 82	700 / 585 / 124	720 / 701 / 98	721 / 666 / 149	868 / 816 / 121	736 / 632 / 118	893 / 778 / 97	
	3	629 / 605 / 84	665 / 756 / 70	693 / 573 / 122	731 / 703 / 98	736 / 671 / 149	885 / 822 / 121	732 / 619 / 115	882 / 757 / 93	647 / 662 / 80	664 / 790 / 63	701 / 614 / 113	759 / 762 / 93	773 / 710 / 137	946 / 882 / 113	792 / 674 / 109	943 / 813 / 87	645 / 696 / 74	679 / 841 / 59	724 / 664 / 107	805 / 814 / 87	825 / 762 / 129	997 / 933 / 105	847 / 724 / 103	1032 / 893 / 84	
50	1	633 / 252 / 121	680 / 353 / 110	631 / 344 / 164	688 / 476 / 148	638 / 435 / 215	715 / 581 / 188	528 / 427 / 177	643 / 536 / 146	643 / 282 / 116	697 / 391 / 105	644 / 383 / 158	709 / 526 / 142	662 / 482 / 206	730 / 623 / 175	567 / 464 / 166	684 / 574 / 136	665 / 317 / 114	713 / 428 / 101	670 / 430 / 154	728 / 575 / 136	686 / 527 / 197	738 / 657 / 162	602 / 498 / 156	736 / 622 / 129	
	2	680 / 353 / 110	735 / 472 / 96	688 / 485 / 148	735 / 628 / 126	699 / 575 / 184	758 / 705 / 149	643 / 544 / 146	776 / 670 / 119	697 / 391 / 105	759 / 518 / 91	709 / 536 / 142	742 / 669 / 117	711 / 615 / 171	816 / 763 / 140	684 / 583 / 136	838 / 726 / 112	713 / 428 / 101	802 / 577 / 89	728 / 585 / 136	742 / 701 / 107	738 / 666 / 162	868 / 816 / 132	736 / 632 / 129	893 / 778 / 105	
	3	656 / 605 / 91	688 / 756 / 76	720 / 573 / 132	753 / 703 / 107	749 / 671 / 162	885 / 822 / 132	732 / 619 / 126	882 / 757 / 102	673 / 662 / 87	684 / 790 / 69	726 / 614 / 123	779 / 762 / 101	773 / 710 / 149	946 / 882 / 123	792 / 674 / 119	943 / 813 / 95	669 / 696 / 80	698 / 841 / 64	747 / 664 / 117	805 / 814 / 95	825 / 762 / 140	997 / 933 / 114	847 / 724 / 112	1032 / 893 / 92	
60	1	665 / 238 / 132	714 / 338 / 122	671 / 331 / 184	717 / 456 / 165	675 / 426 / 247	742 / 567 / 216	537 / 427 / 206	643 / 536 / 171	684 / 271 / 130	726 / 374 / 116	680 / 368 / 176	732 / 503 / 158	696 / 472 / 237	771 / 623 / 206	567 / 464 / 195	684 / 574 / 159	704 / 304 / 127	755 / 418 / 114	703 / 412 / 173	765 / 561 / 154	716 / 516 / 227	776 / 657 / 191	602 / 498 / 183	736 / 622 / 151	
	2	714 / 338 / 122	773 / 461 / 109	717 / 464 / 165	787 / 628 / 147	742 / 575 / 216	785 / 705 / 175	643 / 544 / 171	776 / 670 / 139	726 / 374 / 116	793 / 505 / 103	732 / 512 / 158	789 / 669 / 136	752 / 615 / 201	816 / 763 / 165	684 / 583 / 159	838 / 726 / 131	755 / 418 / 114	833 / 563 / 101	765 / 571 / 154	786 / 701 / 125	776 / 666 / 191	868 / 816 / 155	736 / 632 / 151	893 / 778 / 123	
	3	710 / 605 / 106	732 / 756 / 87	755 / 560 / 151	796 / 703 / 125	787 / 671 / 191	885 / 822 / 155	732 / 619 / 147	882 / 757 / 119	724 / 662 / 101	725 / 790 / 80	776 / 614 / 143	820 / 762 / 118	796 / 710 / 175	946 / 882 / 144	792 / 674 / 139	943 / 813 / 111	716 / 696 / 93	736 / 841 / 74	795 / 664 / 136	840 / 814 / 110	825 / 762 / 165	997 / 933 / 134	847 / 724 / 131	1032 / 893 / 107	
45	1	655 / 354 / 103	716 / 475 / 90	666 / 478 / 139	702 / 606 / 116	685 / 571 / 173	767 / 703 / 141	633 / 527 / 134	763 / 649 / 109	666 / 383 / 99	732 / 509 / 86	679 / 516 / 133	718 / 647 / 110	706 / 612 / 165	809 / 745 / 133	674 / 565 / 128	829 / 708 / 106									
	2	716 / 475 / 90	798 / 620 / 78	702 / 617 / 116	739 / 747 / 93	767 / 713 / 141	912 / 861 / 113	763 / 658 / 109	941 / 822 / 90	732 / 509 / 86	817 / 660 / 74	718 / 659 / 110	765 / 786 / 87	809 / 755 / 133	947 / 897 / 105	829 / 718 / 106	981 / 859 / 84									
	3	658 / 742 / 70	727 / 917 / 57	743 / 711 / 101	845 / 860 / 81	871 / 808 / 121	1037 / 974 / 97	896 / 769 / 97	1077 / 934 / 78	667 / 784 / 65	753 / 953 / 53	760 / 754 / 96	911 / 931 / 78	909 / 846 / 113	1113 / 1047 / 93	938 / 808 / 90	1158 / 1006 / 75									
50	1	675 / 346 / 110	728 / 464 / 96	682 / 468 / 148	728 / 606 / 126	707 / 571 / 188	767 / 703 / 153	633 / 527 / 146	763 / 649 / 119	683 / 375 / 105	759 / 509 / 94	693 / 505 / 142	742 / 647 / 120	809 / 745 / 145	674 / 565 / 139	829 / 708 / 116										
	2	728 / 464 / 96	823 / 620 / 85	728 / 617 / 126	759 / 747 / 101	767 / 713 / 153	912 / 861 / 123	763 / 658 / 119	941 / 822 / 99	759 / 509 / 94	841 / 660 / 80	742 / 659 / 120	772 / 786 / 95	809 / 755 / 145	947 / 897 / 114	829 / 718 / 116	981 / 859 / 92									
	3	680 / 742 / 76	733 / 917 / 62	766 / 711 / 110	845 / 860 / 88	871 / 808 / 132	1037 / 974 / 105	896 / 769 / 105	1077 / 934 / 85	688 / 784 / 71	753 / 953 / 57	781 / 754 / 104	911 / 931 / 85	909 / 846 / 123	1113 / 1047 / 101	938 / 808 / 99	1158 / 1006 / 82									
60	1	709 / 332 / 122	766 / 453 / 109	711 / 448 / 165	779 / 606 / 147	734 / 558 / 216	798 / 703 / 180	633 / 527 / 171	763 / 649 / 139	729 / 366 / 119	795 / 497 / 106	734 / 493 / 162	791 / 647 / 140	751 / 597 / 206	816 / 745 / 170	674 / 565 / 163	829 / 708 / 135									
	2	766 / 453 / 109	850 / 604 / 95	779 / 617 / 147	800 / 747 / 118	798 / 713 / 180	912 / 861 / 144	763 / 658 / 139	941 / 822 / 115	795 / 497 / 106	888 / 660 / 93	791 / 659 / 140	811 / 786 / 110	816 / 755 / 170	947 / 897 / 134	829 / 718 / 135	981 / 859 / 107									
	3	725 / 742 / 87	770 / 917 / 72	811 / 711 / 129	855 / 860 / 103	871 / 808 / 155	1037 / 974 / 124	896 / 769 / 123	1077 / 934 / 100	730 / 784 / 82	772 / 953 / 66	823 / 754 / 121	911 / 931 / 99	909 / 846 / 144	1113 / 1047 / 119	938 / 808 / 115	1158 / 1006 / 96									
45	1	690 / 420 / 97	764 / 556 / 84	691 / 552 / 127	731 / 685 / 104	706 / 634 / 153	844 / 781 / 125	712 / 600 / 121	868 / 743 / 100	699 / 447 / 93	776 / 587 / 80	701 / 585 / 122	741 / 718 / 98	730 / 667 / 145	873 / 811 / 117	746 / 632 / 115	900 / 773 / 93									
	2	764 / 556 / 84	834 / 695 / 70	731 / 697 / 104	821 / 848 / 84	844 / 792 / 125	1013 / 962 / 101	868 / 754 / 100	1051 / 923 / 81	776 / 587 / 80	866 / 725 / 65	741 / 731 / 98	845 / 876 / 78	873 / 822 / 117	1076 / 1025 / 97	900 / 784 / 93	1118 / 984 / 78									
	3	673 / 818 / 61	803 / 1021 / 51	783 / 790 / 90	938 / 961 / 73	975 / 910 / 109	1184 / 1117 / 89	971 / 839 / 84	1181 / 1028 / 69	699 / 877 / 59	851 / 1085 / 49	809 / 821 / 84	996 / 1024 / 70	998 / 935 / 101	1251 / 1182 / 85	1035 / 896 / 81	1248 / 1088 / 66									
50	1	706 / 410 / 103	771 / 542 / 89	719 / 552 / 139	754 / 685 / 114	726 / 634 / 167	844 / 781 / 136	712 / 600 / 133	868 / 743 / 109	729 / 447 / 101	802 / 587 / 87	728 / 585 / 132	763 / 718 / 107	739 / 667 / 158	873 / 811 / 127	746 / 632 / 126	900 / 773 / 102									
	2	771 / 542 / 89	855 / 695 / 76	754 / 697 / 114	821 / 848 / 92	844 / 792 / 136	1013 / 962 / 110	868 / 754 / 109	1051 / 923 / 89	802 / 587 / 87	866 / 725 / 71	763 / 731 / 107	845 / 876 / 85	873 / 822 / 127	1076 / 1025 / 105	900 / 784 / 102	1118 / 984 / 85									
	3	692 / 818 / 66	803 / 1021 / 55	792 / 790 / 98	938 / 961 / 79	975 / 910 / 119	1184 / 1117 / 97	971 / 839 / 92	1181 / 1028 / 75	718 / 877 / 64	851 / 1085 / 53	809 / 821 / 92	996 / 1024 / 76	998 / 935 / 110	1251 / 1182 / 92	1035 / 896 / 89	1248 / 1088 / 72									
60	1	733 / 392 / 114	803 / 528 / 101	741 / 527 / 154	800 / 685 / 132	765 / 634 / 196	844 / 781 / 160	712 / 600 / 155	868 / 743 / 127	753 / 426 / 111	831 / 571 / 98	764 / 572 / 151	807 / 718 / 125	777 / 667 / 185	873 / 811 / 150	746 / 632 / 147	900 / 773 / 119									
	2	803 / 528 / 101	900 / 695 / 87	800 / 697 / 132	845 / 848 / 107	844 / 792 / 160	1013 / 962 / 129	868 / 754 / 103	1051 / 923 / 103	831 / 571 / 98	907 / 725 / 82	807 / 731 / 125	847 / 876 / 99	873 / 822 / 150	1076 / 1025 / 124	900 / 784 / 119	1118 / 984 / 100									
	3	732 / 818 / 77	803 / 1021 / 64	832 / 790 / 114	938 / 961 / 92	975 / 910 / 139	1184 / 1117 / 114	971 / 839 / 107	1181 / 1028 / 88	756 / 877 / 74	851 / 1085 / 61	836 / 821 / 107	996 / 1024 / 88	998 / 935 / 129	1251 / 1182 / 108	1035 / 896 / 103	1248 / 1088 / 84									

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge													
		70	1	696 / 144 / 156	702 / 214 / 147	666 / 204 / 218	703 / 299 / 205	641 / 278 / 309	684 / 385 / 279	496 / 307 / 282	552 / 409 / 245	696 / 160 / 156	706 / 231 / 144	680 / 225 / 218	709 / 322 / 201	650 / 300 / 303	698 / 414 / 273	513 / 332 / 277	564 / 432 / 236	687 / 173 / 153	710 / 248 / 141	683 / 242 / 214	715 / 345 / 197	659 / 321 / 297	712 / 442 / 268
70	2	702 / 214 / 147	737 / 305 / 135	703 / 304 / 205	733 / 419 / 184	684 / 391 / 279	752 / 532 / 250	552 / 416 / 245	625 / 526 / 205	706 / 231 / 144	746 / 328 / 132	709 / 328 / 201	744 / 449 / 180	698 / 420 / 273	772 / 569 / 244	564 / 439 / 236	651 / 551 / 196	710 / 248 / 141	755 / 350 / 129	715 / 351 / 197	755 / 479 / 176	712 / 448 / 268	773 / 590 / 232	575 / 461 / 227	674 / 573 / 186
70	3	722 / 422 / 138	775 / 587 / 126	731 / 380 / 193	778 / 517 / 172	722 / 475 / 256	807 / 637 / 226	585 / 480 / 214	716 / 603 / 177	729 / 453 / 135	768 / 612 / 120	741 / 408 / 189	793 / 553 / 168	740 / 509 / 250	832 / 679 / 220	608 / 503 / 205	740 / 627 / 168	753 / 495 / 135	760 / 635 / 114	751 / 437 / 184	808 / 588 / 164	758 / 542 / 244	833 / 701 / 208	631 / 525 / 196	783 / 665 / 164
80	1	759 / 139 / 168	737 / 206 / 158	721 / 196 / 235	735 / 287 / 221	668 / 267 / 337	717 / 377 / 310	514 / 302 / 312	575 / 409 / 276	744 / 151 / 165	739 / 222 / 155	707 / 212 / 231	739 / 308 / 217	675 / 288 / 330	730 / 405 / 303	530 / 327 / 307	586 / 432 / 266	744 / 166 / 165	757 / 243 / 155	719 / 233 / 231	743 / 330 / 212	696 / 315 / 330	742 / 432 / 297	538 / 345 / 297	596 / 454 / 256
80	2	737 / 206 / 158	781 / 298 / 148	735 / 292 / 221	772 / 410 / 203	717 / 382 / 310	776 / 519 / 276	575 / 416 / 276	630 / 526 / 230	739 / 222 / 155	787 / 320 / 145	739 / 314 / 217	781 / 439 / 198	730 / 410 / 303	795 / 555 / 270	586 / 439 / 266	651 / 551 / 220	757 / 243 / 155	794 / 342 / 142	743 / 336 / 212	790 / 468 / 193	742 / 438 / 297	813 / 590 / 263	596 / 461 / 256	674 / 573 / 210
80	3	767 / 413 / 152	812 / 573 / 138	756 / 364 / 207	810 / 504 / 188	749 / 464 / 283	824 / 620 / 250	605 / 480 / 241	716 / 603 / 200	773 / 443 / 148	822 / 612 / 135	763 / 390 / 203	824 / 539 / 184	765 / 497 / 276	847 / 661 / 243	617 / 503 / 230	740 / 627 / 190	778 / 473 / 145	812 / 635 / 128	770 / 417 / 198	837 / 573 / 179	781 / 529 / 270	869 / 701 / 236	631 / 525 / 220	783 / 665 / 184
90	1	815 / 133 / 179	767 / 197 / 168	775 / 189 / 251	761 / 274 / 235	706 / 262 / 369	748 / 369 / 339	531 / 297 / 342	587 / 402 / 302	798 / 144 / 175	784 / 217 / 168	775 / 208 / 251	780 / 302 / 235	711 / 282 / 362	759 / 396 / 332	538 / 316 / 330	597 / 424 / 290	798 / 159 / 175	784 / 233 / 164	759 / 223 / 246	783 / 323 / 230	717 / 302 / 354	770 / 423 / 324	553 / 339 / 324	618 / 454 / 285
90	2	767 / 197 / 168	802 / 285 / 157	761 / 280 / 235	808 / 400 / 220	748 / 374 / 339	799 / 506 / 302	587 / 408 / 302	649 / 526 / 256	784 / 217 / 168	806 / 305 / 153	780 / 307 / 235	815 / 429 / 214	759 / 401 / 332	815 / 541 / 294	597 / 430 / 290	660 / 551 / 245	784 / 233 / 164	831 / 334 / 153	783 / 329 / 230	822 / 457 / 209	770 / 428 / 324	831 / 575 / 286	618 / 461 / 285	674 / 573 / 234
90	3	792 / 394 / 161	846 / 559 / 149	794 / 356 / 225	840 / 492 / 204	773 / 453 / 309	863 / 620 / 279	626 / 480 / 268	716 / 603 / 222	795 / 423 / 157	855 / 597 / 146	799 / 381 / 220	851 / 525 / 199	787 / 485 / 302	859 / 643 / 264	636 / 503 / 256	740 / 627 / 211	817 / 462 / 157	863 / 635 / 142	805 / 407 / 214	862 / 558 / 194	801 / 516 / 294	879 / 681 / 256	645 / 525 / 245	783 / 665 / 205
Wind Speed [mph]		110								115															
70	1	688 / 185 / 150	730 / 271 / 141	685 / 260 / 209	722 / 368 / 193	668 / 343 / 291	726 / 471 / 262	530 / 370 / 259	584 / 474 / 218	702 / 202 / 150	734 / 289 / 138	687 / 277 / 205	728 / 391 / 189	677 / 365 / 285	740 / 499 / 256	547 / 394 / 254	597 / 493 / 209								
70	2	730 / 271 / 141	764 / 373 / 126	722 / 375 / 193	784 / 522 / 176	726 / 477 / 262	791 / 625 / 226	584 / 481 / 218	694 / 592 / 177	734 / 289 / 138	772 / 395 / 123	728 / 398 / 189	796 / 552 / 172	740 / 506 / 256	810 / 659 / 220	597 / 500 / 209	729 / 625 / 173								
70	3	761 / 527 / 132	771 / 672 / 111	760 / 464 / 180	823 / 623 / 159	775 / 575 / 202	855 / 740 / 202	666 / 557 / 191	800 / 682 / 155	769 / 558 / 129	760 / 689 / 105	770 / 492 / 176	838 / 658 / 155	793 / 608 / 232	850 / 754 / 190	685 / 575 / 182	839 / 717 / 150								
80	1	729 / 178 / 162	760 / 260 / 152	719 / 249 / 226	764 / 360 / 212	704 / 336 / 324	754 / 460 / 290	544 / 363 / 287	605 / 474 / 246	739 / 194 / 162	762 / 276 / 148	735 / 271 / 226	768 / 382 / 207	711 / 358 / 317	766 / 487 / 283	561 / 387 / 282	612 / 493 / 236								
80	2	760 / 260 / 152	801 / 364 / 138	764 / 366 / 212	799 / 497 / 188	754 / 466 / 290	831 / 625 / 256	605 / 481 / 246	694 / 592 / 200	762 / 276 / 148	808 / 385 / 135	768 / 389 / 207	828 / 539 / 188	766 / 494 / 250	848 / 659 / 236	612 / 500 / 236	729 / 625 / 195								
80	3	783 / 503 / 142	821 / 672 / 125	797 / 454 / 198	849 / 607 / 174	796 / 561 / 263	890 / 740 / 229	666 / 557 / 215	800 / 682 / 174	808 / 545 / 142	807 / 689 / 118	804 / 480 / 193	861 / 640 / 170	812 / 592 / 256	883 / 754 / 216	685 / 575 / 205	839 / 717 / 169								
90	1	782 / 171 / 172	784 / 248 / 161	748 / 239 / 241	785 / 344 / 225	722 / 322 / 347	780 / 449 / 317	569 / 363 / 317	626 / 474 / 273	782 / 186 / 172	803 / 270 / 161	763 / 260 / 241	788 / 365 / 220	728 / 342 / 309	790 / 476 / 309	574 / 380 / 307	632 / 493 / 262								
90	2	784 / 248 / 161	836 / 355 / 149	785 / 350 / 225	829 / 485 / 204	780 / 455 / 317	847 / 609 / 279	626 / 481 / 273	694 / 592 / 222	803 / 270 / 161	840 / 376 / 146	788 / 371 / 220	857 / 525 / 204	790 / 482 / 309	862 / 642 / 271	632 / 500 / 262	729 / 625 / 216								
90	3	820 / 491 / 153	871 / 672 / 138	810 / 432 / 209	873 / 591 / 188	815 / 547 / 286	898 / 718 / 249	668 / 557 / 239	800 / 682 / 194	823 / 519 / 149	855 / 689 / 131	836 / 469 / 209	908 / 640 / 188	829 / 577 / 279	916 / 754 / 241	685 / 575 / 228	839 / 717 / 188								
Wind Speed [mph]		120								130															
70	1	703 / 215 / 147	738 / 306 / 135	704 / 300 / 205	734 / 413 / 184	686 / 387 / 279	754 / 527 / 250	553 / 411 / 245	614 / 509 / 200	702 / 202 / 150	734 / 289 / 138	687 / 277 / 205	728 / 391 / 189	677 / 365 / 285	740 / 499 / 256	547 / 394 / 254	597 / 493 / 209								
70	2	738 / 306 / 135	800 / 427 / 123	734 / 421 / 184	807 / 582 / 168	754 / 534 / 250	827 / 693 / 214	614 / 517 / 200	744 / 640 / 164	734 / 289 / 138	772 / 395 / 123	728 / 398 / 189	796 / 552 / 172	740 / 506 / 256	810 / 659 / 220	597 / 500 / 209	729 / 625 / 173								
70	3	776 / 589 / 126	769 / 723 / 102	779 / 519 / 172	852 / 691 / 151	809 / 640 / 226	868 / 789 / 184	718 / 606 / 177	876 / 750 / 146	769 / 558 / 129	760 / 689 / 105	770 / 492 / 176	838 / 658 / 155	793 / 608 / 232	850 / 754 / 190	685 / 575 / 182	839 / 717 / 150								
80	1	738 / 207 / 158	782 / 299 / 148	735 / 288 / 221	773 / 404 / 203	719 / 379 / 310	778 / 514 / 276	577 / 411 / 276	618 / 509 / 225	739 / 194 / 162	762 / 276 / 148	735 / 271 / 226	768 / 382 / 207	711 / 358 / 317	766 / 487 / 283	561 / 387 / 282	612 / 493 / 236								
80	2	782 / 299 / 148	835 / 417 / 135	773 / 411 / 203	837 / 568 / 184	778 / 521 / 276	864 / 693 / 243	618 / 517 / 225	744 / 640 / 184	762 / 276 / 148	808 / 385 / 135	768 / 389 / 207	828 / 539 / 188	766 / 494 / 250	848 / 659 / 236	612 / 500 / 236	729 / 625 / 195								
80	3	813 / 575 / 138	815 / 723 / 115	812 / 507 / 188	873 / 672 / 165	826 / 623 / 250	900 / 789 / 209	718 / 606 / 200	876 / 750 / 164	808 / 545 / 142	807 / 689 / 118	804 / 480 / 193	861 / 640 / 170	812 / 592 / 256	883 / 754 / 216	685 / 575 / 205	839 / 717 / 169								
90	1	767 / 198 / 168	803 / 286 / 157	762 / 276 / 235	809 / 395 / 220	749 / 371 / 339	800 / 502 / 302	589 / 404 / 302	637 / 509 / 251	782 / 186 / 172	803 / 270 / 161	763 / 260 / 241	788 / 365 / 220	728 / 342 / 309	790 / 476 / 309	574 / 380 / 307	632 / 493 / 262								
90	2	803 / 286 / 157	844 / 396 / 142	809 / 402 / 220	864 / 553 / 199	800 / 508 / 302	877 / 674 / 264	637 / 517 / 251	744 / 640 / 205	803 / 270 / 161	840 / 376 / 146	788 / 371 / 220	857 / 525 / 204	790 / 482 / 309	862 / 642 / 271	632 / 500 / 262	729 / 625 / 216								
90	3	847 / 561 / 149	861 / 723 / 127	842 / 494 / 204	918 / 672 / 183	865 / 623 / 279	932 / 789 / 234	718 / 606 / 222	876 / 750 / 182	823 / 519 / 149	855 / 689 / 131	836 / 469 / 209	908 / 640 / 188	829 / 577 / 279	916 / 754 / 241	685 / 575 / 228	839 / 717 / 188								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
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	3 = 3
7.5 - 15	1 = 1
	2 = 2
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Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		70	1	704 / 228 / 144	743 / 323 / 132	706 / 318 / 201	757 / 446 / 184	694 / 409 / 273	767 / 554 / 244	559 / 427 / 236	643 / 536 / 196	720 / 260 / 141	768 / 365 / 129	726 / 360 / 197	769 / 491 / 176	711 / 451 / 262	792 / 607 / 232	579 / 464 / 223	684 / 574 / 182	737 / 292 / 138	776 / 399 / 123	731 / 395 / 189	780 / 535 / 168	744 / 504 / 256	815 / 657 / 220
70	2	743 / 323 / 132	808 / 449 / 120	757 / 454 / 184	817 / 612 / 164	767 / 562 / 244	820 / 705 / 202	643 / 544 / 196	776 / 670 / 159	768 / 365 / 129	824 / 493 / 114	769 / 500 / 176	837 / 669 / 155	792 / 615 / 232	849 / 763 / 190	684 / 583 / 182	838 / 726 / 150	776 / 399 / 123	861 / 548 / 111	780 / 544 / 168	830 / 701 / 143	815 / 666 / 220	873 / 816 / 179	736 / 632 / 173	893 / 778 / 141
70	3	764 / 605 / 120	777 / 756 / 99	788 / 546 / 168	840 / 703 / 143	826 / 671 / 220	886 / 822 / 179	732 / 619 / 168	882 / 757 / 137	776 / 662 / 114	765 / 790 / 90	826 / 614 / 164	862 / 762 / 134	831 / 710 / 202	946 / 882 / 167	792 / 674 / 159	943 / 813 / 127	764 / 696 / 105	773 / 841 / 84	842 / 664 / 155	879 / 814 / 126	855 / 762 / 190	997 / 933 / 155	847 / 724 / 150	1032 / 893 / 123
80	1	753 / 224 / 158	784 / 316 / 145	736 / 305 / 217	777 / 426 / 198	726 / 400 / 303	789 / 540 / 270	582 / 427 / 266	643 / 536 / 220	750 / 249 / 152	807 / 357 / 142	753 / 345 / 212	804 / 480 / 193	739 / 441 / 290	811 / 591 / 256	601 / 464 / 251	684 / 574 / 205	764 / 279 / 148	811 / 389 / 135	771 / 386 / 207	811 / 521 / 184	770 / 492 / 283	853 / 657 / 250	616 / 498 / 236	736 / 622 / 195
80	2	784 / 316 / 145	841 / 438 / 132	777 / 434 / 198	845 / 596 / 179	789 / 548 / 270	855 / 705 / 229	643 / 544 / 220	776 / 670 / 179	807 / 357 / 142	853 / 480 / 125	804 / 488 / 193	861 / 651 / 170	811 / 600 / 256	882 / 763 / 216	684 / 583 / 205	838 / 726 / 169	811 / 389 / 135	886 / 533 / 121	811 / 531 / 184	873 / 701 / 160	853 / 666 / 250	904 / 816 / 202	736 / 632 / 195	893 / 778 / 159
80	3	818 / 605 / 135	822 / 756 / 111	819 / 532 / 184	884 / 703 / 160	840 / 653 / 243	917 / 822 / 202	732 / 619 / 190	882 / 757 / 154	827 / 662 / 128	806 / 790 / 101	854 / 598 / 179	903 / 762 / 151	866 / 710 / 229	946 / 882 / 189	792 / 674 / 179	943 / 813 / 144	811 / 696 / 118	811 / 841 / 95	866 / 647 / 170	918 / 814 / 141	889 / 762 / 216	997 / 933 / 175	847 / 724 / 169	1032 / 893 / 138
90	1	782 / 214 / 168	823 / 309 / 157	778 / 298 / 235	811 / 416 / 214	755 / 391 / 332	810 / 527 / 294	593 / 419 / 290	655 / 536 / 245	793 / 243 / 164	823 / 340 / 149	793 / 337 / 230	836 / 468 / 209	766 / 431 / 317	828 / 576 / 279	622 / 464 / 279	684 / 574 / 228	805 / 273 / 161	843 / 379 / 146	790 / 368 / 220	839 / 508 / 199	794 / 480 / 309	867 / 639 / 271	636 / 498 / 262	736 / 622 / 216
90	2	823 / 309 / 157	871 / 427 / 142	811 / 423 / 214	871 / 580 / 194	810 / 534 / 294	890 / 705 / 256	655 / 544 / 245	776 / 670 / 199	823 / 340 / 149	878 / 467 / 134	836 / 476 / 209	907 / 651 / 188	828 / 584 / 279	915 / 763 / 241	684 / 583 / 228	838 / 726 / 188	843 / 379 / 146	909 / 518 / 131	839 / 517 / 199	917 / 701 / 178	867 / 648 / 271	935 / 816 / 226	736 / 632 / 216	893 / 778 / 177
90	3	851 / 590 / 146	866 / 756 / 123	847 / 519 / 199	927 / 703 / 178	878 / 653 / 271	948 / 822 / 226	732 / 619 / 211	882 / 757 / 171	879 / 662 / 142	847 / 790 / 112	879 / 582 / 194	944 / 762 / 167	902 / 710 / 256	975 / 882 / 211	792 / 674 / 199	943 / 813 / 160	859 / 696 / 131	849 / 841 / 105	887 / 629 / 183	956 / 814 / 157	922 / 762 / 241	997 / 933 / 196	847 / 724 / 188	1032 / 893 / 154
Wind Speed [mph]		170								180															
70	1	754 / 325 / 135	802 / 442 / 120	752 / 438 / 184	810 / 591 / 164	759 / 544 / 244	834 / 703 / 208	633 / 527 / 196	763 / 649 / 159	755 / 350 / 129	828 / 485 / 117	755 / 471 / 176	840 / 647 / 159	773 / 582 / 232	851 / 745 / 196	674 / 565 / 186	829 / 708 / 155								
	2	802 / 442 / 120	873 / 587 / 105	810 / 601 / 164	841 / 747 / 134	834 / 713 / 208	912 / 861 / 167	763 / 658 / 159	941 / 822 / 132	828 / 485 / 117	909 / 641 / 102	840 / 659 / 159	849 / 786 / 126	851 / 755 / 196	947 / 897 / 155	829 / 718 / 155	981 / 859 / 123								
	3	769 / 742 / 99	806 / 917 / 81	856 / 711 / 147	891 / 860 / 118	875 / 808 / 179	1037 / 974 / 143	896 / 769 / 141	1077 / 934 / 114	772 / 784 / 93	806 / 953 / 75	866 / 754 / 138	931 / 931 / 113	909 / 846 / 167	1113 / 1047 / 137	938 / 808 / 132	1158 / 1006 / 109								
80	1	779 / 310 / 145	834 / 430 / 132	772 / 418 / 198	838 / 575 / 179	782 / 531 / 270	871 / 703 / 236	633 / 527 / 220	763 / 649 / 179	794 / 342 / 142	858 / 472 / 128	790 / 460 / 193	866 / 630 / 174	813 / 582 / 263	885 / 745 / 223	674 / 565 / 210	829 / 708 / 174								
	2	834 / 430 / 132	894 / 570 / 115	838 / 586 / 179	883 / 747 / 151	871 / 713 / 236	920 / 861 / 189	763 / 658 / 179	941 / 822 / 149	858 / 472 / 128	927 / 622 / 111	866 / 641 / 174	888 / 786 / 141	885 / 755 / 175	947 / 897 / 171	829 / 718 / 174	981 / 859 / 138								
	3	814 / 742 / 111	843 / 917 / 91	901 / 711 / 165	927 / 860 / 132	906 / 808 / 202	1037 / 974 / 162	896 / 769 / 159	1077 / 934 / 128	814 / 784 / 105	840 / 953 / 84	908 / 754 / 156	966 / 931 / 127	918 / 846 / 189	1113 / 1047 / 155	938 / 808 / 149	1158 / 1006 / 123								
90	1	818 / 303 / 157	864 / 419 / 142	806 / 408 / 214	864 / 560 / 194	803 / 518 / 294	881 / 683 / 256	647 / 527 / 245	763 / 649 / 199	831 / 334 / 153	886 / 460 / 138	822 / 449 / 209	888 / 613 / 188	831 / 567 / 286	919 / 745 / 249	674 / 565 / 234	829 / 708 / 194								
	2	864 / 419 / 142	941 / 570 / 127	864 / 570 / 194	924 / 747 / 167	881 / 693 / 256	949 / 861 / 211	763 / 658 / 199	941 / 822 / 165	886 / 460 / 138	972 / 622 / 123	888 / 624 / 188	926 / 786 / 157	919 / 755 / 249	957 / 897 / 196	829 / 718 / 194	981 / 859 / 154								
	3	859 / 742 / 123	880 / 917 / 101	919 / 691 / 178	963 / 860 / 147	937 / 808 / 226	1037 / 974 / 181	896 / 769 / 177	1077 / 934 / 143	856 / 784 / 116	874 / 953 / 94	951 / 754 / 173	1001 / 931 / 141	947 / 846 / 211	1113 / 1047 / 174	938 / 808 / 165	1158 / 1006 / 137								
Wind Speed [mph]		190								200															
70	1	773 / 383 / 126	832 / 514 / 111	776 / 514 / 172	847 / 685 / 151	805 / 634 / 226	862 / 781 / 184	712 / 600 / 177	868 / 743 / 146	791 / 416 / 123	857 / 556 / 108	797 / 558 / 168	850 / 718 / 143	814 / 667 / 214	873 / 811 / 173	746 / 632 / 168	900 / 773 / 137								
	2	832 / 514 / 111	945 / 695 / 99	847 / 697 / 151	882 / 848 / 122	862 / 792 / 184	1013 / 962 / 149	868 / 754 / 146	1051 / 923 / 118	857 / 556 / 108	949 / 725 / 93	850 / 731 / 143	882 / 876 / 113	873 / 822 / 173	1076 / 1025 / 143	900 / 784 / 137	1118 / 984 / 114								
	3	771 / 818 / 87	834 / 1021 / 72	872 / 790 / 130	938 / 961 / 105	975 / 910 / 161	1184 / 1117 / 131	971 / 839 / 123	1181 / 1028 / 100	794 / 877 / 84	861 / 1085 / 69	873 / 821 / 122	996 / 1024 / 101	998 / 935 / 149	1251 / 1182 / 125	1035 / 896 / 118	1248 / 1088 / 96								
80	1	810 / 374 / 138	882 / 514 / 125	808 / 502 / 188	893 / 685 / 170	822 / 617 / 250	894 / 781 / 209	712 / 600 / 200	868 / 743 / 164	825 / 406 / 135	881 / 540 / 118	827 / 544 / 184	894 / 718 / 160	851 / 667 / 243	899 / 811 / 196	746 / 632 / 190	900 / 773 / 154								
	2	882 / 514 / 125	959 / 674 / 108	893 / 697 / 170	920 / 848 / 137	894 / 792 / 209	1013 / 962 / 169	868 / 754 / 164	1051 / 923 / 133	881 / 540 / 118	991 / 725 / 105	894 / 731 / 160	917 / 876 / 127	899 / 822 / 196	1076 / 1025 / 162	900 / 784 / 154	1118 / 984 / 128								
	3	810 / 818 / 98	867 / 1021 / 81	912 / 790 / 146	965 / 961 / 118	975 / 910 / 182	1184 / 1117 / 149	971 / 839 / 138	1181 / 1028 / 113	832 / 877 / 95	892 / 1085 / 78	911 / 821 / 137	998 / 1024 / 113	998 / 935 / 169	1251 / 1182 / 142	1035 / 896 / 133	1248 / 1088 / 108								
90	1	844 / 365 / 149	907 / 500 / 134	838 / 489 / 204	913 / 666 / 183	860 / 617 / 279	927 / 781 / 234	712 / 600 / 222	868 / 743 / 182	858 / 396 / 146	928 / 540 / 131	854 / 530 / 199	938 / 718 / 178	864 / 648 / 264	929 / 811 / 219	746 / 632 / 211	900 / 773 / 171								
	2	907 / 500 / 134	971 / 653 / 116	913 / 678 / 183	957 / 848 / 152	927 / 792 / 234	1013 / 962 / 189	868 / 754 / 182	1051 / 923 / 148	928 / 540 / 131	1000 / 701 / 112	938 / 731 / 178	951 / 876 / 141	929 / 822 / 219	1076 / 1025 / 181	900 / 784 / 171	1118 / 984 / 143								
	3	849 / 818 / 108	899 / 1021 / 90	952 / 790 / 162	998 / 961 / 131	986 / 910 / 204	1184 / 1117 / 166	971 / 839 / 154	1181 / 1028 / 126	870 / 877 / 105	923 / 1085 / 86	948 / 821 / 152	1029 / 1024 / 126	998 / 935 / 189	1251 / 1182 / 159	1035 / 896 / 148	1248 / 1088 / 120								

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		70in x 41in		Load: Up / Down / Side , lbs																				
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
100	1	846 / 125 / 184	827 / 193 / 180	822 / 181 / 264	801 / 268 / 253	725 / 251 / 392	777 / 361 / 367	548 / 292 / 370	599 / 394 / 326	846 / 138 / 184	808 / 207 / 176	822 / 199 / 264	801 / 288 / 247	745 / 276 / 392	786 / 387 / 358	553 / 310 / 357	607 / 416 / 313	846 / 152 / 184	825 / 227 / 176	804 / 214 / 259	820 / 316 / 247	749 / 296 / 383	795 / 413 / 350	567 / 333 / 351	626 / 445 / 307	
	2	827 / 193 / 180	838 / 278 / 168	801 / 273 / 253	841 / 391 / 236	777 / 366 / 367	819 / 494 / 325	599 / 400 / 326	669 / 526 / 282	808 / 207 / 176	841 / 298 / 164	801 / 294 / 247	846 / 418 / 230	786 / 392 / 358	834 / 527 / 317	607 / 422 / 313	679 / 551 / 270	825 / 227 / 176	865 / 326 / 164	820 / 321 / 247	852 / 445 / 224	795 / 419 / 350	848 / 560 / 308	626 / 452 / 307	687 / 573 / 257	
	3	830 / 385 / 172	878 / 545 / 160	829 / 347 / 241	867 / 479 / 218	796 / 442 / 333	876 / 604 / 300	646 / 480 / 295	716 / 603 / 245	831 / 413 / 168	884 / 582 / 156	833 / 372 / 236	876 / 511 / 213	829 / 485 / 333	896 / 643 / 292	656 / 503 / 282	740 / 627 / 232	853 / 451 / 168	891 / 618 / 152	837 / 397 / 230	885 / 543 / 207	842 / 516 / 325	914 / 681 / 283	664 / 525 / 270	783 / 665 / 226	
Wind Speed [mph]		110								115																
100	1	846 / 167 / 184	823 / 242 / 172	804 / 234 / 259	821 / 336 / 241	753 / 315 / 375	804 / 439 / 342	582 / 357 / 345	646 / 474 / 301	827 / 178 / 180	841 / 264 / 172	787 / 249 / 253	821 / 356 / 236	757 / 335 / 367	813 / 464 / 333	586 / 373 / 332	652 / 493 / 288									
	2	823 / 242 / 172	868 / 346 / 160	821 / 342 / 241	856 / 472 / 218	804 / 445 / 342	861 / 592 / 300	646 / 481 / 301	694 / 592 / 245	841 / 264 / 172	870 / 366 / 156	821 / 363 / 236	884 / 512 / 218	813 / 470 / 333	874 / 624 / 292	652 / 500 / 288	729 / 625 / 238									
	3	854 / 479 / 164	897 / 654 / 148	840 / 421 / 224	919 / 591 / 207	854 / 547 / 317	932 / 718 / 275	686 / 557 / 263	800 / 682 / 213	856 / 506 / 160	902 / 689 / 143	865 / 457 / 224	928 / 622 / 201	867 / 577 / 308	949 / 754 / 267	691 / 575 / 251	839 / 717 / 207									
Wind Speed [mph]		120								130																
100	1	827 / 193 / 180	839 / 279 / 168	802 / 270 / 253	842 / 385 / 236	761 / 354 / 358	821 / 489 / 325	600 / 396 / 326	656 / 509 / 276	827 / 178 / 180	841 / 264 / 172	787 / 249 / 253	821 / 356 / 236	757 / 335 / 367	813 / 464 / 333	586 / 373 / 332	652 / 493 / 288									
	2	839 / 279 / 168	896 / 396 / 156	842 / 392 / 236	889 / 539 / 213	821 / 496 / 325	913 / 674 / 292	656 / 517 / 276	744 / 640 / 226	841 / 264 / 172	870 / 366 / 156	821 / 363 / 236	884 / 512 / 218	813 / 470 / 333	874 / 624 / 292	652 / 500 / 288	729 / 625 / 238									
	3	879 / 547 / 160	907 / 723 / 139	869 / 481 / 218	935 / 653 / 196	878 / 606 / 300	965 / 789 / 258	718 / 606 / 245	876 / 750 / 201	856 / 506 / 160	902 / 689 / 143	865 / 457 / 224	928 / 622 / 201	867 / 577 / 308	949 / 754 / 267	691 / 575 / 251	839 / 717 / 207									

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
	100	1	808 / 205 / 176	838 / 294 / 164	799 / 285 / 247	843 / 405 / 230	782 / 382 / 358	829 / 513 / 317	614 / 419 / 320	673 / 536 / 270	814 / 232 / 172	855 / 332 / 160	811 / 322 / 241	865 / 456 / 224	790 / 420 / 342	866 / 576 / 308	630 / 455 / 301	690 / 574 / 251	823 / 260 / 168	873 / 370 / 156	824 / 360 / 236	888 / 508 / 218	816 / 469 / 333	879 / 622 / 292	656 / 498 / 288
	2	838 / 294 / 164	898 / 416 / 152	843 / 413 / 230	893 / 565 / 207	829 / 520 / 317	925 / 705 / 283	673 / 544 / 270	776 / 670 / 220	855 / 332 / 160	927 / 467 / 148	865 / 465 / 224	927 / 633 / 201	866 / 584 / 308	948 / 763 / 267	690 / 583 / 251	838 / 726 / 207	873 / 370 / 156	929 / 503 / 139	888 / 517 / 218	933 / 680 / 190	879 / 630 / 292	966 / 816 / 250	736 / 632 / 238	893 / 778 / 194
	3	880 / 575 / 156	911 / 756 / 135	872 / 505 / 213	943 / 683 / 190	890 / 635 / 292	979 / 822 / 250	732 / 619 / 232	882 / 757 / 188	906 / 645 / 152	887 / 790 / 123	902 / 566 / 207	985 / 762 / 184	909 / 689 / 275	1003 / 882 / 233	792 / 674 / 220	943 / 813 / 176	906 / 696 / 143	887 / 841 / 115	932 / 629 / 201	995 / 814 / 173	955 / 762 / 267	1021 / 933 / 217	847 / 724 / 207	1032 / 893 / 169

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	377 / 259 / 40	477 / 355 / 35	405 / 351 / 44	494 / 458 / 37	491 / 416 / 46	592 / 523 / 38	484 / 385 / 50	586 / 483 / 41	402 / 281 / 39	491 / 370 / 33	425 / 375 / 42	507 / 475 / 35	505 / 432 / 43	617 / 549 / 36	508 / 407 / 48	611 / 507 / 39	420 / 299 / 38	512 / 391 / 32	451 / 404 / 42	528 / 499 / 34	526 / 455 / 42	639 / 572 / 35
0	2	477 / 355 / 35	565 / 443 / 29	485 / 458 / 36	578 / 568 / 30	592 / 530 / 38	706 / 650 / 31	586 / 490 / 41	720 / 616 / 34	491 / 370 / 33	588 / 466 / 27	507 / 484 / 35	600 / 595 / 28	617 / 556 / 36	729 / 674 / 29	611 / 514 / 39	744 / 640 / 33	512 / 391 / 32	624 / 498 / 27	517 / 498 / 33	619 / 618 / 27	639 / 580 / 35	769 / 715 / 28	634 / 536 / 38	765 / 660 / 31
0	3	464 / 548 / 26	556 / 680 / 22	552 / 528 / 32	656 / 648 / 26	680 / 613 / 33	810 / 746 / 27	675 / 566 / 36	806 / 688 / 29	481 / 573 / 25	572 / 703 / 20	575 / 554 / 30	677 / 673 / 24	704 / 639 / 31	830 / 767 / 25	700 / 589 / 34	853 / 730 / 28	509 / 611 / 25	602 / 744 / 20	595 / 578 / 29	714 / 713 / 24	725 / 661 / 30	873 / 810 / 24	741 / 626 / 33	898 / 771 / 27
5	1	377 / 259 / 40	477 / 355 / 35	405 / 351 / 51	494 / 458 / 43	491 / 416 / 57	592 / 523 / 47	484 / 385 / 57	586 / 483 / 47	402 / 281 / 39	491 / 370 / 33	425 / 375 / 49	507 / 475 / 41	505 / 432 / 54	617 / 549 / 45	508 / 407 / 55	611 / 507 / 45	420 / 299 / 38	512 / 391 / 32	451 / 404 / 49	528 / 499 / 39	526 / 455 / 52	639 / 572 / 43	530 / 429 / 53	634 / 528 / 43
5	2	477 / 355 / 35	565 / 443 / 29	485 / 458 / 42	578 / 568 / 35	592 / 530 / 47	706 / 650 / 38	586 / 490 / 47	720 / 616 / 39	491 / 370 / 33	588 / 466 / 27	507 / 484 / 41	600 / 595 / 33	617 / 556 / 45	729 / 674 / 36	611 / 514 / 45	744 / 640 / 37	512 / 391 / 32	624 / 498 / 27	517 / 498 / 38	619 / 618 / 31	639 / 580 / 43	769 / 715 / 35	634 / 536 / 43	765 / 660 / 35
5	3	464 / 548 / 26	556 / 680 / 22	552 / 528 / 37	656 / 648 / 30	680 / 613 / 41	810 / 746 / 33	675 / 566 / 41	806 / 688 / 33	481 / 573 / 25	572 / 703 / 20	575 / 554 / 35	677 / 673 / 28	704 / 639 / 39	830 / 767 / 31	700 / 589 / 39	853 / 730 / 32	509 / 611 / 25	602 / 744 / 20	595 / 578 / 34	714 / 713 / 28	725 / 661 / 37	873 / 810 / 30	741 / 626 / 38	898 / 771 / 31
10	1	415 / 259 / 47	477 / 355 / 42	426 / 351 / 66	494 / 458 / 56	491 / 416 / 74	592 / 523 / 61	484 / 385 / 69	586 / 483 / 57	432 / 281 / 47	491 / 370 / 40	437 / 375 / 64	507 / 475 / 53	505 / 432 / 70	617 / 549 / 58	508 / 407 / 67	611 / 507 / 55	442 / 299 / 45	512 / 391 / 38	455 / 404 / 63	528 / 499 / 51	526 / 455 / 67	639 / 572 / 56	530 / 429 / 65	634 / 528 / 52
10	2	477 / 355 / 42	565 / 443 / 34	485 / 458 / 55	578 / 568 / 45	592 / 530 / 61	706 / 650 / 49	586 / 490 / 57	720 / 616 / 48	491 / 370 / 40	588 / 466 / 33	507 / 484 / 53	600 / 595 / 43	617 / 556 / 58	729 / 674 / 47	611 / 514 / 55	744 / 640 / 45	512 / 391 / 38	624 / 498 / 32	517 / 498 / 50	619 / 618 / 41	639 / 580 / 56	769 / 715 / 45	634 / 536 / 52	765 / 660 / 43
10	3	464 / 548 / 31	556 / 680 / 26	552 / 528 / 48	656 / 648 / 39	680 / 613 / 53	810 / 746 / 43	675 / 566 / 50	806 / 688 / 40	481 / 573 / 30	572 / 703 / 24	575 / 554 / 46	677 / 673 / 37	704 / 639 / 51	830 / 767 / 40	700 / 589 / 48	853 / 730 / 39	509 / 611 / 29	602 / 744 / 24	595 / 578 / 44	714 / 713 / 36	725 / 661 / 48	873 / 810 / 39	741 / 626 / 46	898 / 771 / 38
0	1	438 / 317 / 37	532 / 410 / 31	462 / 419 / 40	547 / 521 / 32	546 / 476 / 40	659 / 593 / 33	551 / 449 / 45	670 / 561 / 37	462 / 340 / 36	550 / 428 / 30	480 / 440 / 38	564 / 542 / 31	565 / 496 / 39	693 / 627 / 32	571 / 468 / 43	689 / 579 / 35	462 / 340 / 36	550 / 428 / 30	480 / 440 / 38	564 / 542 / 31	565 / 496 / 39	693 / 627 / 32	571 / 468 / 43	689 / 579 / 35
0	2	532 / 410 / 31	644 / 518 / 26	536 / 520 / 32	636 / 638 / 26	659 / 601 / 33	785 / 732 / 27	670 / 569 / 37	805 / 696 / 30	550 / 428 / 30	662 / 535 / 25	552 / 540 / 30	668 / 674 / 25	676 / 620 / 31	822 / 769 / 26	689 / 587 / 35	844 / 732 / 29	534 / 650 / 22	638 / 796 / 18	629 / 618 / 26	763 / 768 / 22	779 / 715 / 27	953 / 889 / 23	797 / 679 / 31	950 / 819 / 25
0	3	522 / 632 / 23	631 / 784 / 19	613 / 600 / 28	729 / 731 / 22	743 / 680 / 28	914 / 850 / 23	760 / 645 / 32	910 / 783 / 26	534 / 650 / 22	638 / 796 / 18	629 / 618 / 26	763 / 768 / 22	779 / 715 / 27	953 / 889 / 23	797 / 679 / 31	950 / 819 / 25	534 / 650 / 22	638 / 796 / 18	629 / 618 / 26	763 / 768 / 22	779 / 715 / 27	953 / 889 / 23	797 / 679 / 31	950 / 819 / 25
5	1	438 / 317 / 37	532 / 410 / 31	462 / 419 / 46	547 / 521 / 38	546 / 476 / 50	659 / 593 / 41	551 / 449 / 51	670 / 561 / 42	462 / 340 / 36	550 / 428 / 30	480 / 440 / 45	564 / 542 / 36	565 / 496 / 48	693 / 627 / 40	571 / 468 / 49	689 / 579 / 40	462 / 340 / 36	550 / 428 / 30	480 / 440 / 45	564 / 542 / 36	565 / 496 / 48	693 / 627 / 40	571 / 468 / 49	689 / 579 / 40
5	2	532 / 410 / 31	644 / 518 / 26	536 / 520 / 37	636 / 638 / 30	659 / 601 / 41	785 / 732 / 33	670 / 569 / 42	805 / 696 / 33	550 / 428 / 30	662 / 535 / 25	552 / 540 / 35	668 / 674 / 29	676 / 620 / 39	822 / 769 / 32	689 / 587 / 40	844 / 732 / 33	534 / 650 / 22	638 / 796 / 18	629 / 618 / 31	763 / 768 / 25	779 / 715 / 34	953 / 889 / 28	797 / 679 / 35	950 / 819 / 28
5	3	522 / 632 / 23	631 / 784 / 19	613 / 600 / 32	729 / 731 / 26	743 / 680 / 35	914 / 850 / 29	760 / 645 / 36	910 / 783 / 29	534 / 650 / 22	638 / 796 / 18	629 / 618 / 31	763 / 768 / 25	779 / 715 / 34	953 / 889 / 28	797 / 679 / 35	950 / 819 / 28	534 / 650 / 22	638 / 796 / 18	629 / 618 / 31	763 / 768 / 25	779 / 715 / 34	953 / 889 / 28	797 / 679 / 35	950 / 819 / 28
10	1	451 / 317 / 44	532 / 410 / 37	462 / 419 / 60	547 / 521 / 49	546 / 476 / 65	659 / 593 / 53	551 / 449 / 62	670 / 561 / 51	467 / 340 / 43	550 / 428 / 35	480 / 440 / 58	564 / 542 / 47	565 / 496 / 62	693 / 627 / 52	571 / 468 / 60	689 / 579 / 49	467 / 340 / 43	550 / 428 / 35	480 / 440 / 58	564 / 542 / 47	565 / 496 / 62	693 / 627 / 52	571 / 468 / 60	689 / 579 / 49
10	2	532 / 410 / 37	644 / 518 / 31	536 / 520 / 48	636 / 638 / 39	659 / 601 / 53	785 / 732 / 43	670 / 569 / 51	805 / 696 / 42	550 / 428 / 35	662 / 535 / 29	552 / 540 / 46	668 / 674 / 38	676 / 620 / 51	822 / 769 / 42	689 / 587 / 49	844 / 732 / 40	550 / 428 / 35	662 / 535 / 29	552 / 540 / 46	668 / 674 / 38	676 / 620 / 51	822 / 769 / 42	689 / 587 / 49	844 / 732 / 40
10	3	522 / 632 / 28	631 / 784 / 23	613 / 600 / 42	729 / 731 / 34	743 / 680 / 45	914 / 850 / 38	760 / 645 / 44	910 / 783 / 36	534 / 650 / 26	638 / 796 / 21	629 / 618 / 40	763 / 768 / 33	779 / 715 / 44	953 / 889 / 36	797 / 679 / 43	950 / 819 / 34	534 / 650 / 26	638 / 796 / 21	629 / 618 / 40	763 / 768 / 33	779 / 715 / 44	953 / 889 / 36	797 / 679 / 43	950 / 819 / 34
0	1	471 / 350 / 34	567 / 445 / 29	487 / 451 / 36	580 / 561 / 30	594 / 525 / 38	708 / 644 / 31	589 / 485 / 41	723 / 609 / 34	462 / 340 / 36	550 / 428 / 30	480 / 440 / 38	564 / 542 / 31	565 / 496 / 39	693 / 627 / 32	571 / 468 / 43	689 / 579 / 35	462 / 340 / 36	550 / 428 / 30	480 / 440 / 38	564 / 542 / 31	565 / 496 / 39	693 / 627 / 32	571 / 468 / 43	689 / 579 / 35
0	2	567 / 445 / 29	694 / 565 / 24	580 / 571 / 30	679 / 688 / 24	708 / 653 / 31	857 / 804 / 25	723 / 618 / 34	881 / 766 / 28	550 / 428 / 30	662 / 535 / 25	552 / 540 / 30	668 / 674 / 25	676 / 620 / 31	822 / 769 / 26	689 / 587 / 35	844 / 732 / 29	534 / 650 / 22	638 / 796 / 18	629 / 618 / 26	763 / 768 / 22	779 / 715 / 27	953 / 889 / 23	797 / 679 / 31	950 / 819 / 25
0	3	558 / 683 / 22	664 / 831 / 17	659 / 651 / 26	795 / 803 / 21	813 / 749 / 27	990 / 925 / 22	809 / 691 / 29	986 / 852 / 24	534 / 650 / 22	638 / 796 / 18	629 / 618 / 26	763 / 768 / 22	779 / 715 / 27	953 / 889 / 23	797 / 679 / 31	950 / 819 / 25	534 / 650 / 22	638 / 796 / 18	629 / 618 / 26	763 / 768 / 22	779 / 715 / 27	953 / 889 / 23	797 / 679 / 31	950 / 819 / 25
5	1	471 / 350 / 34	567 / 445 / 29	487 / 451 / 42	580 / 561 / 35	594 / 525 / 47	708 / 644 / 38	589 / 485 / 47	723 / 609 / 39	462 / 340 / 36	550 / 428 / 30	480 / 440 / 45	564 / 542 / 36	565 / 496 / 48	693 / 627 / 40	571 / 468 / 49	689 / 579 / 40	462 / 340 / 36	550 / 428 / 30	480 / 440 / 45	564 / 542 / 36	565 / 496 / 48	693 / 627 / 40	571 / 468 / 49	689 / 579 / 40
5	2	567 / 445 / 29	694 / 565 / 24	580 / 571 / 35	679 / 688 / 28	708 / 653 / 38	857 / 804 / 31	723 / 618 / 39	881 / 766 / 32	550 / 428 / 30	662 / 535 / 25	552 / 540 / 35	668 / 674 / 29	676 / 620 / 39	822 / 769 / 32	689 / 587 / 40	844 / 732 / 33	534 / 650 / 22	638 / 796 / 18	629 / 618 / 31	763 / 768 / 25	779 / 715 / 34	953 / 889 / 28	797 / 679 / 35	950 / 819 / 28
5	3	558 / 683 / 22	664 / 831 / 17	659 / 651 / 30	795 / 803 / 25	813 / 749 / 33	990 / 925 / 27	809 / 691 / 33	986 / 852 / 27	534 / 650 / 22	638 / 796 / 18	629 / 618 / 31	763 / 768 / 25	779 / 715 / 34	953 / 889 / 28	797 / 679 / 35	950 / 819 / 28	534 / 650 / 22	638 / 796 / 18	629 / 618 / 31	763 / 768 / 25	779 / 715 / 34	953 / 889 / 28	797 / 679 / 35	950 / 819 / 28
10	1	471 / 350 / 41	567 / 445 / 34	487 / 451 / 55	580 / 561 / 45	594 / 525 / 61	708 / 644 / 49	589 / 485 / 57	723 / 609 / 48	467 / 340 / 43	550 / 428 / 35	480 / 440 / 58	564 / 542 / 47	565 / 496 / 62	693 / 627 / 52	571 / 468 / 60	689 / 579 / 49	467 / 340 / 43	550 / 428 / 35	480 / 440 / 58	564 / 542 / 47	565 / 496 / 62	693 / 627 / 52	571 / 468 / 60	689 / 579 / 49
10	2	567 / 445 / 34	694 / 565 / 28	580 / 571 / 45	679 / 688 / 36	708 / 653 / 49	857 / 804 / 40	723 / 618 / 48	881 / 766 / 39	550 / 428 / 35	662 / 535 / 29	552 / 540 / 46	668 / 674												

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	494 / 372 / 34	594 / 470 / 28	502 / 469 / 35	593 / 577 / 28	610 / 542 / 36	740 / 675 / 30	604 / 500 / 39	736 / 623 / 33	522 / 400 / 32	634 / 508 / 26	538 / 510 / 33	628 / 617 / 26	649 / 583 / 34	777 / 714 / 27	644 / 538 / 37	796 / 678 / 31	555 / 433 / 30	668 / 541 / 25	557 / 536 / 30	674 / 668 / 25	682 / 618 / 31	830 / 766 / 26	695 / 585 / 35	852 / 728 / 29
	2	594 / 470 / 28	707 / 578 / 23	593 / 587 / 28	708 / 720 / 23	720 / 666 / 29	891 / 838 / 24	736 / 632 / 33	887 / 773 / 26	634 / 508 / 26	765 / 631 / 22	628 / 628 / 26	761 / 780 / 22	777 / 724 / 27	918 / 867 / 22	796 / 688 / 31	948 / 829 / 25	668 / 541 / 25	819 / 680 / 20	656 / 662 / 24	809 / 834 / 20	830 / 777 / 26	1003 / 951 / 21	852 / 739 / 29	1038 / 911 / 24
	3	582 / 715 / 21	688 / 864 / 17	669 / 664 / 24	826 / 837 / 20	847 / 783 / 26	1023 / 959 / 21	843 / 721 / 28	1020 / 883 / 23	607 / 752 / 19	730 / 923 / 16	722 / 722 / 23	882 / 898 / 19	878 / 816 / 23	1082 / 1017 / 20	905 / 778 / 26	1124 / 976 / 22	645 / 804 / 18	765 / 970 / 15	770 / 775 / 22	929 / 950 / 18	962 / 897 / 23	1127 / 1062 / 18	959 / 827 / 25	1175 / 1022 / 20
5	1	494 / 372 / 34	594 / 470 / 28	502 / 469 / 41	593 / 577 / 33	610 / 542 / 45	740 / 675 / 37	604 / 500 / 45	736 / 623 / 37	522 / 400 / 32	634 / 508 / 26	538 / 510 / 38	628 / 617 / 31	649 / 583 / 42	777 / 714 / 34	644 / 538 / 42	796 / 678 / 35	555 / 433 / 30	668 / 541 / 25	557 / 536 / 35	674 / 668 / 29	682 / 618 / 39	830 / 766 / 32	695 / 585 / 40	852 / 728 / 33
	2	594 / 470 / 28	707 / 578 / 23	593 / 587 / 33	708 / 720 / 27	720 / 666 / 36	891 / 838 / 30	736 / 632 / 37	887 / 773 / 30	634 / 508 / 26	765 / 631 / 22	628 / 628 / 31	761 / 780 / 25	777 / 724 / 34	918 / 867 / 27	796 / 688 / 35	948 / 829 / 28	668 / 541 / 25	819 / 680 / 20	656 / 662 / 28	809 / 834 / 24	830 / 777 / 32	1003 / 951 / 26	852 / 739 / 33	1038 / 911 / 27
	3	582 / 715 / 21	688 / 864 / 17	669 / 664 / 28	826 / 837 / 24	847 / 783 / 32	1023 / 959 / 26	843 / 721 / 32	1020 / 883 / 26	607 / 752 / 19	730 / 923 / 16	722 / 722 / 27	882 / 898 / 22	878 / 816 / 29	1082 / 1017 / 24	905 / 778 / 30	1124 / 976 / 25	645 / 804 / 18	765 / 970 / 15	770 / 775 / 25	929 / 950 / 21	962 / 897 / 28	1127 / 1062 / 22	959 / 827 / 28	1175 / 1022 / 23
10	1	494 / 372 / 40	594 / 470 / 33	502 / 469 / 53	593 / 577 / 43	610 / 542 / 58	740 / 675 / 48	604 / 500 / 55	736 / 623 / 45	522 / 400 / 38	634 / 508 / 31	538 / 510 / 50	628 / 617 / 40	649 / 583 / 54	777 / 714 / 44	644 / 538 / 51	796 / 678 / 43	555 / 433 / 35	668 / 541 / 29	557 / 536 / 46	674 / 668 / 38	682 / 618 / 51	830 / 766 / 42	695 / 585 / 49	852 / 728 / 40
	2	594 / 470 / 33	707 / 578 / 27	593 / 587 / 43	708 / 720 / 35	720 / 666 / 47	891 / 838 / 39	736 / 632 / 45	887 / 773 / 37	634 / 508 / 31	765 / 631 / 26	628 / 628 / 40	761 / 780 / 33	777 / 724 / 44	918 / 867 / 35	796 / 688 / 43	948 / 829 / 34	668 / 541 / 29	819 / 680 / 24	656 / 662 / 37	809 / 834 / 31	830 / 777 / 42	1003 / 951 / 34	852 / 739 / 40	1038 / 911 / 33
	3	582 / 715 / 25	688 / 864 / 20	669 / 664 / 37	826 / 837 / 31	847 / 783 / 42	1023 / 959 / 34	843 / 721 / 39	1020 / 883 / 32	607 / 752 / 23	730 / 923 / 19	722 / 722 / 35	882 / 898 / 29	878 / 816 / 38	1082 / 1017 / 31	905 / 778 / 37	1124 / 976 / 31	645 / 804 / 21	765 / 970 / 17	770 / 775 / 33	929 / 950 / 27	962 / 897 / 36	1127 / 1062 / 29	959 / 827 / 34	1175 / 1022 / 28
Wind Speed [mph]		170								180															
0	1	585 / 462 / 28	714 / 583 / 23	597 / 580 / 29	717 / 716 / 24	728 / 663 / 30	876 / 812 / 24	724 / 612 / 33	901 / 774 / 27	624 / 498 / 27	756 / 622 / 22	619 / 607 / 27	755 / 758 / 22	769 / 705 / 28	914 / 851 / 23	765 / 650 / 31	943 / 812 / 26	ASCE Group Zone							
	2	714 / 583 / 23	867 / 724 / 19	696 / 708 / 23	850 / 880 / 19	876 / 823 / 24	1043 / 993 / 20	901 / 785 / 27	1084 / 953 / 22	756 / 622 / 22	908 / 763 / 18	732 / 748 / 22	883 / 917 / 18	914 / 863 / 23	1119 / 1067 / 19	943 / 824 / 26	1165 / 1027 / 21	Panal Angle							
	3	676 / 849 / 17	825 / 1051 / 14	812 / 822 / 20	966 / 992 / 16	1006 / 942 / 21	1213 / 1145 / 17	1042 / 901 / 24	1268 / 1105 / 20	729 / 919 / 16	883 / 1128 / 13	847 / 862 / 19	1036 / 1066 / 16	1040 / 976 / 20	1293 / 1224 / 16	1080 / 936 / 22	1291 / 1127 / 18	Mono Slope							
5	1	585 / 462 / 28	714 / 583 / 23	597 / 580 / 34	717 / 716 / 28	728 / 663 / 37	876 / 812 / 30	724 / 612 / 37	901 / 774 / 31	624 / 498 / 27	756 / 622 / 22	619 / 607 / 31	755 / 758 / 26	769 / 705 / 35	914 / 851 / 28	765 / 650 / 35	943 / 812 / 29	1 = 1							
	2	714 / 583 / 23	867 / 724 / 19	696 / 708 / 27	850 / 880 / 22	876 / 823 / 30	1043 / 993 / 24	901 / 785 / 31	1084 / 953 / 25	756 / 622 / 22	908 / 763 / 18	732 / 748 / 25	883 / 917 / 21	914 / 863 / 28	1119 / 1067 / 23	943 / 824 / 29	1165 / 1027 / 24	2 = 2							
	3	676 / 849 / 17	825 / 1051 / 14	812 / 822 / 24	966 / 992 / 19	1006 / 942 / 26	1213 / 1145 / 21	1042 / 901 / 27	1268 / 1105 / 22	729 / 919 / 16	883 / 1128 / 13	847 / 862 / 22	1036 / 1066 / 18	1040 / 976 / 24	1293 / 1224 / 20	1080 / 936 / 25	1291 / 1127 / 20	3 = 3							
10	1	585 / 462 / 33	714 / 583 / 28	597 / 580 / 44	717 / 716 / 36	728 / 663 / 48	876 / 812 / 39	724 / 612 / 45	901 / 774 / 38	624 / 498 / 32	756 / 622 / 26	619 / 607 / 41	755 / 758 / 34	769 / 705 / 45	914 / 851 / 36	765 / 650 / 43	943 / 812 / 36	1 = 1							
	2	714 / 583 / 28	867 / 724 / 23	696 / 708 / 35	850 / 880 / 29	876 / 823 / 39	1043 / 993 / 31	901 / 785 / 38	1084 / 953 / 31	756 / 622 / 26	908 / 763 / 21	732 / 748 / 33	883 / 917 / 27	914 / 863 / 36	1119 / 1067 / 30	943 / 824 / 36	1165 / 1027 / 30	2 = 2							
	3	676 / 849 / 20	825 / 1051 / 17	812 / 822 / 31	966 / 992 / 25	1006 / 942 / 34	1213 / 1145 / 27	1042 / 901 / 33	1268 / 1105 / 27	729 / 919 / 19	883 / 1128 / 16	847 / 862 / 29	1036 / 1066 / 24	1040 / 976 / 31	1293 / 1224 / 26	1080 / 936 / 31	1291 / 1127 / 25	3 = 3							
Wind Speed [mph]		190								200															
0	1	645 / 520 / 25	794 / 657 / 21	653 / 644 / 26	787 / 795 / 21	806 / 742 / 27	980 / 916 / 22	826 / 705 / 30	977 / 844 / 24	678 / 550 / 24	827 / 688 / 20	682 / 678 / 24	814 / 825 / 20	836 / 774 / 25	1004 / 941 / 20	860 / 736 / 28	1041 / 901 / 23	ASCE Group Zone							
	2	794 / 657 / 21	942 / 795 / 17	787 / 809 / 21	944 / 984 / 17	980 / 928 / 22	1191 / 1139 / 18	977 / 856 / 24	1188 / 1050 / 20	827 / 688 / 20	1005 / 850 / 16	814 / 840 / 20	1002 / 1048 / 16	1004 / 953 / 20	1198 / 1148 / 16	1041 / 914 / 23	1256 / 1111 / 19	Panal Angle							
	3	750 / 950 / 15	893 / 1144 / 12	908 / 927 / 18	1102 / 1138 / 15	1108 / 1043 / 19	1367 / 1296 / 16	1154 / 1002 / 21	1365 / 1193 / 17	796 / 1011 / 15	938 / 1205 / 12	930 / 952 / 17	1109 / 1147 / 14	1173 / 1106 / 18	1434 / 1361 / 15	1224 / 1065 / 20	1432 / 1253 / 16	Mono Slope							
5	1	645 / 520 / 25	794 / 657 / 21	653 / 644 / 30	787 / 795 / 25	806 / 742 / 33	980 / 916 / 27	826 / 705 / 34	977 / 844 / 27	678 / 550 / 24	827 / 688 / 20	682 / 678 / 28	814 / 825 / 23	836 / 774 / 31	1004 / 941 / 25	860 / 736 / 32	1041 / 901 / 26	1 = 1							
	2	794 / 657 / 21	942 / 795 / 17	787 / 809 / 25	944 / 984 / 20	980 / 928 / 27	1191 / 1139 / 22	977 / 856 / 27	1188 / 1050 / 22	827 / 688 / 20	1005 / 850 / 16	814 / 840 / 23	1002 / 1048 / 19	1004 / 953 / 25	1198 / 1148 / 20	1041 / 914 / 26	1256 / 1111 / 21	2 = 2							
	3	750 / 950 / 15	893 / 1144 / 12	908 / 927 / 21	1102 / 1138 / 18	1108 / 1043 / 23	1367 / 1296 / 19	1154 / 1002 / 24	1365 / 1193 / 19	796 / 1011 / 15	938 / 1205 / 12	930 / 952 / 20	1109 / 1147 / 16	1173 / 1106 / 22	1434 / 1361 / 18	1224 / 1065 / 23	1432 / 1253 / 18	3 = 3							
10	1	645 / 520 / 30	794 / 657 / 25	653 / 644 / 39	787 / 795 / 32	806 / 742 / 43	980 / 916 / 35	826 / 705 / 42	977 / 844 / 33	678 / 550 / 28	827 / 688 / 24	682 / 678 / 37	814 / 825 / 30	836 / 774 / 40	1004 / 941 / 33	860 / 736 / 39	1041 / 901 / 32	1 = 1							
	2	794 / 657 / 25	942 / 795 / 20	787 / 809 / 32	944 / 984 / 26	980 / 928 / 35	1191 / 1139 / 29	977 / 856 / 33	1188 / 1050 / 27	827 / 688 / 24	1005 / 850 / 19	814 / 840 / 30	1002 / 1048 / 25	1004 / 953 / 33	1198 / 1148 / 26	1041 / 914 / 32	1256 / 1111 / 26	2 = 2							
	3	750 / 950 / 18	893 / 1144 / 14	908 / 927 / 28	1102 / 1138 / 23	1108 / 1043 / 30	1367 / 1296 / 25	1154 / 1002 / 30	1365 / 1193 / 23	796 / 1011 / 17	938 / 1205 / 14	930 / 952 / 26	1109 / 1147 / 21	1173 / 1106 / 29	1434 / 1361 / 24	1224 / 1065 / 28	1432 / 1253 / 22	3 = 3							

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs																																																																																																																																																																																																																											
Wind Speed [mph]		95								100								105																																																																																																																																																																																																																			
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																																																																																																																																																																																																													
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																																																																																																																																																												
15	1	461 / 251 / 54	518 / 349 / 48	474 / 346 / 79	521 / 458 / 68	491 / 416 / 91	592 / 523 / 75	484 / 385 / 82	586 / 483 / 67	476 / 273 / 53	529 / 370 / 46	490 / 375 / 78	522 / 475 / 64	505 / 432 / 86	617 / 549 / 72	508 / 407 / 79	611 / 507 / 65	491 / 295 / 52	539 / 391 / 45	499 / 397 / 76	532 / 499 / 62	526 / 455 / 83	639 / 572 / 68	530 / 429 / 76	634 / 528 / 62																																																																																																																																																																																																												
	2	518 / 349 / 48	565 / 443 / 40	511 / 458 / 67	578 / 568 / 55	592 / 530 / 75	706 / 650 / 61	586 / 490 / 67	720 / 616 / 56	529 / 370 / 46	588 / 466 / 38	522 / 484 / 64	600 / 595 / 52	617 / 556 / 72	729 / 674 / 57	611 / 514 / 65	744 / 640 / 53	539 / 391 / 45	624 / 498 / 37	522 / 498 / 61	619 / 618 / 50	639 / 580 / 68	769 / 715 / 56	634 / 536 / 62	765 / 660 / 50																																																																																																																																																																																																												
	3	474 / 548 / 36	556 / 680 / 30	552 / 528 / 58	656 / 648 / 47	680 / 613 / 65	810 / 746 / 53	675 / 566 / 59	806 / 688 / 47	481 / 573 / 35	572 / 703 / 28	575 / 554 / 56	677 / 673 / 45	704 / 639 / 62	830 / 767 / 50	700 / 589 / 56	853 / 730 / 46	509 / 611 / 34	602 / 744 / 27	595 / 578 / 53	714 / 713 / 44	725 / 661 / 59	873 / 810 / 48	741 / 626 / 55	898 / 771 / 45																																																																																																																																																																																																												
	1	503 / 243 / 59	551 / 337 / 53	512 / 335 / 91	568 / 458 / 81	495 / 416 / 112	592 / 523 / 92	484 / 385 / 95	586 / 483 / 79	517 / 264 / 58	569 / 363 / 52	518 / 357 / 88	567 / 475 / 76	505 / 432 / 106	617 / 549 / 89	508 / 407 / 92	611 / 507 / 75	521 / 281 / 57	577 / 383 / 50	533 / 384 / 87	575 / 499 / 73	526 / 455 / 102	639 / 572 / 85	530 / 429 / 89	634 / 528 / 72																																																																																																																																																																																																												
	2	551 / 337 / 53	604 / 443 / 45	557 / 458 / 79	591 / 568 / 65	592 / 530 / 92	706 / 650 / 75	586 / 490 / 79	720 / 616 / 65	569 / 363 / 52	615 / 466 / 43	567 / 484 / 76	600 / 595 / 62	617 / 556 / 89	729 / 674 / 71	611 / 514 / 75	744 / 640 / 62	577 / 383 / 50	637 / 498 / 43	564 / 498 / 72	619 / 618 / 59	639 / 580 / 85	769 / 715 / 69	634 / 536 / 72	765 / 660 / 59																																																																																																																																																																																																												
	3	514 / 548 / 42	556 / 680 / 34	582 / 528 / 69	656 / 648 / 56	680 / 613 / 81	810 / 746 / 65	675 / 566 / 69	806 / 688 / 55	519 / 573 / 40	572 / 703 / 32	592 / 554 / 66	677 / 673 / 53	704 / 639 / 77	830 / 767 / 61	700 / 589 / 65	853 / 730 / 54	536 / 611 / 39	602 / 744 / 31	600 / 578 / 63	714 / 713 / 52	725 / 661 / 73	873 / 810 / 59	741 / 626 / 64	898 / 771 / 52																																																																																																																																																																																																												
	1	503 / 243 / 59	551 / 337 / 53	512 / 335 / 91	568 / 458 / 81	524 / 416 / 135	592 / 523 / 111	484 / 385 / 112	586 / 483 / 92	517 / 264 / 58	569 / 363 / 52	518 / 357 / 88	567 / 475 / 76	527 / 432 / 128	617 / 549 / 106	508 / 407 / 108	611 / 507 / 88	521 / 281 / 57	577 / 383 / 50	533 / 384 / 87	575 / 499 / 73	537 / 455 / 123	639 / 572 / 102	530 / 429 / 104	634 / 528 / 84																																																																																																																																																																																																												
	2	551 / 337 / 53	604 / 443 / 45	557 / 458 / 79	591 / 568 / 65	592 / 530 / 111	706 / 650 / 90	586 / 490 / 92	720 / 616 / 77	569 / 363 / 52	615 / 466 / 43	567 / 484 / 76	600 / 595 / 62	617 / 556 / 89	729 / 674 / 85	611 / 514 / 88	744 / 640 / 73	577 / 383 / 50	637 / 498 / 43	564 / 498 / 72	619 / 618 / 59	639 / 580 / 102	769 / 715 / 83	634 / 536 / 84	765 / 660 / 69																																																																																																																																																																																																												
	3	514 / 548 / 42	556 / 680 / 34	582 / 528 / 69	656 / 648 / 56	680 / 613 / 97	810 / 746 / 78	675 / 566 / 80	806 / 688 / 65	519 / 573 / 40	572 / 703 / 32	592 / 554 / 66	677 / 673 / 53	704 / 639 / 92	830 / 767 / 73	700 / 589 / 77	853 / 730 / 63	536 / 611 / 39	602 / 744 / 31	600 / 578 / 63	714 / 713 / 52	725 / 661 / 88	873 / 810 / 71	741 / 626 / 75	898 / 771 / 61																																																																																																																																																																																																												
15	1	498 / 312 / 50	548 / 410 / 43	508 / 419 / 73	547 / 521 / 60	546 / 476 / 80	659 / 593 / 65	551 / 449 / 73	670 / 561 / 60	513 / 334 / 50	556 / 428 / 41	515 / 440 / 71	564 / 542 / 57	565 / 496 / 76	693 / 627 / 64	571 / 468 / 70	689 / 579 / 57	556 / 428 / 41	662 / 535 / 34	552 / 540 / 56	668 / 674 / 46	676 / 620 / 62	822 / 769 / 51	689 / 587 / 57	844 / 732 / 47																																																																																																																																																																																																												
	2	548 / 410 / 43	644 / 518 / 36	536 / 520 / 58	636 / 638 / 47	659 / 601 / 65	785 / 732 / 53	670 / 569 / 60	805 / 696 / 49	556 / 428 / 41	662 / 535 / 34	552 / 540 / 56	668 / 674 / 46	676 / 620 / 62	822 / 769 / 51	689 / 587 / 57	844 / 732 / 47	534 / 650 / 31	638 / 796 / 25	629 / 618 / 48	763 / 768 / 40	779 / 715 / 54	953 / 889 / 45	797 / 679 / 50	950 / 819 / 40																																																																																																																																																																																																												
	3	522 / 632 / 32	631 / 784 / 27	613 / 600 / 51	729 / 731 / 41	743 / 680 / 56	914 / 850 / 46	760 / 645 / 52	910 / 783 / 42	534 / 650 / 31	638 / 796 / 25	629 / 618 / 48	763 / 768 / 40	779 / 715 / 54	953 / 889 / 45	797 / 679 / 50	950 / 819 / 40	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 94	693 / 627 / 79	571 / 468 / 82	689 / 579 / 67																																																																																																																																																																																																												
	1	535 / 302 / 56	595 / 410 / 49	539 / 405 / 84	582 / 521 / 71	546 / 476 / 98	659 / 593 / 81	551 / 449 / 85	670 / 561 / 70	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 94	693 / 627 / 79	571 / 468 / 82	689 / 579 / 67	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 77	822 / 769 / 63	689 / 587 / 57	844 / 732 / 55																																																																																																																																																																																																												
	2	595 / 410 / 49	645 / 518 / 41	570 / 520 / 69	636 / 638 / 56	659 / 601 / 81	785 / 732 / 65	670 / 569 / 70	805 / 696 / 57	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 77	822 / 769 / 63	689 / 587 / 57	844 / 732 / 55	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 67	953 / 889 / 55	797 / 679 / 59	950 / 819 / 47																																																																																																																																																																																																												
	3	539 / 632 / 37	631 / 784 / 30	613 / 600 / 60	729 / 731 / 49	743 / 680 / 69	914 / 850 / 57	760 / 645 / 60	910 / 783 / 49	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 67	953 / 889 / 55	797 / 679 / 59	950 / 819 / 47	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 113	693 / 627 / 95	571 / 468 / 96	689 / 579 / 79																																																																																																																																																																																																												
	1	535 / 302 / 56	595 / 410 / 49	539 / 405 / 84	582 / 521 / 71	547 / 476 / 118	659 / 593 / 97	551 / 449 / 100	670 / 561 / 82	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 92	822 / 769 / 76	689 / 587 / 79	844 / 732 / 65	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 81	953 / 889 / 66	797 / 679 / 69	950 / 819 / 55																																																																																																																																																																																																												
	2	595 / 410 / 49	645 / 518 / 41	570 / 520 / 69	636 / 638 / 56	659 / 601 / 97	785 / 732 / 78	670 / 569 / 82	805 / 696 / 67	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 92	822 / 769 / 76	689 / 587 / 79	844 / 732 / 65	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 81	953 / 889 / 66	797 / 679 / 69	950 / 819 / 55																																																																																																																																																																																																												
	3	539 / 632 / 37	631 / 784 / 30	613 / 600 / 60	729 / 731 / 49	743 / 680 / 83	914 / 850 / 69	760 / 645 / 71	910 / 783 / 57	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 81	953 / 889 / 66	797 / 679 / 69	950 / 819 / 55	15	1	520 / 350 / 48	567 / 445 / 40	513 / 451 / 67	580 / 561 / 55	594 / 525 / 75	708 / 644 / 61	589 / 485 / 67	723 / 609 / 56	513 / 334 / 50	556 / 428 / 41	515 / 440 / 71	564 / 542 / 57	565 / 496 / 76	693 / 627 / 64	571 / 468 / 70	689 / 579 / 57	556 / 428 / 41	662 / 535 / 34	552 / 540 / 56	668 / 674 / 46	676 / 620 / 62	822 / 769 / 51	689 / 587 / 57	844 / 732 / 47	2	567 / 445 / 40	694 / 565 / 33	580 / 571 / 55	679 / 688 / 44	708 / 653 / 61	857 / 804 / 50	723 / 618 / 56	881 / 766 / 46	556 / 428 / 41	662 / 535 / 34	552 / 540 / 56	668 / 674 / 46	676 / 620 / 62	822 / 769 / 51	689 / 587 / 57	844 / 732 / 47	534 / 650 / 31	638 / 796 / 25	629 / 618 / 48	763 / 768 / 40	779 / 715 / 54	953 / 889 / 45	797 / 679 / 50	950 / 819 / 40	3	558 / 683 / 30	664 / 831 / 24	659 / 651 / 47	795 / 803 / 39	813 / 749 / 53	990 / 925 / 43	809 / 691 / 47	986 / 852 / 39	534 / 650 / 31	638 / 796 / 25	629 / 618 / 48	763 / 768 / 40	779 / 715 / 54	953 / 889 / 45	797 / 679 / 50	950 / 819 / 40	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 94	693 / 627 / 79	571 / 468 / 82	689 / 579 / 67	1	552 / 338 / 53	606 / 445 / 45	559 / 451 / 79	592 / 561 / 65	594 / 525 / 92	708 / 644 / 75	589 / 485 / 79	723 / 609 / 65	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 94	693 / 627 / 79	571 / 468 / 82	689 / 579 / 67	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 77	822 / 769 / 63	689 / 587 / 57	844 / 732 / 55	2	606 / 445 / 45	694 / 565 / 38	592 / 571 / 65	679 / 688 / 52	708 / 653 / 75	857 / 804 / 61	723 / 618 / 65	881 / 766 / 54	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 77	822 / 769 / 63	689 / 587 / 57	844 / 732 / 55	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 67	953 / 889 / 55	797 / 679 / 59	950 / 819 / 47	3	558 / 683 / 34	664 / 831 / 28	659 / 651 / 56	795 / 803 / 46	813 / 749 / 65	990 / 925 / 53	809 / 691 / 55	986 / 852 / 45	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 67	953 / 889 / 55	797 / 679 / 59	950 / 819 / 47	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 113	693 / 627 / 95	571 / 468 / 96	689 / 579 / 79	1	552 / 338 / 53	606 / 445 / 45	559 / 451 / 79	592 / 561 / 65	594 / 525 / 111	708 / 644 / 90	589 / 485 / 92	723 / 609 / 77	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 113	693 / 627 / 95	571 / 468 / 96	689 / 579 / 79	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 92	822 / 769 / 76	689 / 587 / 79	844 / 732 / 65	2	606 / 445 / 45	694 / 565 / 38	592 / 571 / 65	679 / 688 / 52	708 / 653 / 90	857 / 804 / 73	723 / 618 / 77	881 / 766 / 63	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 92	822 / 769 / 76	689 / 587 / 79	844 / 732 / 65	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 81	953 / 889 / 66	797 / 679 / 69	950 / 819 / 55	3	558 / 683 / 34	664 / 831 / 28	659 / 651 / 56	795 / 803 / 46	813 / 749 / 78	990 / 925 / 64	809 / 691 / 65	986 / 852 / 53	540 / 650 / 35	638 / 796 / 29
15	1	520 / 350 / 48	567 / 445 / 40	513 / 451 / 67	580 / 561 / 55	594 / 525 / 75	708 / 644 / 61	589 / 485 / 67	723 / 609 / 56	513 / 334 / 50	556 / 428 / 41	515 / 440 / 71	564 / 542 / 57	565 / 496 / 76	693 / 627 / 64	571 / 468 / 70	689 / 579 / 57		556 / 428 / 41	662 / 535 / 34	552 / 540 / 56	668 / 674 / 46	676 / 620 / 62	822 / 769 / 51	689 / 587 / 57	844 / 732 / 47																																																																																																																																																																																																											
	2	567 / 445 / 40	694 / 565 / 33	580 / 571 / 55	679 / 688 / 44	708 / 653 / 61	857 / 804 / 50	723 / 618 / 56	881 / 766 / 46	556 / 428 / 41	662 / 535 / 34	552 / 540 / 56	668 / 674 / 46	676 / 620 / 62	822 / 769 / 51	689 / 587 / 57	844 / 732 / 47		534 / 650 / 31	638 / 796 / 25	629 / 618 / 48	763 / 768 / 40	779 / 715 / 54	953 / 889 / 45	797 / 679 / 50	950 / 819 / 40																																																																																																																																																																																																											
	3	558 / 683 / 30	664 / 831 / 24	659 / 651 / 47	795 / 803 / 39	813 / 749 / 53	990 / 925 / 43	809 / 691 / 47	986 / 852 / 39	534 / 650 / 31	638 / 796 / 25	629 / 618 / 48	763 / 768 / 40	779 / 715 / 54	953 / 889 / 45	797 / 679 / 50	950 / 819 / 40		548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 94	693 / 627 / 79	571 / 468 / 82	689 / 579 / 67																																																																																																																																																																																																											
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	2	606 / 445 / 45	694 / 565 / 38	592 / 571 / 65	679 / 688 / 52	708 / 653 / 75	857 / 804 / 61	723 / 618 / 65	881 / 766 / 54	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 77	822 / 769 / 63	689 / 587 / 57	844 / 732 / 55		540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 67	953 / 889 / 55	797 / 679 / 59	950 / 819 / 47																																																																																																																																																																																																											
	3	558 / 683 / 34	664 / 831 / 28	659 / 651 / 56	795 / 803 / 46	813 / 749 / 65	990 / 925 / 53	809 / 691 / 55	986 / 852 / 45	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 67	953 / 889 / 55	797 / 679 / 59	950 / 819 / 47		548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 113	693 / 627 / 95	571 / 468 / 96	689 / 579 / 79																																																																																																																																																																																																											
	1	552 / 338 / 53	606 / 445 / 45	559 / 451 / 79	592 / 561 / 65	594 / 525 / 111	708 / 644 / 90	589 / 485 / 92	723 / 609 / 77	548 / 323 / 55	601 / 428 / 47	554 / 432 / 82	588 / 542 / 68	565 / 496 / 113	693 / 627 / 95	571 / 468 / 96	689 / 579 / 79		601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 92	822 / 769 / 76	689 / 587 / 79	844 / 732 / 65																																																																																																																																																																																																											
	2	606 / 445 / 45	694 / 565 / 38	592 / 571 / 65	679 / 688 / 52	708 / 653 / 90	857 / 804 / 73	723 / 618 / 77	881 / 766 / 63	601 / 428 / 47	662 / 535 / 39	575 / 540 / 66	668 / 674 / 54	676 / 620 / 92	822 / 769 / 76	689 / 587 / 79	844 / 732 / 65		540 / 650 / 35	638 / 796 / 29	629 / 618 / 57	763 / 768 / 47	779 / 715 / 81	953 / 889 / 66	797 / 679 / 69	950 / 819 / 55																																																																																																																																																																																																											
	3	558 / 683 / 34	664 / 831 / 28	659 / 651 / 56	795 / 803 / 46	813 / 749 / 78	990 / 925 / 64	809 / 691 / 65	986 / 852 / 53	540 / 650 / 35	638 / 796 / 29	629 / 618 / 57																																																																																																																																																																																																																									

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	534 / 372 / 47	594 / 470 / 39	518 / 469 / 64	593 / 577 / 52	610 / 542 / 72	740 / 675 / 59	604 / 500 / 65	736 / 623 / 53	544 / 400 / 44	634 / 508 / 36	538 / 510 / 61	628 / 617 / 48	649 / 583 / 67	777 / 714 / 54	644 / 538 / 60	796 / 678 / 50	560 / 433 / 41	668 / 541 / 34	557 / 536 / 56	674 / 668 / 46	682 / 618 / 62	830 / 766 / 51	695 / 585 / 57	852 / 728 / 47
	2	594 / 470 / 39	707 / 578 / 32	593 / 587 / 52	708 / 720 / 42	720 / 666 / 57	891 / 838 / 48	736 / 632 / 53	887 / 773 / 43	634 / 508 / 36	765 / 631 / 30	628 / 628 / 48	761 / 780 / 40	777 / 724 / 54	918 / 867 / 43	796 / 688 / 50	948 / 829 / 40	668 / 541 / 34	819 / 680 / 28	656 / 662 / 45	809 / 834 / 37	830 / 777 / 51	1003 / 951 / 42	852 / 739 / 47	1038 / 911 / 39
	3	582 / 715 / 29	688 / 864 / 23	669 / 664 / 45	826 / 837 / 37	847 / 783 / 51	1023 / 959 / 42	843 / 721 / 46	1020 / 883 / 38	607 / 752 / 27	730 / 923 / 22	722 / 722 / 42	882 / 898 / 35	878 / 816 / 46	1082 / 1017 / 38	905 / 778 / 43	1124 / 976 / 36	645 / 804 / 25	765 / 970 / 20	770 / 775 / 40	929 / 950 / 32	962 / 897 / 45	1127 / 1062 / 35	959 / 827 / 40	1175 / 1022 / 33
20	1	565 / 359 / 52	623 / 470 / 44	562 / 469 / 76	595 / 577 / 62	610 / 542 / 89	740 / 675 / 73	604 / 500 / 75	736 / 623 / 62	580 / 393 / 49	641 / 508 / 42	579 / 510 / 72	628 / 617 / 57	649 / 583 / 83	777 / 714 / 67	644 / 538 / 70	796 / 678 / 59	605 / 433 / 47	668 / 541 / 39	579 / 536 / 66	674 / 668 / 54	682 / 618 / 77	830 / 766 / 63	695 / 585 / 67	852 / 728 / 55
	2	623 / 470 / 44	707 / 578 / 36	595 / 587 / 62	708 / 720 / 50	720 / 666 / 71	891 / 838 / 59	736 / 632 / 62	887 / 773 / 50	641 / 508 / 42	765 / 631 / 34	628 / 628 / 57	761 / 780 / 47	777 / 724 / 67	918 / 867 / 53	796 / 688 / 59	948 / 829 / 47	668 / 541 / 39	819 / 680 / 32	656 / 662 / 53	809 / 834 / 44	830 / 777 / 63	1003 / 951 / 51	852 / 739 / 55	1038 / 911 / 45
	3	582 / 715 / 33	688 / 864 / 27	669 / 664 / 53	826 / 837 / 44	847 / 783 / 63	1023 / 959 / 51	843 / 721 / 54	1020 / 883 / 44	607 / 752 / 30	730 / 923 / 25	722 / 722 / 50	882 / 898 / 41	878 / 816 / 57	1082 / 1017 / 47	905 / 778 / 50	1124 / 976 / 42	645 / 804 / 29	765 / 970 / 23	770 / 775 / 47	929 / 950 / 38	962 / 897 / 55	1127 / 1062 / 44	959 / 827 / 47	1175 / 1022 / 39
25	1	565 / 359 / 52	623 / 470 / 44	562 / 469 / 76	595 / 577 / 62	610 / 542 / 106	740 / 675 / 88	604 / 500 / 88	736 / 623 / 73	580 / 393 / 49	641 / 508 / 42	579 / 510 / 72	628 / 617 / 57	649 / 583 / 99	777 / 714 / 81	644 / 538 / 82	796 / 678 / 69	605 / 433 / 47	668 / 541 / 39	579 / 536 / 66	674 / 668 / 54	682 / 618 / 92	830 / 766 / 76	695 / 585 / 79	852 / 728 / 65
	2	623 / 470 / 44	707 / 578 / 36	595 / 587 / 62	708 / 720 / 50	720 / 666 / 85	891 / 838 / 71	736 / 632 / 73	887 / 773 / 59	641 / 508 / 42	765 / 631 / 34	628 / 628 / 57	761 / 780 / 47	777 / 724 / 81	918 / 867 / 64	796 / 688 / 69	948 / 829 / 55	668 / 541 / 39	819 / 680 / 32	656 / 662 / 53	809 / 834 / 44	830 / 777 / 76	1003 / 951 / 62	852 / 739 / 65	1038 / 911 / 53
	3	582 / 715 / 33	688 / 864 / 27	669 / 664 / 53	826 / 837 / 44	847 / 783 / 76	1023 / 959 / 62	843 / 721 / 63	1020 / 883 / 51	607 / 752 / 30	730 / 923 / 25	722 / 722 / 50	882 / 898 / 41	878 / 816 / 69	1082 / 1017 / 57	905 / 778 / 59	1124 / 976 / 49	645 / 804 / 29	765 / 970 / 23	770 / 775 / 47	929 / 950 / 38	962 / 897 / 66	1127 / 1062 / 52	959 / 827 / 55	1175 / 1022 / 45
Wind Speed [mph]		170								180															
15	1	585 / 462 / 39	714 / 583 / 32	597 / 580 / 53	717 / 716 / 44	728 / 663 / 59	876 / 812 / 48	724 / 612 / 53	901 / 774 / 45	624 / 498 / 37	756 / 622 / 31	619 / 607 / 50	755 / 758 / 41	769 / 705 / 56	914 / 851 / 45	765 / 650 / 50	943 / 812 / 42	ASCE Group Zone							
	2	714 / 583 / 32	867 / 724 / 27	696 / 708 / 42	850 / 880 / 35	876 / 823 / 48	1043 / 993 / 38	901 / 785 / 45	1084 / 953 / 36	756 / 622 / 31	908 / 763 / 25	732 / 748 / 40	883 / 917 / 32	914 / 863 / 45	1119 / 1067 / 37	943 / 824 / 42	1165 / 1027 / 35	Panal Angle							
	3	676 / 849 / 23	825 / 1051 / 19	812 / 822 / 37	966 / 992 / 30	1006 / 942 / 42	1213 / 1145 / 34	1042 / 901 / 39	1268 / 1105 / 32	729 / 919 / 23	883 / 1128 / 18	847 / 862 / 35	1036 / 1066 / 29	1040 / 976 / 38	1293 / 1224 / 32	1080 / 936 / 36	1291 / 1127 / 29	Mono Slope							
20	1	616 / 462 / 44	714 / 583 / 37	602 / 580 / 63	717 / 716 / 52	728 / 663 / 73	876 / 812 / 59	724 / 612 / 62	901 / 774 / 52	637 / 498 / 43	756 / 622 / 35	619 / 607 / 59	755 / 758 / 49	769 / 705 / 69	914 / 851 / 55	765 / 650 / 59	943 / 812 / 49	0 - 7.5							
	2	714 / 583 / 37	867 / 724 / 30	696 / 708 / 50	850 / 880 / 41	876 / 823 / 59	1043 / 993 / 47	901 / 785 / 52	1084 / 953 / 42	756 / 622 / 35	908 / 763 / 29	732 / 748 / 47	883 / 917 / 38	914 / 863 / 55	1119 / 1067 / 45	943 / 824 / 49	1165 / 1027 / 40	2 = 2							
	3	676 / 849 / 27	825 / 1051 / 22	812 / 822 / 44	966 / 992 / 36	1006 / 942 / 51	1213 / 1145 / 42	1042 / 901 / 45	1268 / 1105 / 37	729 / 919 / 26	883 / 1128 / 21	847 / 862 / 41	1036 / 1066 / 34	1040 / 976 / 47	1293 / 1224 / 40	1080 / 936 / 42	1291 / 1127 / 34	3 = 3							
25	1	616 / 462 / 44	714 / 583 / 37	602 / 580 / 63	717 / 716 / 52	728 / 663 / 88	876 / 812 / 71	724 / 612 / 73	901 / 774 / 61	637 / 498 / 43	756 / 622 / 35	619 / 607 / 59	755 / 758 / 49	769 / 705 / 83	914 / 851 / 66	765 / 650 / 69	943 / 812 / 57	7.5 - 15							
	2	714 / 583 / 37	867 / 724 / 30	696 / 708 / 50	850 / 880 / 41	876 / 823 / 71	1043 / 993 / 57	901 / 785 / 61	1084 / 953 / 49	756 / 622 / 35	908 / 763 / 29	732 / 748 / 47	883 / 917 / 38	914 / 863 / 55	1119 / 1067 / 45	943 / 824 / 57	1165 / 1027 / 47	2 = 2							
	3	676 / 849 / 27	825 / 1051 / 22	812 / 822 / 44	966 / 992 / 36	1006 / 942 / 62	1213 / 1145 / 50	1042 / 901 / 53	1268 / 1105 / 43	729 / 919 / 26	883 / 1128 / 21	847 / 862 / 41	1036 / 1066 / 34	1040 / 976 / 57	1293 / 1224 / 48	1080 / 936 / 49	1291 / 1127 / 40	3 = 3							
Wind Speed [mph]		190								200															
15	1	645 / 520 / 35	794 / 657 / 29	653 / 644 / 47	787 / 795 / 39	806 / 742 / 53	980 / 916 / 43	826 / 705 / 49	977 / 844 / 39	678 / 550 / 33	827 / 688 / 27	682 / 678 / 45	814 / 825 / 36	836 / 774 / 50	1004 / 941 / 40	860 / 736 / 46	1041 / 901 / 38	ASCE Group Zone							
	2	794 / 657 / 29	942 / 795 / 23	787 / 809 / 39	944 / 984 / 31	980 / 928 / 43	1191 / 1139 / 35	977 / 856 / 39	1188 / 1050 / 32	827 / 688 / 27	1005 / 850 / 23	814 / 840 / 36	1002 / 1048 / 30	1004 / 953 / 40	1198 / 1148 / 32	1041 / 914 / 38	1256 / 1111 / 30	Panal Angle							
	3	750 / 950 / 21	893 / 1144 / 17	908 / 927 / 34	1102 / 1138 / 28	1108 / 1043 / 37	1367 / 1296 / 31	1154 / 1002 / 35	1365 / 1193 / 28	796 / 1011 / 20	938 / 1205 / 16	930 / 952 / 31	1109 / 1147 / 25	1173 / 1106 / 35	1434 / 1361 / 29	1224 / 1065 / 33	1432 / 1253 / 26	Mono Slope							
20	1	645 / 520 / 40	794 / 657 / 33	653 / 644 / 56	787 / 795 / 46	806 / 742 / 65	980 / 916 / 53	826 / 705 / 57	977 / 844 / 45	678 / 550 / 38	827 / 688 / 31	682 / 678 / 53	814 / 825 / 43	836 / 774 / 61	1004 / 941 / 49	860 / 736 / 54	1041 / 901 / 44	0 - 7.5							
	2	794 / 657 / 33	942 / 795 / 27	787 / 809 / 46	944 / 984 / 37	980 / 928 / 53	1191 / 1139 / 44	977 / 856 / 45	1188 / 1050 / 37	827 / 688 / 31	1005 / 850 / 26	814 / 840 / 43	1002 / 1048 / 36	1004 / 953 / 49	1198 / 1148 / 40	1041 / 914 / 44	1256 / 1111 / 35	2 = 2							
	3	750 / 950 / 24	893 / 1144 / 19	908 / 927 / 40	1102 / 1138 / 33	1108 / 1043 / 45	1367 / 1296 / 38	1154 / 1002 / 40	1365 / 1193 / 32	796 / 1011 / 23	938 / 1205 / 18	930 / 952 / 37	1109 / 1147 / 30	1173 / 1106 / 44	1434 / 1361 / 36	1224 / 1065 / 39	1432 / 1253 / 30	3 = 3							
25	1	645 / 520 / 40	794 / 657 / 33	653 / 644 / 56	787 / 795 / 46	806 / 742 / 78	980 / 916 / 64	826 / 705 / 67	977 / 844 / 53	678 / 550 / 38	827 / 688 / 31	682 / 678 / 53	814 / 825 / 43	836 / 774 / 73	1004 / 941 / 59	860 / 736 / 63	1041 / 901 / 51	7.5 - 15							
	2	794 / 657 / 33	942 / 795 / 27	787 / 809 / 46	944 / 984 / 37	980 / 928 / 64	1191 / 1139 / 52	977 / 856 / 53	1188 / 1050 / 43	827 / 688 / 31	1005 / 850 / 26	814 / 840 / 43	1002 / 1048 / 36	1004 / 953 / 59	1198 / 1148 / 48	1041 / 914 / 51	1256 / 1111 / 41	2 = 2							
	3	750 / 950 / 24	893 / 1144 / 19	908 / 927 / 40	1102 / 1138 / 33	1108 / 1043 / 55	1367 / 1296 / 45	1154 / 1002 / 47	1365 / 1193 / 38	796 / 1011 / 23	938 / 1205 / 18	930 / 952 / 37	1109 / 1147 / 30	1173 / 1106 / 52	1434 / 1361 / 43	1224 / 1065 / 45	1432 / 1253 / 36	3 = 3							

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs																		
Wind Speed [mph]		95								100								105										
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45				
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge			
30	1	525 / 240 / 62	567 / 331 / 55	531 / 330 / 97	582 / 449 / 86	544 / 408 / 155	597 / 523 / 130	484 / 385 / 128	586 / 483 / 106	529 / 256 / 60	585 / 357 / 54	536 / 351 / 94	590 / 475 / 83	555 / 432 / 149	617 / 549 / 124	508 / 407 / 124	611 / 507 / 101	541 / 276 / 59	591 / 376 / 52	551 / 378 / 92	598 / 499 / 80	564 / 455 / 144	639 / 572 / 119	530 / 429 / 119	634 / 528 / 97			
	2	567 / 331 / 55	627 / 443 / 48	582 / 458 / 86	611 / 568 / 70	597 / 530 / 130	706 / 650 / 105	586 / 490 / 106	720 / 616 / 88	585 / 357 / 54	637 / 466 / 46	590 / 484 / 83	619 / 595 / 67	617 / 556 / 124	729 / 674 / 100	611 / 514 / 101	744 / 640 / 83	591 / 376 / 52	659 / 498 / 45	586 / 498 / 78	626 / 618 / 64	639 / 580 / 119	769 / 715 / 97	634 / 536 / 97	765 / 660 / 79			
	3	535 / 548 / 44	570 / 680 / 36	604 / 528 / 75	656 / 648 / 61	680 / 613 / 113	810 / 746 / 91	675 / 566 / 92	806 / 688 / 74	539 / 573 / 42	573 / 703 / 34	613 / 554 / 72	677 / 673 / 57	704 / 639 / 108	830 / 767 / 86	700 / 589 / 88	853 / 730 / 72	556 / 611 / 41	602 / 744 / 33	620 / 578 / 68	714 / 713 / 56	725 / 661 / 102	873 / 810 / 83	741 / 626 / 86	898 / 771 / 70			
	35	1	549 / 232 / 66	593 / 325 / 59	552 / 319 / 106	594 / 433 / 94	563 / 401 / 174	621 / 523 / 149	484 / 385 / 144	586 / 483 / 119	560 / 252 / 65	598 / 344 / 57	565 / 345 / 105	612 / 466 / 92	572 / 424 / 167	633 / 549 / 142	508 / 407 / 139	611 / 507 / 114	561 / 267 / 62	614 / 369 / 56	568 / 365 / 101	630 / 499 / 90	591 / 455 / 164	642 / 572 / 136	530 / 429 / 134	634 / 528 / 109		
		2	593 / 325 / 59	646 / 434 / 52	594 / 441 / 94	639 / 568 / 80	621 / 530 / 149	706 / 650 / 120	586 / 490 / 119	720 / 616 / 99	598 / 344 / 57	668 / 466 / 51	612 / 474 / 92	646 / 595 / 76	633 / 556 / 142	729 / 674 / 114	611 / 514 / 114	744 / 640 / 94	614 / 369 / 56	689 / 498 / 49	617 / 498 / 89	652 / 618 / 72	642 / 580 / 136	769 / 715 / 111	634 / 536 / 109	765 / 660 / 89		
		3	564 / 548 / 48	594 / 680 / 40	634 / 528 / 85	670 / 648 / 69	680 / 613 / 130	810 / 746 / 104	675 / 566 / 104	806 / 688 / 84	568 / 573 / 46	596 / 703 / 37	642 / 554 / 81	677 / 673 / 65	704 / 639 / 123	830 / 767 / 98	700 / 589 / 99	853 / 730 / 81	583 / 611 / 45	614 / 744 / 36	648 / 578 / 78	714 / 713 / 63	725 / 661 / 117	873 / 810 / 95	741 / 626 / 96	898 / 771 / 79		
	40	1	570 / 224 / 111	607 / 313 / 100	570 / 308 / 150	615 / 424 / 134	581 / 394 / 197	646 / 523 / 171	484 / 385 / 161	586 / 483 / 133	580 / 243 / 109	621 / 337 / 98	581 / 333 / 147	632 / 457 / 132	588 / 416 / 189	656 / 549 / 164	508 / 407 / 155	611 / 507 / 127	589 / 262 / 108	636 / 362 / 96	593 / 358 / 145	649 / 489 / 129	606 / 446 / 186	664 / 572 / 157	530 / 429 / 150	634 / 528 / 121		
		2	607 / 313 / 100	664 / 425 / 88	615 / 432 / 134	667 / 568 / 116	646 / 530 / 171	706 / 650 / 139	586 / 490 / 133	720 / 616 / 110	621 / 337 / 98	684 / 456 / 87	632 / 465 / 132	673 / 595 / 111	656 / 556 / 164	729 / 674 / 131	611 / 514 / 127	744 / 640 / 105	636 / 362 / 96	704 / 487 / 85	649 / 498 / 129	677 / 618 / 105	664 / 580 / 157	769 / 715 / 128	634 / 536 / 121	765 / 660 / 99		
		3	594 / 548 / 85	619 / 680 / 69	664 / 528 / 124	694 / 648 / 100	686 / 613 / 149	810 / 746 / 120	675 / 566 / 116	806 / 688 / 93	596 / 573 / 81	619 / 703 / 65	671 / 554 / 119	699 / 673 / 95	704 / 639 / 142	830 / 767 / 113	700 / 589 / 110	853 / 730 / 90	611 / 611 / 79	636 / 744 / 64	675 / 578 / 113	722 / 713 / 92	725 / 661 / 135	873 / 810 / 110	741 / 626 / 107	898 / 771 / 88		
30	1	554 / 297 / 58	608 / 402 / 51	555 / 398 / 89	604 / 521 / 76	573 / 476 / 138	659 / 593 / 113	551 / 449 / 115	670 / 561 / 95	556 / 312 / 56	613 / 420 / 49	569 / 424 / 87	609 / 542 / 73	580 / 496 / 133	693 / 627 / 111	571 / 468 / 110	689 / 579 / 90											
	2	608 / 402 / 51	666 / 518 / 43	591 / 520 / 75	636 / 638 / 61	659 / 601 / 113	785 / 732 / 91	670 / 569 / 95	805 / 696 / 77	613 / 420 / 49	671 / 535 / 41	596 / 540 / 72	668 / 674 / 59	676 / 620 / 108	822 / 769 / 89	689 / 587 / 90	844 / 732 / 74											
	3	558 / 632 / 39	631 / 784 / 32	626 / 600 / 65	729 / 731 / 53	743 / 680 / 97	914 / 850 / 80	760 / 645 / 81	910 / 783 / 65	558 / 650 / 37	638 / 796 / 30	629 / 618 / 62	763 / 768 / 51	779 / 715 / 94	953 / 889 / 78	797 / 679 / 79	950 / 819 / 63											
	35	1	572 / 286 / 61	630 / 394 / 55	581 / 391 / 99	635 / 521 / 87	599 / 476 / 158	659 / 593 / 130	551 / 449 / 129	670 / 561 / 107	583 / 306 / 60	633 / 411 / 53	594 / 417 / 98	639 / 542 / 83	605 / 496 / 152	693 / 627 / 126	571 / 468 / 124	689 / 579 / 102										
		2	630 / 394 / 55	695 / 518 / 47	622 / 520 / 85	655 / 638 / 69	659 / 601 / 130	785 / 732 / 104	670 / 569 / 107	805 / 696 / 86	633 / 411 / 53	698 / 535 / 45	625 / 540 / 81	674 / 674 / 67	676 / 620 / 123	822 / 769 / 101	689 / 587 / 102	844 / 732 / 84										
		3	584 / 632 / 43	631 / 784 / 35	652 / 600 / 74	729 / 731 / 60	743 / 680 / 111	914 / 850 / 92	760 / 645 / 91	910 / 783 / 74	583 / 650 / 41	638 / 796 / 33	654 / 618 / 71	763 / 768 / 58	779 / 715 / 108	953 / 889 / 89	797 / 679 / 89	950 / 819 / 71										
	40	1	599 / 281 / 106	650 / 386 / 94	605 / 384 / 142	652 / 511 / 124	625 / 476 / 182	670 / 593 / 149	551 / 449 / 144	670 / 561 / 119	609 / 301 / 104	665 / 411 / 92	605 / 401 / 137	668 / 542 / 121	630 / 496 / 175	693 / 627 / 146	571 / 468 / 138	689 / 579 / 113										
		2	650 / 386 / 94	724 / 518 / 83	652 / 520 / 124	679 / 638 / 100	670 / 601 / 149	785 / 732 / 120	670 / 569 / 119	805 / 696 / 96	665 / 411 / 92	726 / 535 / 79	654 / 540 / 119	698 / 674 / 98	676 / 620 / 142	822 / 769 / 117	689 / 587 / 113	844 / 732 / 93										
		3	610 / 632 / 75	653 / 784 / 62	678 / 600 / 108	729 / 731 / 87	743 / 680 / 128	914 / 850 / 106	760 / 645 / 102	910 / 783 / 82	608 / 650 / 71	647 / 796 / 58	679 / 618 / 103	763 / 768 / 84	779 / 715 / 124	953 / 889 / 102	797 / 679 / 99	950 / 819 / 79										
30	1	568 / 332 / 55	629 / 445 / 48	583 / 451 / 86	612 / 561 / 70	599 / 525 / 130	708 / 644 / 105	589 / 485 / 106	723 / 609 / 88	556 / 312 / 56	613 / 420 / 49	569 / 424 / 87	609 / 542 / 73	580 / 496 / 133	693 / 627 / 111	571 / 468 / 110	689 / 579 / 90											
	2	629 / 445 / 48	694 / 565 / 40	612 / 571 / 70	679 / 688 / 56	708 / 653 / 105	857 / 804 / 86	723 / 618 / 88	881 / 766 / 72	613 / 420 / 49	671 / 535 / 41	596 / 540 / 72	668 / 674 / 59	676 / 620 / 108	822 / 769 / 89	689 / 587 / 90	844 / 732 / 74											
	3	572 / 683 / 36	664 / 831 / 29	659 / 651 / 61	795 / 803 / 49	813 / 749 / 91	990 / 925 / 75	809 / 691 / 74	986 / 852 / 61	558 / 650 / 37	638 / 796 / 30	629 / 618 / 62	763 / 768 / 51	779 / 715 / 94	953 / 889 / 78	797 / 679 / 79	950 / 819 / 63											
	35	1	595 / 326 / 59	648 / 436 / 52	595 / 435 / 94	641 / 561 / 80	623 / 525 / 149	708 / 644 / 120	589 / 485 / 119	723 / 609 / 99	583 / 306 / 60	633 / 411 / 53	594 / 417 / 98	639 / 542 / 83	605 / 496 / 152	693 / 627 / 126	571 / 468 / 124	689 / 579 / 102										
		2	648 / 436 / 52	718 / 565 / 44	641 / 571 / 80	679 / 688 / 63	708 / 653 / 120	857 / 804 / 98	723 / 618 / 99	881 / 766 / 81	633 / 411 / 53	698 / 535 / 45	625 / 540 / 81	674 / 674 / 67	676 / 620 / 123	822 / 769 / 101	689 / 587 / 102	844 / 732 / 84										
		3	596 / 683 / 40	664 / 831 / 32	672 / 651 / 69	795 / 803 / 56	813 / 749 / 104	990 / 925 / 86	809 / 691 / 84	986 / 852 / 69	583 / 650 / 41	638 / 796 / 33	654 / 618 / 71	763 / 768 / 58	779 / 715 / 108	953 / 889 / 89	797 / 679 / 89	950 / 819 / 71										
	40	1	608 / 314 / 100	665 / 426 / 88	616 / 426 / 134	669 / 561 / 116	647 / 525 / 171	708 / 644 / 139	589 / 485 / 133	723 / 609 / 110	609 / 301 / 104	665 / 411 / 92	605 / 401 / 137	668 / 542 / 121	630 / 496 / 175	693 / 627 / 146	571 / 468 / 138	689 / 579 / 113										
		2	665 / 426 / 88	745 / 565 / 77	669 / 571 / 116	696 / 688 / 92	708 / 653 / 139	857 / 804 / 113	723 / 618 / 110	881 / 766 / 90	665 / 411 / 92	726 / 535 / 79	654 / 540 / 119	698 / 674 / 98	676 / 620 / 142	822 / 769 / 117	689 / 587 / 113	844 / 732 / 93										
		3	620 / 683 / 69	664 / 831 / 56	696 / 651 / 100	795 / 803 / 82	813 / 749 / 120	990 / 925 / 99	809 / 691 / 93	986 / 852 / 76	608 / 650 / 71	647 / 796 / 58	679 / 618 / 103	763 / 768 / 84	779 / 715 / 124	953 / 889 / 102	797 / 679 / 99	950 / 819 / 79										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	581 / 352 / 54	645 / 470 / 47	586 / 469 / 83	614 / 577 / 67	610 / 542 / 124	740 / 675 / 102	604 / 500 / 101	736 / 623 / 83	605 / 393 / 52	662 / 508 / 44	601 / 510 / 78	628 / 617 / 62	649 / 583 / 116	777 / 714 / 94	644 / 538 / 95	796 / 678 / 79	616 / 424 / 49	675 / 541 / 41	600 / 536 / 72	674 / 668 / 59	682 / 618 / 108	830 / 766 / 89	695 / 585 / 90	852 / 728 / 74
	2	645 / 470 / 47	707 / 578 / 38	614 / 587 / 67	708 / 720 / 54	720 / 666 / 100	891 / 838 / 83	736 / 632 / 83	887 / 773 / 68	662 / 508 / 44	765 / 631 / 36	628 / 628 / 62	761 / 780 / 51	777 / 724 / 94	918 / 867 / 75	796 / 688 / 79	948 / 829 / 63	675 / 541 / 41	819 / 680 / 34	656 / 662 / 57	809 / 834 / 48	830 / 777 / 89	1003 / 951 / 72	852 / 739 / 74	1038 / 911 / 61
	3	585 / 715 / 35	688 / 864 / 28	669 / 664 / 57	826 / 837 / 48	847 / 783 / 89	1023 / 959 / 72	843 / 721 / 72	1020 / 883 / 59	607 / 752 / 32	730 / 923 / 26	722 / 722 / 54	882 / 898 / 45	878 / 816 / 80	1082 / 1017 / 67	905 / 778 / 68	1124 / 976 / 56	645 / 804 / 30	765 / 970 / 24	770 / 775 / 51	929 / 950 / 42	962 / 897 / 78	1127 / 1062 / 61	959 / 827 / 63	1175 / 1022 / 52
	1	606 / 346 / 58	663 / 460 / 51	608 / 460 / 92	641 / 577 / 76	627 / 542 / 142	740 / 675 / 117	604 / 500 / 114	736 / 623 / 94	616 / 378 / 55	692 / 508 / 48	632 / 510 / 89	653 / 617 / 71	649 / 583 / 133	777 / 714 / 108	644 / 538 / 107	796 / 678 / 89	636 / 415 / 53	703 / 541 / 45	629 / 536 / 81	679 / 668 / 67	682 / 618 / 123	830 / 766 / 101	695 / 585 / 102	852 / 728 / 84
	2	663 / 460 / 51	717 / 578 / 42	641 / 587 / 76	708 / 720 / 62	720 / 666 / 114	891 / 838 / 95	736 / 632 / 94	887 / 773 / 76	692 / 508 / 48	765 / 631 / 40	653 / 628 / 71	761 / 780 / 58	777 / 724 / 108	918 / 867 / 86	796 / 688 / 89	948 / 829 / 71	703 / 541 / 45	819 / 680 / 37	660 / 662 / 65	809 / 834 / 54	830 / 777 / 101	1003 / 951 / 82	852 / 739 / 84	1038 / 911 / 69
	3	609 / 715 / 39	688 / 864 / 31	670 / 664 / 65	826 / 837 / 54	847 / 783 / 101	1023 / 959 / 82	843 / 721 / 81	1020 / 883 / 66	613 / 752 / 35	730 / 923 / 29	722 / 722 / 62	882 / 898 / 51	878 / 816 / 92	1082 / 1017 / 76	905 / 778 / 76	1124 / 976 / 64	645 / 804 / 33	765 / 970 / 27	770 / 775 / 58	929 / 950 / 47	962 / 897 / 89	1127 / 1062 / 70	959 / 827 / 71	1175 / 1022 / 59
	1	617 / 333 / 98	679 / 450 / 87	628 / 451 / 132	668 / 577 / 111	650 / 542 / 164	740 / 675 / 135	604 / 500 / 127	736 / 623 / 105	636 / 370 / 94	706 / 496 / 83	650 / 500 / 126	679 / 617 / 103	667 / 583 / 153	777 / 714 / 124	644 / 538 / 119	796 / 678 / 99	655 / 407 / 90	731 / 541 / 79	657 / 536 / 119	703 / 668 / 98	682 / 618 / 142	830 / 766 / 117	695 / 585 / 113	852 / 728 / 93
	2	679 / 450 / 87	743 / 578 / 73	668 / 587 / 111	712 / 720 / 90	720 / 666 / 131	891 / 838 / 110	736 / 632 / 105	887 / 773 / 85	706 / 496 / 83	775 / 631 / 69	679 / 628 / 103	761 / 780 / 84	777 / 724 / 99	918 / 867 / 99	796 / 688 / 99	948 / 829 / 79	731 / 541 / 79	819 / 680 / 65	684 / 662 / 95	809 / 834 / 79	830 / 777 / 117	1003 / 951 / 95	852 / 739 / 93	1038 / 911 / 76
	3	632 / 715 / 67	688 / 864 / 54	693 / 664 / 95	826 / 837 / 79	847 / 783 / 117	1023 / 959 / 95	843 / 721 / 90	1020 / 883 / 74	635 / 752 / 62	730 / 923 / 50	722 / 722 / 90	882 / 898 / 74	878 / 816 / 106	1082 / 1017 / 88	905 / 778 / 85	1124 / 976 / 71	652 / 804 / 58	765 / 970 / 46	770 / 775 / 84	929 / 950 / 69	962 / 897 / 102	1127 / 1062 / 80	959 / 827 / 79	1175 / 1022 / 65
Wind Speed [mph]		170								180															
30	1	638 / 462 / 47	714 / 583 / 39	621 / 580 / 68	717 / 716 / 56	728 / 663 / 102	876 / 812 / 83	724 / 612 / 83	901 / 774 / 70	659 / 498 / 45	756 / 622 / 37	626 / 607 / 64	755 / 758 / 53	769 / 705 / 97	914 / 851 / 78	765 / 650 / 79	943 / 812 / 65	ASCE Group Zone							
	2	714 / 583 / 39	867 / 724 / 32	696 / 708 / 54	850 / 880 / 45	876 / 823 / 83	1043 / 993 / 67	901 / 785 / 70	1084 / 953 / 56	756 / 622 / 37	908 / 763 / 30	732 / 748 / 51	883 / 917 / 42	914 / 863 / 78	1119 / 1067 / 64	943 / 824 / 65	1165 / 1027 / 54	Panal Angle							
	3	676 / 849 / 28	825 / 1051 / 23	812 / 822 / 48	966 / 992 / 38	1006 / 942 / 72	1213 / 1145 / 58	1042 / 901 / 61	1268 / 1105 / 50	729 / 919 / 27	883 / 1128 / 22	847 / 862 / 45	1036 / 1066 / 37	1040 / 976 / 67	1293 / 1224 / 56	1080 / 936 / 56	1291 / 1127 / 45	Mono Slope							
	1	656 / 452 / 51	727 / 583 / 43	649 / 580 / 78	717 / 716 / 63	728 / 663 / 117	876 / 812 / 95	724 / 612 / 94	901 / 774 / 79	689 / 498 / 49	756 / 622 / 41	652 / 607 / 72	755 / 758 / 60	769 / 705 / 111	914 / 851 / 89	765 / 650 / 89	943 / 812 / 74	0 - 7.5							
	2	727 / 583 / 43	867 / 724 / 35	696 / 708 / 62	850 / 880 / 51	876 / 823 / 95	1043 / 993 / 76	901 / 785 / 79	1084 / 953 / 64	756 / 622 / 41	908 / 763 / 36	732 / 748 / 58	883 / 917 / 47	914 / 863 / 89	1119 / 1067 / 73	943 / 824 / 74	1165 / 1027 / 61	7.5 - 15							
	3	676 / 849 / 31	825 / 1051 / 26	812 / 822 / 54	966 / 992 / 44	1006 / 942 / 82	1213 / 1145 / 67	1042 / 901 / 69	1268 / 1105 / 56	729 / 919 / 30	883 / 1128 / 24	847 / 862 / 51	1036 / 1066 / 42	1040 / 976 / 76	1293 / 1224 / 63	1080 / 936 / 64	1291 / 1127 / 51	15 - 30							
	1	687 / 452 / 88	754 / 583 / 75	677 / 580 / 113	724 / 716 / 92	728 / 663 / 135	876 / 812 / 110	724 / 612 / 105	901 / 774 / 88	704 / 487 / 85	774 / 622 / 71	677 / 607 / 105	755 / 758 / 87	769 / 705 / 128	914 / 851 / 102	765 / 650 / 99	943 / 812 / 82	30 - 45							
	2	754 / 583 / 75	867 / 724 / 62	703 / 708 / 90	850 / 880 / 74	876 / 823 / 110	1043 / 993 / 88	901 / 785 / 88	1084 / 953 / 71	774 / 622 / 71	908 / 763 / 58	732 / 748 / 84	883 / 917 / 69	914 / 863 / 102	1119 / 1067 / 84	943 / 824 / 82	1165 / 1027 / 68	1 = 1							
	3	676 / 849 / 54	825 / 1051 / 44	812 / 822 / 79	966 / 992 / 63	1006 / 942 / 95	1213 / 1145 / 77	1042 / 901 / 76	1268 / 1105 / 62	729 / 919 / 52	883 / 1128 / 43	847 / 862 / 74	1036 / 1066 / 61	1040 / 976 / 88	1293 / 1224 / 73	1080 / 936 / 71	1291 / 1127 / 57	2 = 2							
Wind Speed [mph]		190								200															
30	1	662 / 520 / 42	794 / 657 / 35	653 / 644 / 61	787 / 795 / 49	806 / 742 / 91	980 / 916 / 75	826 / 705 / 77	977 / 844 / 61	678 / 550 / 40	827 / 688 / 33	682 / 678 / 57	814 / 825 / 46	836 / 774 / 86	1004 / 941 / 69	860 / 736 / 72	1041 / 901 / 59	ASCE Group Zone							
	2	794 / 657 / 35	942 / 795 / 28	787 / 809 / 49	944 / 984 / 40	980 / 928 / 75	1191 / 1139 / 61	977 / 856 / 50	1188 / 1050 / 50	827 / 688 / 33	1005 / 850 / 27	814 / 840 / 46	1002 / 1048 / 38	1004 / 953 / 69	1198 / 1148 / 56	1041 / 914 / 59	1256 / 1111 / 48	Panal Angle							
	3	750 / 950 / 25	893 / 1144 / 20	908 / 927 / 43	1102 / 1138 / 35	1108 / 1043 / 64	1367 / 1296 / 53	1154 / 1002 / 54	1365 / 1193 / 43	796 / 1011 / 24	938 / 1205 / 19	930 / 952 / 40	1109 / 1147 / 32	1173 / 1106 / 61	1434 / 1361 / 50	1224 / 1065 / 52	1432 / 1253 / 41	Mono Slope							
	1	691 / 520 / 46	794 / 657 / 39	667 / 644 / 69	787 / 795 / 56	806 / 742 / 104	980 / 916 / 86	826 / 705 / 86	977 / 844 / 69	705 / 550 / 44	827 / 688 / 36	682 / 678 / 65	814 / 825 / 53	836 / 774 / 98	1004 / 941 / 79	860 / 736 / 81	1041 / 901 / 66	0 - 7.5							
	2	794 / 657 / 39	942 / 795 / 31	787 / 809 / 56	944 / 984 / 45	980 / 928 / 86	1191 / 1139 / 70	977 / 856 / 69	1188 / 1050 / 56	827 / 688 / 36	1005 / 850 / 30	814 / 840 / 53	1002 / 1048 / 44	1004 / 953 / 79	1198 / 1148 / 63	1041 / 914 / 66	1256 / 1111 / 54	7.5 - 15							
	3	750 / 950 / 28	893 / 1144 / 22	908 / 927 / 49	1102 / 1138 / 40	1108 / 1043 / 73	1367 / 1296 / 60	1154 / 1002 / 61	1365 / 1193 / 48	796 / 1011 / 27	938 / 1205 / 21	930 / 952 / 45	1109 / 1147 / 36	1173 / 1106 / 70	1434 / 1361 / 57	1224 / 1065 / 59	1432 / 1253 / 46	15 - 30							
	1	719 / 520 / 81	794 / 657 / 67	692 / 644 / 100	787 / 795 / 82	806 / 742 / 120	980 / 916 / 99	826 / 705 / 96	977 / 844 / 76	732 / 550 / 77	827 / 688 / 64	703 / 678 / 95	814 / 825 / 77	836 / 774 / 113	1004 / 941 / 91	860 / 736 / 90	1041 / 901 / 74	30 - 45							
	2	794 / 657 / 67	942 / 795 / 54	787 / 809 / 82	944 / 984 / 66	980 / 928 / 99	1191 / 1139 / 80	977 / 856 / 76	1188 / 1050 / 62	827 / 688 / 64	1005 / 850 / 52	814 / 840 / 77	1002 / 1048 / 63	1004 / 953 / 91	1198 / 1148 / 73	1041 / 914 / 74	1256 / 1111 / 60	1 = 1							
	3	750 / 950 / 48	893 / 1144 / 39	908 / 927 / 71	1102 / 1138 / 58	1108 / 1043 / 84	1367 / 1296 / 70	1154 / 1002 / 68	1365 / 1193 / 54	796 / 1011 / 46	938 / 1205 / 37	930 / 952 / 66	1109 / 1147 / 53	1173 / 1106 / 80	1434 / 1361 / 66	1224 / 1065 / 65	1432 / 1253 / 51	2 = 2							

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge															
45	1	599 / 220 / 120	630 / 307 / 107	596 / 303 / 162	635 / 416 / 145	597 / 386 / 213	656 / 512 / 185	484 / 385 / 177	586 / 483 / 146	597 / 235 / 116	643 / 330 / 105	606 / 327 / 159	651 / 447 / 209	615 / 416 / 209	679 / 549 / 181	508 / 407 / 171	611 / 507 / 140	605 / 253 / 113	656 / 354 / 103	605 / 345 / 153	666 / 479 / 139	620 / 437 / 201	686 / 572 / 173	530 / 429 / 165	634 / 528 / 134	
	2	630 / 307 / 107	695 / 425 / 97	635 / 424 / 145	696 / 568 / 127	656 / 519 / 185	712 / 650 / 153	586 / 490 / 146	720 / 616 / 121	643 / 330 / 105	698 / 446 / 93	651 / 456 / 142	700 / 595 / 122	679 / 556 / 181	729 / 674 / 145	611 / 514 / 140	744 / 640 / 115	656 / 354 / 103	717 / 476 / 90	666 / 488 / 139	703 / 618 / 116	686 / 580 / 173	769 / 715 / 141	634 / 536 / 134	765 / 660 / 109	
	3	624 / 548 / 93	643 / 680 / 76	680 / 517 / 133	719 / 648 / 110	707 / 613 / 165	810 / 746 / 133	675 / 566 / 128	806 / 688 / 103	624 / 573 / 88	642 / 703 / 72	699 / 554 / 130	722 / 673 / 104	716 / 639 / 157	830 / 767 / 125	700 / 589 / 121	853 / 730 / 100	639 / 611 / 86	659 / 744 / 70	703 / 578 / 124	745 / 713 / 101	725 / 661 / 149	873 / 810 / 121	741 / 626 / 118	898 / 771 / 97	
	50	1	615 / 213 / 126	651 / 301 / 114	609 / 292 / 170	654 / 408 / 154	613 / 379 / 228	680 / 512 / 202	493 / 385 / 194	586 / 483 / 160	622 / 230 / 123	663 / 324 / 112	618 / 315 / 167	668 / 438 / 151	629 / 408 / 223	687 / 536 / 193	508 / 407 / 187	611 / 507 / 153	630 / 248 / 121	675 / 347 / 110	627 / 339 / 164	683 / 469 / 148	633 / 429 / 215	709 / 572 / 188	530 / 429 / 180	634 / 528 / 146
		2	651 / 301 / 114	710 / 415 / 103	654 / 415 / 154	724 / 568 / 139	680 / 519 / 202	732 / 650 / 167	586 / 490 / 160	720 / 616 / 133	663 / 324 / 112	728 / 446 / 101	668 / 446 / 151	727 / 595 / 132	687 / 544 / 193	738 / 674 / 158	611 / 514 / 153	744 / 640 / 126	675 / 347 / 110	729 / 465 / 96	683 / 478 / 148	729 / 618 / 126	709 / 580 / 188	769 / 715 / 153	634 / 536 / 146	765 / 660 / 119
		3	654 / 548 / 101	667 / 680 / 82	694 / 505 / 142	743 / 648 / 120	728 / 613 / 180	810 / 746 / 145	675 / 566 / 139	806 / 688 / 112	653 / 573 / 96	665 / 703 / 78	712 / 542 / 139	746 / 673 / 114	736 / 639 / 171	830 / 767 / 136	700 / 589 / 133	853 / 730 / 109	667 / 611 / 94	681 / 744 / 76	731 / 578 / 136	767 / 713 / 110	741 / 661 / 162	873 / 810 / 132	741 / 626 / 129	898 / 771 / 105
	60	1	652 / 201 / 138	690 / 289 / 127	653 / 281 / 191	688 / 391 / 173	641 / 365 / 257	696 / 489 / 227	518 / 385 / 226	586 / 483 / 187	657 / 217 / 135	700 / 311 / 124	660 / 303 / 187	700 / 420 / 169	655 / 392 / 252	716 / 524 / 221	530 / 407 / 218	611 / 507 / 179	675 / 239 / 135	710 / 333 / 122	668 / 326 / 184	712 / 449 / 165	670 / 420 / 247	735 / 559 / 216	542 / 429 / 210	634 / 528 / 171
		2	690 / 289 / 127	737 / 397 / 114	688 / 398 / 173	745 / 543 / 154	696 / 496 / 227	771 / 650 / 196	586 / 490 / 187	720 / 616 / 155	700 / 311 / 124	752 / 425 / 111	700 / 428 / 169	763 / 580 / 151	716 / 531 / 221	775 / 674 / 185	611 / 514 / 179	744 / 640 / 147	710 / 333 / 122	767 / 454 / 109	712 / 457 / 165	780 / 618 / 147	735 / 567 / 216	800 / 715 / 180	634 / 536 / 171	765 / 660 / 139
		3	714 / 548 / 116	716 / 680 / 95	735 / 494 / 162	792 / 648 / 140	752 / 598 / 206	818 / 746 / 170	675 / 566 / 163	806 / 688 / 131	710 / 573 / 111	711 / 703 / 90	751 / 530 / 158	792 / 673 / 132	776 / 639 / 201	830 / 767 / 160	700 / 589 / 155	853 / 730 / 127	722 / 611 / 109	726 / 744 / 87	768 / 565 / 154	812 / 713 / 129	780 / 661 / 191	873 / 810 / 155	741 / 626 / 151	898 / 771 / 123
45	1	614 / 271 / 111	670 / 379 / 101	616 / 369 / 150	668 / 500 / 133	637 / 467 / 197	692 / 593 / 165	551 / 449 / 159	670 / 561 / 131	622 / 290 / 109	683 / 403 / 99	626 / 394 / 147	683 / 530 / 130	641 / 486 / 189	713 / 627 / 161	571 / 468 / 152	689 / 579 / 124									
	2	670 / 379 / 101	736 / 506 / 88	668 / 509 / 133	704 / 638 / 110	692 / 601 / 165	785 / 732 / 133	670 / 569 / 131	805 / 696 / 106	683 / 403 / 99	754 / 535 / 86	683 / 540 / 130	722 / 674 / 107	695 / 620 / 157	822 / 769 / 129	689 / 587 / 124	844 / 732 / 103									
	3	637 / 632 / 82	675 / 784 / 67	705 / 600 / 119	744 / 731 / 96	743 / 680 / 117	914 / 850 / 112	760 / 645 / 90	910 / 783 / 90	633 / 650 / 78	667 / 796 / 63	704 / 618 / 113	763 / 768 / 93	779 / 715 / 137	953 / 889 / 113	797 / 679 / 109	950 / 819 / 87									
	50	1	637 / 266 / 119	688 / 371 / 107	637 / 362 / 161	697 / 500 / 145	649 / 457 / 210	713 / 593 / 180	551 / 449 / 173	670 / 561 / 143	645 / 284 / 116	700 / 394 / 105	646 / 386 / 158	711 / 530 / 142	665 / 486 / 206	733 / 627 / 175	571 / 468 / 166	689 / 579 / 136								
		2	688 / 371 / 107	746 / 494 / 94	697 / 509 / 145	728 / 638 / 120	713 / 601 / 145	785 / 732 / 143	670 / 569 / 143	805 / 696 / 116	700 / 394 / 105	763 / 522 / 91	711 / 540 / 142	745 / 674 / 117	715 / 620 / 171	822 / 769 / 140	689 / 587 / 136	844 / 732 / 112								
		3	663 / 632 / 89	696 / 784 / 73	731 / 600 / 129	765 / 731 / 104	744 / 680 / 153	914 / 850 / 127	760 / 645 / 99	910 / 783 / 99	658 / 650 / 85	688 / 796 / 69	729 / 618 / 123	783 / 768 / 101	779 / 715 / 149	953 / 889 / 123	797 / 679 / 119	950 / 819 / 95								
	60	1	680 / 256 / 132	719 / 355 / 119	675 / 348 / 180	723 / 478 / 162	684 / 448 / 242	755 / 593 / 211	552 / 449 / 203	670 / 561 / 167	686 / 273 / 130	729 / 377 / 116	682 / 371 / 176	735 / 507 / 158	684 / 465 / 232	775 / 627 / 206	571 / 468 / 195	689 / 579 / 159								
		2	719 / 355 / 119	782 / 482 / 106	723 / 487 / 162	777 / 638 / 140	755 / 601 / 211	799 / 732 / 170	670 / 569 / 167	805 / 696 / 135	729 / 377 / 116	796 / 509 / 103	735 / 516 / 158	793 / 674 / 136	755 / 620 / 201	822 / 769 / 165	689 / 587 / 159	844 / 732 / 131								
		3	716 / 632 / 103	740 / 784 / 85	765 / 585 / 147	807 / 731 / 121	780 / 680 / 180	914 / 850 / 150	760 / 645 / 143	910 / 783 / 115	708 / 650 / 98	728 / 796 / 80	779 / 618 / 143	825 / 768 / 118	800 / 715 / 175	953 / 889 / 144	797 / 679 / 139	950 / 819 / 111								
45	1	631 / 308 / 107	696 / 426 / 97	637 / 418 / 145	697 / 561 / 127	657 / 514 / 185	714 / 644 / 153	589 / 485 / 146	723 / 609 / 121	622 / 290 / 109	683 / 403 / 99	626 / 394 / 147	683 / 530 / 130	641 / 486 / 189	713 / 627 / 161	571 / 468 / 152	689 / 579 / 124									
	2	696 / 426 / 97	772 / 565 / 84	697 / 571 / 127	718 / 688 / 101	714 / 653 / 153	857 / 804 / 125	723 / 618 / 121	881 / 766 / 100	683 / 403 / 99	754 / 535 / 86	683 / 540 / 130	722 / 674 / 107	695 / 620 / 157	822 / 769 / 129	689 / 587 / 124	844 / 732 / 103									
	3	645 / 683 / 76	680 / 831 / 61	721 / 651 / 110	795 / 803 / 90	813 / 749 / 133	990 / 925 / 109	809 / 691 / 103	986 / 852 / 84	633 / 650 / 78	667 / 796 / 63	704 / 618 / 113	763 / 768 / 93	779 / 715 / 137	953 / 889 / 113	797 / 679 / 109	950 / 819 / 87									
	50	1	652 / 302 / 114	712 / 417 / 103	655 / 409 / 154	726 / 561 / 139	681 / 514 / 202	734 / 644 / 167	589 / 485 / 160	723 / 609 / 133	645 / 284 / 116	700 / 394 / 105	646 / 386 / 158	711 / 530 / 142	665 / 486 / 206	733 / 627 / 175	571 / 468 / 166	689 / 579 / 136								
		2	712 / 417 / 103	779 / 551 / 89	726 / 571 / 139	741 / 688 / 110	734 / 653 / 167	857 / 804 / 136	723 / 618 / 133	881 / 766 / 109	700 / 394 / 105	763 / 522 / 91	711 / 540 / 142	745 / 674 / 117	715 / 620 / 171	822 / 769 / 140	689 / 587 / 136	844 / 732 / 112								
		3	669 / 683 / 82	700 / 831 / 66	745 / 651 / 120	801 / 803 / 98	813 / 749 / 145	990 / 925 / 119	809 / 691 / 112	986 / 852 / 92	658 / 650 / 85	688 / 796 / 69	729 / 618 / 123	783 / 768 / 101	779 / 715 / 149	953 / 889 / 123	797 / 679 / 119	950 / 819 / 95								
	60	1	691 / 290 / 127	738 / 399 / 114	689 / 393 / 173	747 / 535 / 154	697 / 491 / 227	773 / 644 / 196	589 / 485 / 187	723 / 609 / 155	686 / 273 / 130	729 / 377 / 116	682 / 371 / 176	735 / 507 / 158	684 / 465 / 232	775 / 627 / 206	571 / 468 / 195	689 / 579 / 159								
		2	738 / 399 / 114	810 / 536 / 101	747 / 545 / 154	786 / 688 / 129	773 / 653 / 196	857 / 804 / 160	723 / 618 / 155	881 / 766 / 127	729 / 377 / 116	796 / 509 / 103	735 / 516 / 158	793 / 674 / 136	755 / 620 / 201	822 / 769 / 165	689 / 587 / 159	844 / 732 / 131								
		3	718 / 683 / 95	739 / 831 / 77	794 / 651 / 140	841 / 803 / 114	820 / 749 / 170	990 / 925 / 139	809 / 691 / 131	986 / 852 / 107	708 / 650 / 98	728 / 796 / 80	779 / 618 / 143	825 / 768 / 118	800 / 715 / 175	953 / 889 / 144	797 / 679 / 139	950 / 819 / 111								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	639 / 326 / 105	694 / 440 / 93	647 / 442 / 142	695 / 577 / 122	674 / 542 / 181	740 / 675 / 149	604 / 500 / 140	736 / 623 / 115	656 / 363 / 101	718 / 485 / 88	667 / 489 / 136	704 / 617 / 113	689 / 583 / 169	777 / 714 / 137	644 / 538 / 131	796 / 678 / 109	672 / 398 / 97	758 / 541 / 86	686 / 536 / 130	726 / 668 / 107	700 / 618 / 157	830 / 766 / 129	695 / 585 / 124	852 / 728 / 103
	2	694 / 440 / 93	769 / 578 / 80	695 / 587 / 122	734 / 720 / 98	720 / 666 / 145	891 / 838 / 121	736 / 632 / 115	887 / 773 / 93	718 / 485 / 88	800 / 631 / 76	704 / 628 / 113	762 / 780 / 93	777 / 724 / 137	918 / 867 / 109	796 / 688 / 109	948 / 829 / 87	758 / 541 / 86	827 / 680 / 72	707 / 662 / 104	809 / 834 / 87	830 / 777 / 129	1003 / 951 / 105	852 / 739 / 103	1038 / 911 / 84
	3	656 / 715 / 74	692 / 864 / 59	717 / 664 / 104	826 / 837 / 87	847 / 783 / 129	1023 / 959 / 105	843 / 721 / 100	1020 / 883 / 81	656 / 752 / 67	730 / 923 / 55	744 / 722 / 98	882 / 898 / 81	878 / 816 / 117	1082 / 1017 / 97	905 / 778 / 93	1124 / 976 / 78	672 / 804 / 63	765 / 970 / 51	770 / 775 / 93	929 / 950 / 75	962 / 897 / 113	1127 / 1062 / 89	959 / 827 / 87	1175 / 1022 / 72
50	1	660 / 320 / 112	723 / 440 / 101	665 / 433 / 151	722 / 577 / 132	682 / 530 / 193	752 / 675 / 162	604 / 500 / 153	736 / 623 / 126	674 / 355 / 107	746 / 485 / 96	682 / 479 / 145	729 / 617 / 123	711 / 583 / 184	777 / 714 / 149	644 / 538 / 143	796 / 678 / 119	703 / 398 / 105	767 / 528 / 91	699 / 524 / 139	750 / 668 / 117	720 / 618 / 171	830 / 766 / 140	695 / 585 / 136	852 / 728 / 112
	2	723 / 440 / 101	795 / 578 / 87	722 / 587 / 132	756 / 720 / 107	732 / 666 / 158	891 / 838 / 132	736 / 632 / 126	887 / 773 / 102	746 / 485 / 96	824 / 631 / 82	729 / 628 / 123	783 / 780 / 101	777 / 724 / 149	918 / 867 / 119	796 / 688 / 119	948 / 829 / 95	767 / 528 / 91	850 / 680 / 78	730 / 662 / 114	809 / 834 / 95	830 / 777 / 140	1003 / 951 / 114	852 / 739 / 112	1038 / 911 / 92
	3	680 / 715 / 80	711 / 864 / 64	740 / 664 / 114	826 / 837 / 95	847 / 783 / 140	1023 / 959 / 114	843 / 721 / 109	1020 / 883 / 89	678 / 752 / 73	730 / 923 / 60	766 / 722 / 107	882 / 898 / 88	878 / 816 / 127	1082 / 1017 / 105	905 / 778 / 102	1124 / 976 / 85	692 / 804 / 69	765 / 970 / 55	789 / 775 / 101	929 / 950 / 82	962 / 897 / 123	1127 / 1062 / 97	959 / 827 / 95	1175 / 1022 / 78
60	1	696 / 307 / 124	747 / 420 / 111	696 / 415 / 169	758 / 563 / 151	710 / 518 / 221	790 / 675 / 191	604 / 500 / 179	736 / 623 / 147	722 / 347 / 122	784 / 473 / 109	725 / 469 / 165	779 / 617 / 143	736 / 569 / 211	799 / 714 / 175	644 / 538 / 167	796 / 678 / 139	732 / 381 / 116	801 / 515 / 103	739 / 512 / 158	798 / 668 / 136	760 / 618 / 201	830 / 766 / 165	695 / 585 / 159	852 / 728 / 131
	2	747 / 420 / 111	824 / 563 / 98	758 / 573 / 151	799 / 720 / 125	769 / 666 / 185	891 / 838 / 155	736 / 632 / 147	887 / 773 / 119	784 / 473 / 109	849 / 613 / 93	779 / 628 / 143	824 / 780 / 118	799 / 724 / 175	918 / 867 / 139	796 / 688 / 139	948 / 829 / 111	801 / 515 / 103	897 / 680 / 90	776 / 662 / 132	844 / 834 / 110	830 / 777 / 165	1003 / 951 / 134	852 / 739 / 131	1038 / 911 / 107
	3	727 / 715 / 93	749 / 864 / 74	786 / 664 / 132	856 / 837 / 110	847 / 783 / 165	1023 / 959 / 134	843 / 721 / 127	1020 / 883 / 103	721 / 752 / 85	764 / 923 / 69	810 / 722 / 125	882 / 898 / 103	878 / 816 / 150	1082 / 1017 / 124	905 / 778 / 119	1124 / 976 / 100	733 / 804 / 80	773 / 970 / 64	830 / 775 / 118	929 / 950 / 96	962 / 897 / 144	1127 / 1062 / 114	959 / 827 / 111	1175 / 1022 / 92
45	1	703 / 442 / 95	780 / 583 / 82	704 / 580 / 124	746 / 716 / 101	728 / 663 / 149	876 / 812 / 121	724 / 612 / 115	901 / 774 / 97	717 / 476 / 90	799 / 622 / 78	703 / 607 / 116	763 / 758 / 96	769 / 705 / 141	914 / 851 / 113	765 / 650 / 109	943 / 812 / 90	ASCE Group Zone							
	2	780 / 583 / 82	867 / 724 / 67	725 / 708 / 98	850 / 880 / 81	876 / 823 / 121	1043 / 993 / 97	901 / 785 / 97	1084 / 953 / 78	799 / 622 / 78	908 / 763 / 63	740 / 748 / 93	883 / 917 / 75	914 / 863 / 113	1119 / 1067 / 93	943 / 824 / 90	1165 / 1027 / 75	Panal Angle							
	3	683 / 849 / 59	825 / 1051 / 49	812 / 822 / 87	966 / 992 / 70	1006 / 942 / 105	1213 / 1145 / 85	1042 / 901 / 84	1268 / 1105 / 69	729 / 919 / 57	883 / 1128 / 47	847 / 862 / 81	1036 / 1066 / 67	1040 / 976 / 97	1293 / 1224 / 81	1080 / 936 / 78	1291 / 1127 / 62	Mono Slope							
50	1	717 / 432 / 101	786 / 568 / 87	732 / 580 / 136	769 / 716 / 110	743 / 663 / 162	876 / 812 / 132	724 / 612 / 126	901 / 774 / 105	729 / 465 / 96	824 / 622 / 85	729 / 607 / 126	784 / 758 / 104	769 / 705 / 153	914 / 851 / 123	765 / 650 / 119	943 / 812 / 99	0 - 7.5							
	2	786 / 568 / 87	873 / 724 / 73	747 / 708 / 107	850 / 880 / 88	876 / 823 / 132	1043 / 993 / 105	901 / 785 / 105	1084 / 953 / 85	824 / 622 / 85	908 / 763 / 69	760 / 748 / 101	883 / 917 / 82	914 / 863 / 123	1119 / 1067 / 101	943 / 824 / 99	1165 / 1027 / 82	7.5 - 15							
	3	702 / 849 / 64	825 / 1051 / 53	812 / 822 / 95	966 / 992 / 76	1006 / 942 / 114	1213 / 1145 / 92	1042 / 901 / 92	1268 / 1105 / 75	735 / 919 / 62	883 / 1128 / 51	847 / 862 / 88	1036 / 1066 / 73	1040 / 976 / 105	1293 / 1224 / 88	1080 / 936 / 85	1291 / 1127 / 68	15 - 30							
60	1	759 / 422 / 114	815 / 553 / 98	751 / 553 / 151	814 / 716 / 129	781 / 663 / 191	876 / 812 / 155	724 / 612 / 147	901 / 774 / 123	767 / 454 / 109	851 / 605 / 95	780 / 607 / 147	827 / 758 / 121	800 / 705 / 180	914 / 851 / 144	765 / 650 / 139	943 / 812 / 115	30 - 45							
	2	815 / 553 / 98	916 / 724 / 85	791 / 708 / 125	859 / 880 / 103	876 / 823 / 155	1043 / 993 / 124	901 / 785 / 123	1084 / 953 / 100	851 / 605 / 95	931 / 763 / 80	802 / 748 / 118	883 / 917 / 96	914 / 863 / 144	1119 / 1067 / 119	943 / 824 / 115	1165 / 1027 / 96	1 = 1							
	3	740 / 849 / 74	825 / 1051 / 61	846 / 822 / 110	966 / 992 / 88	1006 / 942 / 134	1213 / 1145 / 108	1042 / 901 / 107	1268 / 1105 / 88	771 / 919 / 72	883 / 1128 / 58	857 / 862 / 103	1036 / 1066 / 85	1040 / 976 / 124	1293 / 1224 / 103	1080 / 936 / 100	1291 / 1127 / 80	2 = 2							
45	1	748 / 520 / 88	815 / 657 / 74	716 / 644 / 110	787 / 795 / 90	806 / 742 / 133	980 / 916 / 109	826 / 705 / 106	977 / 844 / 84	759 / 550 / 84	827 / 688 / 70	726 / 678 / 104	814 / 825 / 84	836 / 774 / 125	1004 / 941 / 101	860 / 736 / 100	1041 / 901 / 81	2 = 2							
	2	815 / 657 / 74	942 / 795 / 59	787 / 809 / 90	944 / 984 / 73	980 / 928 / 109	1191 / 1139 / 89	977 / 856 / 84	1188 / 1050 / 69	827 / 688 / 70	1005 / 850 / 57	814 / 840 / 84	1002 / 1048 / 70	1004 / 953 / 101	1198 / 1148 / 81	1041 / 914 / 81	1256 / 1111 / 66	3 = 3							
	3	750 / 950 / 53	893 / 1144 / 42	908 / 927 / 78	1102 / 1138 / 64	1108 / 1043 / 93	1367 / 1296 / 77	1154 / 1002 / 75	1365 / 1193 / 59	796 / 1011 / 51	938 / 1205 / 40	930 / 952 / 73	1109 / 1147 / 58	1173 / 1106 / 89	1434 / 1361 / 73	1224 / 1065 / 72	1432 / 1253 / 56	3 = 3							
50	1	758 / 507 / 94	839 / 657 / 80	741 / 644 / 120	796 / 795 / 98	806 / 742 / 145	980 / 916 / 119	826 / 705 / 116	977 / 844 / 92	767 / 537 / 89	850 / 688 / 76	750 / 678 / 114	814 / 825 / 92	836 / 774 / 136	1004 / 941 / 110	860 / 736 / 109	1041 / 901 / 89	1 = 1							
	2	839 / 657 / 80	942 / 795 / 64	796 / 809 / 98	944 / 984 / 79	980 / 928 / 119	1191 / 1139 / 97	977 / 856 / 92	1188 / 1050 / 75	850 / 688 / 76	1005 / 850 / 62	814 / 840 / 92	1002 / 1048 / 76	1004 / 953 / 110	1198 / 1148 / 88	1041 / 914 / 89	1256 / 1111 / 72	2 = 2							
	3	750 / 950 / 57	893 / 1144 / 46	908 / 927 / 85	1102 / 1138 / 70	1108 / 1043 / 101	1367 / 1296 / 84	1154 / 1002 / 82	1365 / 1193 / 65	796 / 1011 / 55	938 / 1205 / 44	930 / 952 / 79	1109 / 1147 / 63	1173 / 1106 / 97	1434 / 1361 / 79	1224 / 1065 / 78	1432 / 1253 / 61	3 = 3							
60	1	793 / 495 / 106	886 / 657 / 93	789 / 644 / 140	835 / 795 / 114	814 / 742 / 170	980 / 916 / 139	826 / 705 / 135	977 / 844 / 107	799 / 523 / 101	894 / 688 / 87	796 / 678 / 132	839 / 825 / 107	836 / 774 / 160	1004 / 941 / 129	860 / 736 / 127	1041 / 901 / 103	1 = 1							
	2	886 / 657 / 93	942 / 795 / 74	835 / 809 / 114	944 / 984 / 92	980 / 928 / 139	1191 / 1139 / 114	977 / 856 / 107	1188 / 1050 / 88	894 / 688 / 87	1005 / 850 / 72	839 / 840 / 107	1002 / 1048 / 88	1004 / 953 / 129	1198 / 1148 / 103	1041 / 914 / 103	1256 / 1111 / 84	2 = 2							
	3	770 / 950 / 66	893 / 1144 / 53	908 / 927 / 99	1102 / 1138 / 81	1108 / 1043 / 119	1367 / 1296 / 98	1154 / 1002 / 96	1365 / 1193 / 76	796 / 1011 / 64	938 / 1205 / 51	930 / 952 / 92	1109 / 1147 / 74	1173 / 1106 / 114	1434 / 1361 / 93	1224 / 1065 / 92	1432 / 1253 / 72	3 = 3							

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
70	1	695 / 193 / 150	724 / 277 / 138	693 / 270 / 209	732 / 383 / 193	679 / 357 / 291	724 / 478 / 256	542 / 385 / 259	588 / 483 / 214	697 / 209 / 147	731 / 297 / 135	698 / 292 / 205	742 / 411 / 189	692 / 384 / 285	742 / 512 / 250	554 / 407 / 250	611 / 507 / 205	700 / 225 / 144	738 / 318 / 132	703 / 313 / 201	752 / 439 / 184	689 / 402 / 273	760 / 546 / 244	564 / 429 / 241	634 / 528 / 196		
	2	724 / 277 / 138	777 / 388 / 126	732 / 390 / 193	780 / 530 / 172	724 / 485 / 256	810 / 650 / 226	588 / 490 / 214	720 / 616 / 177	731 / 297 / 135	790 / 415 / 123	742 / 419 / 189	796 / 566 / 168	742 / 519 / 250	813 / 674 / 214	611 / 514 / 205	744 / 640 / 168	738 / 318 / 132	803 / 443 / 120	752 / 447 / 184	811 / 603 / 164	760 / 553 / 244	836 / 715 / 208	634 / 536 / 196	765 / 660 / 159		
	3	756 / 535 / 129	765 / 680 / 108	756 / 472 / 176	841 / 648 / 159	773 / 583 / 232	852 / 746 / 196	675 / 566 / 186	806 / 688 / 150	767 / 573 / 126	757 / 703 / 102	769 / 505 / 172	838 / 673 / 151	796 / 622 / 226	852 / 767 / 184	700 / 589 / 177	853 / 730 / 146	778 / 611 / 123	770 / 744 / 99	783 / 538 / 168	857 / 713 / 147	818 / 661 / 220	876 / 810 / 179	741 / 626 / 173	898 / 771 / 141		
80	1	732 / 186 / 162	769 / 271 / 152	727 / 260 / 226	757 / 366 / 207	700 / 343 / 317	751 / 467 / 283	557 / 378 / 287	608 / 483 / 241	733 / 200 / 158	774 / 291 / 148	730 / 280 / 221	765 / 393 / 203	710 / 368 / 310	767 / 500 / 276	567 / 400 / 276	620 / 507 / 230	749 / 220 / 158	780 / 311 / 145	733 / 300 / 217	772 / 419 / 198	721 / 394 / 303	783 / 532 / 270	576 / 421 / 266	634 / 528 / 220		
	2	769 / 271 / 152	814 / 378 / 138	757 / 373 / 207	812 / 517 / 188	751 / 474 / 283	827 / 633 / 250	608 / 490 / 241	720 / 616 / 200	774 / 291 / 148	825 / 405 / 135	765 / 400 / 203	826 / 552 / 184	767 / 507 / 276	850 / 674 / 243	620 / 514 / 230	744 / 640 / 190	780 / 311 / 145	835 / 432 / 132	772 / 427 / 198	839 / 587 / 179	783 / 540 / 270	872 / 715 / 236	634 / 536 / 220	765 / 660 / 179		
	3	795 / 523 / 142	814 / 680 / 121	790 / 461 / 193	866 / 631 / 174	814 / 583 / 263	886 / 746 / 223	675 / 566 / 210	806 / 688 / 169	804 / 559 / 138	803 / 703 / 115	802 / 493 / 188	884 / 673 / 170	835 / 622 / 256	884 / 767 / 209	700 / 589 / 200	853 / 730 / 164	813 / 596 / 135	815 / 744 / 111	813 / 524 / 184	902 / 713 / 165	833 / 643 / 243	907 / 810 / 202	741 / 626 / 195	898 / 771 / 159		
90	1	782 / 178 / 172	793 / 259 / 161	756 / 249 / 241	795 / 358 / 225	732 / 335 / 347	775 / 456 / 309	571 / 371 / 313	628 / 483 / 268	782 / 196 / 172	796 / 278 / 157	756 / 268 / 235	801 / 384 / 220	741 / 360 / 339	790 / 488 / 302	579 / 392 / 302	639 / 507 / 256	779 / 211 / 168	819 / 304 / 157	774 / 293 / 235	807 / 409 / 214	750 / 385 / 332	804 / 519 / 294	599 / 421 / 296	648 / 528 / 245		
	2	793 / 259 / 161	848 / 369 / 149	795 / 364 / 225	842 / 504 / 204	775 / 462 / 309	842 / 616 / 271	628 / 490 / 268	720 / 616 / 222	796 / 278 / 157	857 / 395 / 146	801 / 391 / 220	854 / 538 / 199	790 / 494 / 302	862 / 655 / 264	639 / 514 / 256	744 / 640 / 211	819 / 304 / 157	865 / 421 / 142	807 / 417 / 214	865 / 572 / 194	804 / 526 / 294	882 / 694 / 256	648 / 536 / 245	765 / 660 / 199		
	3	832 / 510 / 153	863 / 680 / 134	822 / 449 / 209	889 / 614 / 188	832 / 568 / 286	920 / 746 / 249	675 / 566 / 234	806 / 688 / 188	839 / 546 / 149	850 / 703 / 127	832 / 480 / 204	905 / 654 / 183	851 / 606 / 279	916 / 767 / 234	700 / 589 / 222	853 / 730 / 182	845 / 581 / 146	860 / 744 / 123	841 / 511 / 199	920 / 693 / 178	870 / 643 / 271	938 / 810 / 226	741 / 626 / 216	898 / 771 / 177		
Wind Speed [mph]		110								115																	
70	1	718 / 246 / 144	763 / 347 / 132	708 / 334 / 197	762 / 467 / 180	702 / 429 / 268	778 / 579 / 238	574 / 449 / 232	670 / 561 / 191	722 / 262 / 141	771 / 368 / 129	713 / 355 / 193	772 / 495 / 176	714 / 455 / 262	795 / 612 / 232	582 / 468 / 223	689 / 579 / 182										
	2	763 / 347 / 132	815 / 470 / 117	762 / 476 / 180	826 / 638 / 159	778 / 587 / 238	833 / 732 / 196	670 / 569 / 191	805 / 696 / 155	771 / 368 / 129	827 / 496 / 114	772 / 504 / 176	841 / 674 / 155	795 / 620 / 232	853 / 769 / 190	689 / 587 / 182	844 / 732 / 150										
	3	769 / 632 / 117	783 / 784 / 96	796 / 570 / 164	850 / 731 / 138	816 / 680 / 208	914 / 850 / 173	760 / 645 / 164	910 / 783 / 132	758 / 650 / 111	769 / 796 / 90	808 / 602 / 159	866 / 768 / 134	835 / 715 / 202	953 / 889 / 167	797 / 679 / 159	950 / 819 / 127										
80	1	751 / 235 / 155	785 / 331 / 142	752 / 327 / 217	799 / 456 / 198	732 / 419 / 297	799 / 564 / 263	596 / 449 / 261	670 / 561 / 215	752 / 251 / 152	790 / 351 / 138	755 / 347 / 212	806 / 483 / 193	742 / 444 / 290	814 / 596 / 256	604 / 468 / 251	689 / 579 / 205										
	2	785 / 331 / 142	846 / 458 / 128	799 / 465 / 198	852 / 622 / 174	799 / 572 / 263	867 / 732 / 223	670 / 569 / 215	805 / 696 / 174	790 / 351 / 138	856 / 483 / 125	806 / 492 / 193	864 / 655 / 170	814 / 604 / 256	886 / 769 / 216	689 / 587 / 205	844 / 732 / 169										
	3	822 / 632 / 132	826 / 784 / 108	824 / 556 / 179	892 / 731 / 156	852 / 680 / 236	930 / 850 / 196	760 / 645 / 184	910 / 783 / 149	808 / 650 / 125	810 / 796 / 101	857 / 602 / 179	907 / 768 / 151	871 / 715 / 229	953 / 889 / 189	797 / 679 / 179	950 / 819 / 144										
90	1	778 / 225 / 164	822 / 323 / 153	776 / 313 / 230	812 / 435 / 209	759 / 410 / 324	818 / 550 / 286	606 / 440 / 285	671 / 561 / 239	795 / 245 / 164	825 / 343 / 149	777 / 332 / 225	838 / 471 / 209	768 / 434 / 317	831 / 580 / 279	625 / 468 / 279	689 / 579 / 228										
	2	822 / 323 / 153	874 / 446 / 138	812 / 443 / 209	875 / 605 / 188	818 / 557 / 286	901 / 732 / 249	671 / 569 / 239	805 / 696 / 194	825 / 343 / 149	881 / 470 / 134	838 / 480 / 209	885 / 637 / 183	831 / 588 / 279	919 / 769 / 241	689 / 587 / 228	844 / 732 / 188										
	3	852 / 616 / 142	870 / 784 / 120	873 / 556 / 199	934 / 731 / 173	888 / 680 / 264	960 / 850 / 219	760 / 645 / 205	910 / 783 / 165	858 / 650 / 138	850 / 796 / 112	882 / 587 / 194	948 / 768 / 167	906 / 715 / 256	980 / 889 / 211	797 / 679 / 199	950 / 819 / 160										
Wind Speed [mph]		120								130																	
70	1	725 / 278 / 138	778 / 389 / 126	734 / 384 / 193	782 / 522 / 172	726 / 480 / 256	812 / 644 / 226	589 / 485 / 214	723 / 609 / 177	722 / 262 / 141	771 / 368 / 129	713 / 355 / 193	772 / 495 / 176	714 / 455 / 262	795 / 612 / 232	582 / 468 / 223	689 / 579 / 182										
	2	778 / 389 / 126	839 / 522 / 111	782 / 532 / 172	831 / 688 / 147	812 / 653 / 226	872 / 804 / 184	723 / 618 / 177	881 / 766 / 146	771 / 368 / 129	827 / 496 / 114	772 / 504 / 176	841 / 674 / 155	795 / 620 / 232	853 / 769 / 190	689 / 587 / 182	844 / 732 / 150										
	3	767 / 683 / 108	778 / 831 / 87	843 / 651 / 159	881 / 803 / 130	854 / 749 / 196	990 / 925 / 161	809 / 691 / 150	986 / 852 / 123	758 / 650 / 111	769 / 796 / 90	808 / 602 / 159	866 / 768 / 134	835 / 715 / 202	953 / 889 / 167	797 / 679 / 159	950 / 819 / 127										
80	1	770 / 272 / 152	815 / 380 / 138	758 / 368 / 207	814 / 510 / 188	752 / 469 / 283	610 / 485 / 241	723 / 609 / 200	752 / 251 / 152	790 / 351 / 138	755 / 347 / 212	806 / 483 / 193	742 / 444 / 290	814 / 596 / 256	604 / 468 / 251	689 / 579 / 205											
	2	815 / 380 / 138	865 / 508 / 121	814 / 519 / 188	876 / 688 / 165	829 / 635 / 250	904 / 804 / 209	723 / 618 / 164	881 / 766 / 164	790 / 351 / 138	856 / 483 / 125	806 / 492 / 193	864 / 655 / 170	814 / 604 / 256	886 / 769 / 216	689 / 587 / 205	844 / 732 / 169										
	3	815 / 683 / 121	818 / 831 / 98	868 / 634 / 174	921 / 803 / 146	888 / 749 / 223	990 / 925 / 182	809 / 691 / 169	986 / 852 / 138	808 / 650 / 125	810 / 796 / 101	857 / 602 / 179	907 / 768 / 151	871 / 715 / 229	953 / 889 / 189	797 / 679 / 179	950 / 819 / 144										
90	1	794 / 260 / 161	849 / 371 / 149	796 / 359 / 225	844 / 497 / 204	777 / 458 / 309	844 / 610 / 271	630 / 485 / 268	723 / 609 / 222	795 / 245 / 164	825 / 343 / 149	777 / 332 / 225	838 / 471 / 209	768 / 434 / 317	831 / 580 / 279	625 / 468 / 279	689 / 579 / 228										
	2	849 / 371 / 149	914 / 508 / 134	844 / 506 / 204	921 / 688 / 183	844 / 618 / 271	936 / 804 / 234	723 / 618 / 222	881 / 766 / 182	825 / 343 / 149	881 / 470 / 134	838 / 480 / 209	885 / 637 / 183	831 / 588 / 279	919 / 769 / 241	689 / 587 / 228	844 / 732 / 188										
	3	864 / 683 / 134	857 / 831 / 108	891 / 617 / 188	961 / 803 / 162	922 / 749 / 249	998 / 925 / 204	809 / 691 / 188	986 / 852 / 154	858 / 650 / 138	850 / 796 / 112	882 / 587 / 194	948 / 768 / 167	906 / 715 / 256	980 / 889 / 211	797 / 679 / 199	950 / 819 / 160										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		70	1	728 / 294 / 135	785 / 410 / 123	739 / 406 / 189	791 / 549 / 168	737 / 506 / 250	829 / 675 / 220	604 / 500 / 205	736 / 623 / 168	750 / 332 / 132	798 / 450 / 117	749 / 448 / 180	808 / 602 / 159	760 / 555 / 238	835 / 714 / 202	644 / 538 / 191	796 / 678 / 159	774 / 372 / 129	832 / 501 / 114	776 / 500 / 176	845 / 668 / 155	800 / 618 / 232	859 / 766 / 190	695 / 585 / 182	852 / 728 / 150	774 / 372 / 129	832 / 501 / 114	776 / 500 / 176	845 / 668 / 155	800 / 618 / 232	859 / 766 / 190	695 / 585 / 182	852 / 728 / 150	774 / 372 / 129	832 / 501 / 114	776 / 500 / 176	845 / 668 / 155	800 / 618 / 232	859 / 766 / 190	695 / 585 / 182	852 / 728 / 150						

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		70in x 41in		Load: Up / Down / Side , lbs																											
Wind Speed [mph]		140								150								160															
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
100	1	830 / 268 / 168	882 / 380 / 156	831 / 370 / 236	874 / 508 / 213	826 / 482 / 333	892 / 639 / 292	653 / 500 / 282	736 / 623 / 232	845 / 302 / 164	908 / 427 / 152	851 / 417 / 230	904 / 570 / 207	839 / 527 / 317	912 / 693 / 275	670 / 538 / 263	796 / 678 / 220	860 / 338 / 160	908 / 462 / 143	871 / 464 / 224	935 / 632 / 201	874 / 586 / 308	958 / 766 / 267	699 / 585 / 251	852 / 728 / 207								
	2	882 / 380 / 156	941 / 517 / 139	874 / 517 / 213	946 / 699 / 190	892 / 647 / 292	983 / 838 / 250	736 / 632 / 232	887 / 773 / 188	908 / 427 / 152	979 / 578 / 135	904 / 580 / 207	988 / 780 / 184	912 / 702 / 275	972 / 867 / 225	796 / 688 / 220	948 / 829 / 176	908 / 462 / 143	985 / 620 / 127	935 / 644 / 201	998 / 834 / 173	958 / 777 / 267	1025 / 951 / 217	852 / 739 / 207	1038 / 911 / 169								
	3	917 / 715 / 143	900 / 864 / 115	917 / 627 / 196	1010 / 837 / 173	971 / 783 / 267	1041 / 959 / 217	843 / 721 / 201	1020 / 883 / 163	895 / 752 / 131	905 / 923 / 107	956 / 701 / 190	1026 / 898 / 161	963 / 816 / 242	1082 / 1017 / 200	905 / 778 / 188	1124 / 976 / 157	895 / 804 / 123	903 / 970 / 99	995 / 775 / 184	1036 / 950 / 150	1016 / 897 / 233	1127 / 1062 / 184	959 / 827 / 176	1175 / 1022 / 144								
Wind Speed [mph]		170								180																							
100	1	876 / 373 / 156	934 / 508 / 139	868 / 499 / 213	937 / 675 / 190	884 / 628 / 250	972 / 812 / 250	724 / 612 / 232	901 / 774 / 194	893 / 409 / 152	959 / 555 / 135	887 / 546 / 207	966 / 735 / 184	917 / 685 / 283	980 / 851 / 233	765 / 650 / 220	943 / 812 / 182	934 / 508 / 139	1021 / 679 / 123	937 / 687 / 190	1003 / 880 / 161	972 / 823 / 250	1043 / 993 / 200	901 / 785 / 194	1084 / 953 / 157	959 / 555 / 135	1057 / 737 / 119	966 / 748 / 184	1001 / 917 / 150	980 / 863 / 233	1119 / 1067 / 192	943 / 824 / 182	1165 / 1027 / 151
	2	934 / 508 / 139	1021 / 679 / 123	937 / 687 / 190	1003 / 880 / 161	972 / 823 / 250	1043 / 993 / 200	901 / 785 / 194	1084 / 953 / 157	959 / 555 / 135	1057 / 737 / 119	966 / 748 / 184	1001 / 917 / 150	980 / 863 / 233	1119 / 1067 / 192	943 / 824 / 182	1165 / 1027 / 151	892 / 849 / 115	935 / 1051 / 94	1000 / 822 / 173	1037 / 992 / 138	1028 / 942 / 217	1213 / 1145 / 175	1042 / 901 / 169	1268 / 1105 / 138	917 / 919 / 111	964 / 1128 / 90	1001 / 862 / 161	1077 / 1066 / 132	1040 / 976 / 200	1293 / 1224 / 167	1080 / 936 / 157	1291 / 1127 / 126
	3	892 / 849 / 115	935 / 1051 / 94	1000 / 822 / 173	1037 / 992 / 138	1028 / 942 / 217	1213 / 1145 / 175	1042 / 901 / 169	1268 / 1105 / 138	917 / 919 / 111	964 / 1128 / 90	1001 / 862 / 161	1077 / 1066 / 132	1040 / 976 / 200	1293 / 1224 / 167	1080 / 936 / 157	1291 / 1127 / 126																
Wind Speed [mph]		190								200																							
100	1	909 / 446 / 148	984 / 601 / 131	907 / 594 / 201	995 / 795 / 178	951 / 742 / 275	1019 / 916 / 225	826 / 705 / 213	977 / 844 / 169	925 / 482 / 143	1008 / 646 / 127	927 / 640 / 196	989 / 825 / 167	953 / 774 / 258	1015 / 941 / 209	860 / 736 / 201	1041 / 901 / 163	984 / 601 / 131	1091 / 795 / 115	995 / 809 / 178	1034 / 984 / 144	1019 / 928 / 225	1191 / 1139 / 184	977 / 856 / 169	1188 / 1050 / 138	1008 / 646 / 127	1124 / 850 / 111	989 / 840 / 167	1064 / 1048 / 138	1015 / 953 / 209	1198 / 1148 / 167	1041 / 914 / 163	1256 / 1111 / 132
	2	984 / 601 / 131	1091 / 795 / 115	995 / 809 / 178	1034 / 984 / 144	1019 / 928 / 225	1191 / 1139 / 184	977 / 856 / 169	1188 / 1050 / 138	1008 / 646 / 127	1124 / 850 / 111	989 / 840 / 167	1064 / 1048 / 138	1015 / 953 / 209	1198 / 1148 / 167	1041 / 914 / 163	1256 / 1111 / 132	906 / 950 / 103	944 / 1144 / 82	1033 / 927 / 155	1113 / 1138 / 127	1108 / 1043 / 192	1367 / 1296 / 159	1154 / 1002 / 151	1365 / 1193 / 119	926 / 1011 / 99	964 / 1205 / 78	1023 / 952 / 144	1109 / 1147 / 115	1173 / 1106 / 184	1434 / 1361 / 150	1224 / 1065 / 144	1432 / 1253 / 113
	3	906 / 950 / 103	944 / 1144 / 82	1033 / 927 / 155	1113 / 1138 / 127	1108 / 1043 / 192	1367 / 1296 / 159	1154 / 1002 / 151	1365 / 1193 / 119	926 / 1011 / 99	964 / 1205 / 78	1023 / 952 / 144	1109 / 1147 / 115	1173 / 1106 / 184	1434 / 1361 / 150	1224 / 1065 / 144	1432 / 1253 / 113																

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof				30-60ft					70in x 41in					Load: Up / Down / Side , lbs															
Wind Speed [mph]				95					100					105															
Panal Angle				0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	414 / 293 / 39	505 / 383 / 33	437 / 389 / 42	521 / 491 / 34	519 / 447 / 43	632 / 565 / 35	513 / 413 / 46	627 / 521 / 39	434 / 313 / 37	528 / 406 / 32	458 / 414 / 40	533 / 507 / 32	543 / 472 / 41	657 / 591 / 34	537 / 436 / 45	653 / 545 / 37	454 / 332 / 36	550 / 427 / 30	471 / 430 / 38	553 / 530 / 31	565 / 495 / 39	679 / 614 / 32	560 / 458 / 43	675 / 566 / 35		
0	2	505 / 383 / 33	603 / 480 / 27	511 / 490 / 34	614 / 611 / 28	618 / 560 / 35	744 / 690 / 28	627 / 529 / 39	761 / 655 / 32	528 / 406 / 32	627 / 503 / 26	533 / 516 / 32	636 / 637 / 26	657 / 599 / 34	787 / 733 / 27	653 / 553 / 37	783 / 677 / 30	550 / 427 / 30	664 / 537 / 25	553 / 540 / 31	654 / 659 / 25	679 / 622 / 32	805 / 753 / 26	675 / 575 / 35	826 / 716 / 29				
0	3	492 / 589 / 25	582 / 718 / 20	589 / 571 / 30	691 / 688 / 24	720 / 655 / 31	871 / 807 / 25	716 / 604 / 33	868 / 744 / 27	509 / 614 / 23	615 / 762 / 19	612 / 597 / 28	731 / 732 / 23	744 / 680 / 29	889 / 827 / 23	760 / 644 / 33	916 / 788 / 26	538 / 653 / 23	646 / 805 / 19	632 / 621 / 27	747 / 751 / 22	763 / 700 / 27	933 / 870 / 23	781 / 664 / 31	963 / 830 / 26				
5	1	414 / 293 / 39	505 / 383 / 33	437 / 389 / 49	521 / 491 / 40	519 / 447 / 51	632 / 565 / 42	513 / 413 / 52	627 / 521 / 43	434 / 313 / 37	528 / 406 / 32	458 / 414 / 47	533 / 507 / 38	543 / 472 / 49	657 / 591 / 40	537 / 436 / 50	653 / 545 / 41	454 / 332 / 36	550 / 427 / 30	471 / 430 / 45	553 / 530 / 36	565 / 495 / 47	679 / 614 / 39	560 / 458 / 48	675 / 566 / 39				
5	2	505 / 383 / 33	603 / 480 / 27	511 / 490 / 39	614 / 611 / 32	618 / 560 / 41	744 / 690 / 34	627 / 529 / 43	761 / 655 / 35	528 / 406 / 32	627 / 503 / 26	533 / 516 / 38	636 / 637 / 31	657 / 599 / 40	787 / 733 / 33	653 / 553 / 41	783 / 677 / 33	550 / 427 / 30	664 / 537 / 25	553 / 540 / 36	654 / 659 / 29	679 / 622 / 39	805 / 753 / 31	675 / 575 / 39	826 / 716 / 32				
5	3	492 / 589 / 25	582 / 718 / 20	589 / 571 / 35	691 / 688 / 28	720 / 655 / 37	871 / 807 / 30	716 / 604 / 37	868 / 744 / 31	509 / 614 / 23	615 / 762 / 19	612 / 597 / 33	731 / 732 / 27	744 / 680 / 35	889 / 827 / 28	760 / 644 / 36	916 / 788 / 30	538 / 653 / 23	646 / 805 / 19	632 / 621 / 31	747 / 751 / 25	763 / 700 / 33	933 / 870 / 27	781 / 664 / 34	963 / 830 / 29				
10	1	439 / 293 / 46	505 / 383 / 39	444 / 389 / 63	521 / 491 / 52	519 / 447 / 65	632 / 565 / 54	513 / 413 / 62	627 / 521 / 52	450 / 313 / 45	528 / 406 / 38	458 / 414 / 61	533 / 507 / 49	543 / 472 / 63	657 / 591 / 52	537 / 436 / 60	653 / 545 / 49	461 / 332 / 43	550 / 427 / 36	471 / 430 / 58	553 / 530 / 47	565 / 495 / 60	679 / 614 / 49	560 / 458 / 57	675 / 566 / 47				
10	2	505 / 383 / 39	603 / 480 / 32	511 / 490 / 51	614 / 611 / 42	618 / 560 / 53	744 / 690 / 43	627 / 529 / 52	761 / 655 / 42	528 / 406 / 38	627 / 503 / 31	533 / 516 / 49	636 / 637 / 40	657 / 599 / 52	787 / 733 / 42	653 / 553 / 49	783 / 677 / 40	550 / 427 / 36	664 / 537 / 30	553 / 540 / 47	654 / 659 / 38	679 / 622 / 49	805 / 753 / 39	675 / 575 / 47	826 / 716 / 39				
10	3	492 / 589 / 29	582 / 718 / 24	589 / 571 / 45	691 / 688 / 36	720 / 655 / 47	871 / 807 / 38	716 / 604 / 45	868 / 744 / 36	509 / 614 / 28	615 / 762 / 23	612 / 597 / 43	731 / 732 / 35	744 / 680 / 44	889 / 827 / 36	760 / 644 / 43	916 / 788 / 35	538 / 653 / 27	646 / 805 / 22	632 / 621 / 41	747 / 751 / 33	763 / 700 / 42	933 / 870 / 35	781 / 664 / 41	963 / 830 / 34				
Wind Speed [mph]				110					115																				
0	1	472 / 350 / 35	571 / 447 / 29	489 / 452 / 37	572 / 552 / 30	586 / 517 / 38	698 / 634 / 31	580 / 477 / 41	712 / 600 / 34	490 / 368 / 34	589 / 466 / 28	507 / 473 / 36	602 / 585 / 29	604 / 537 / 36	734 / 669 / 30	612 / 507 / 40	729 / 617 / 33	ASCE Group Zone											
0	2	571 / 447 / 29	684 / 556 / 24	572 / 562 / 30	689 / 697 / 24	698 / 643 / 31	845 / 792 / 25	712 / 609 / 34	868 / 754 / 28	589 / 466 / 28	719 / 588 / 23	588 / 582 / 28	702 / 713 / 23	734 / 678 / 30	883 / 830 / 24	729 / 626 / 33	908 / 791 / 27												
0	3	550 / 672 / 22	654 / 819 / 17	649 / 641 / 26	783 / 791 / 21	802 / 738 / 27	975 / 911 / 22	822 / 701 / 30	972 / 839 / 24	577 / 708 / 21	682 / 856 / 17	682 / 676 / 25	818 / 829 / 20	839 / 775 / 26	1014 / 950 / 21	835 / 715 / 28	1011 / 875 / 23												
5	1	472 / 350 / 35	571 / 447 / 29	489 / 452 / 43	572 / 552 / 35	586 / 517 / 45	698 / 634 / 37	580 / 477 / 46	712 / 600 / 38	490 / 368 / 34	589 / 466 / 28	507 / 473 / 42	602 / 585 / 34	604 / 537 / 43	734 / 669 / 36	612 / 507 / 45	729 / 617 / 36												
5	2	571 / 447 / 29	684 / 556 / 24	572 / 562 / 35	689 / 697 / 28	698 / 643 / 30	845 / 792 / 34	712 / 609 / 38	868 / 754 / 32	589 / 466 / 28	719 / 588 / 23	588 / 582 / 33	702 / 713 / 27	734 / 678 / 36	883 / 830 / 29	729 / 626 / 36	908 / 791 / 31												
5	3	550 / 672 / 22	654 / 819 / 17	649 / 641 / 30	783 / 791 / 25	802 / 738 / 32	975 / 911 / 26	822 / 701 / 33	972 / 839 / 27	577 / 708 / 21	682 / 856 / 17	682 / 676 / 29	818 / 829 / 24	839 / 775 / 31	1014 / 950 / 25	835 / 715 / 32	1011 / 875 / 26												
10	1	472 / 350 / 42	571 / 447 / 35	489 / 452 / 56	572 / 552 / 45	586 / 517 / 58	698 / 634 / 47	580 / 477 / 55	712 / 600 / 46	490 / 368 / 40	589 / 466 / 33	507 / 473 / 54	602 / 585 / 44	604 / 537 / 55	734 / 669 / 46	612 / 507 / 54	729 / 617 / 43												
10	2	571 / 447 / 35	684 / 556 / 28	572 / 562 / 45	689 / 697 / 37	698 / 643 / 47	845 / 792 / 38	712 / 609 / 46	868 / 754 / 38	589 / 466 / 33	719 / 588 / 28	588 / 582 / 43	702 / 713 / 35	734 / 678 / 46	883 / 830 / 37	729 / 626 / 43	908 / 791 / 36												
10	3	550 / 672 / 26	654 / 819 / 21	649 / 641 / 39	783 / 791 / 32	802 / 738 / 41	975 / 911 / 33	822 / 701 / 40	972 / 839 / 32	577 / 708 / 25	682 / 856 / 20	682 / 676 / 38	818 / 829 / 31	839 / 775 / 39	1014 / 950 / 32	835 / 715 / 38	1011 / 875 / 31												
Wind Speed [mph]				120					130																				
0	1	507 / 385 / 33	606 / 482 / 27	523 / 493 / 34	616 / 603 / 28	635 / 567 / 35	747 / 683 / 28	630 / 524 / 39	764 / 648 / 32	490 / 368 / 34	589 / 466 / 28	507 / 473 / 36	602 / 585 / 29	604 / 537 / 36	734 / 669 / 30	612 / 507 / 40	729 / 617 / 33												
0	2	606 / 482 / 27	734 / 603 / 22	601 / 599 / 27	733 / 748 / 22	747 / 693 / 28	919 / 866 / 23	764 / 658 / 32	915 / 799 / 26	589 / 466 / 28	719 / 588 / 23	588 / 582 / 28	702 / 713 / 23	734 / 678 / 30	883 / 830 / 24	729 / 626 / 33	908 / 791 / 27												
0	3	584 / 721 / 20	707 / 891 / 16	693 / 691 / 24	851 / 865 / 20	875 / 811 / 25	1050 / 985 / 20	871 / 747 / 27	1048 / 908 / 22	577 / 708 / 21	682 / 856 / 17	682 / 676 / 25	818 / 829 / 20	839 / 775 / 26	1014 / 950 / 21	835 / 715 / 28	1011 / 875 / 23												
5	1	507 / 385 / 33	606 / 482 / 27	523 / 493 / 40	616 / 603 / 32	635 / 567 / 42	747 / 683 / 34	630 / 524 / 43	764 / 648 / 35	490 / 368 / 34	589 / 466 / 28	507 / 473 / 42	602 / 585 / 34	604 / 537 / 43	734 / 669 / 36	612 / 507 / 45	729 / 617 / 36												
5	2	606 / 482 / 27	734 / 603 / 22	601 / 599 / 31	733 / 748 / 26	747 / 693 / 34	919 / 866 / 28	764 / 658 / 35	915 / 799 / 29	589 / 466 / 28	719 / 588 / 23	588 / 582 / 33	702 / 713 / 27	734 / 678 / 36	883 / 830 / 29	729 / 626 / 36	908 / 791 / 31												
5	3	584 / 721 / 20	707 / 891 / 16	693 / 691 / 28	851 / 865 / 23	875 / 811 / 30	1050 / 985 / 24	871 / 747 / 31	1048 / 908 / 25	577 / 708 / 21	682 / 856 / 17	682 / 676 / 29	818 / 829 / 24	839 / 775 / 31	1014 / 950 / 25	835 / 715 / 32	1011 / 875 / 26												
10	1	507 / 385 / 39	606 / 482 / 32	523 / 493 / 52	616 / 603 / 42	635 / 567 / 54	747 / 683 / 43	630 / 524 / 52	764 / 648 / 42	490 / 368 / 40	589 / 466 / 33	507 / 473 / 54	602 / 585 / 44	604 / 537 / 55	734 / 669 / 46	612 / 507 / 54	729 / 617 / 43												
10	2	606 / 482 / 32	734 / 603 / 26	601 / 599 / 41	733 / 748 / 34	747 / 693 / 43	919 / 866 / 36	764 / 658 / 42	915 / 799 / 34	589 / 466 / 33	719 / 588 / 28	588 / 582 / 43	702 / 713 / 35	734 / 678 / 46	883 / 830 / 37	729 / 626 / 43	908 / 791 / 36												
10	3	584 / 721 / 24	707 / 891 / 19	693 / 691 / 36	851 / 865 / 30	875 / 811 / 38	1050 / 985 / 31	871 / 747 / 36	1048 / 908 / 30	577 / 708 / 25	682 / 856 / 20	682 / 676 / 38	818 / 829 / 31	839 / 775 / 39	1014 / 950 / 32	835 / 715 / 38	1011 / 875 / 31												

Exposure Category : D

Panal Angle	ASCE Group Zone	
	Mono Slope	
0 - 7.5	1 = 1	
	2 = 2	
	3 = 3	
7.5 - 15	1 = 1	
	2 = 2	
15 - 30	1 = 1	
	2 = 2	
30 - 45	1 = 1	
	2 = 2	
	3 = 3	

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the e edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft (m).
 h=Mean roof height, in ft (m).
 θ=Angle of roof from horizontal, in degrees

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		0	1	522/401/32	635/508/26	538/511/33	629/618/26	650/583/34	778/715/27	645/538/31	797/678/31	560/437/30	674/546/25	563/541/30	681/675/25	689/624/31	838/774/26	702/590/35	834/713/28	595/470/28	707/578/23	593/577/28	708/708/23	741/676/30	891/827/24
0	2	635/508/26	766/632/22	629/629/26	762/781/22	778/725/27	918/868/22	797/688/31	949/830/25	674/546/25	826/687/20	662/669/24	790/814/20	838/785/26	1013/961/21	834/724/28	1010/886/23	707/578/23	854/714/19	708/721/23	865/896/19	891/838/24	1062/1010/20	888/773/26	1103/971/22
0	3	608/753/19	731/923/16	723/723/23	851/867/18	879/817/23	1083/1018/20	906/778/26	1126/977/22	651/812/18	772/980/15	777/783/22	938/960/18	937/874/22	1138/1072/18	968/835/25	1187/1032/20	688/864/17	840/1070/14	826/837/20	983/1009/16	1024/959/21	1234/1166/17	1021/883/23	1232/1073/19
5	1	522/401/32	635/508/26	538/511/38	629/618/31	650/583/40	778/715/33	645/538/41	797/678/34	560/437/30	674/546/25	563/541/35	681/675/29	689/624/38	838/774/31	702/590/39	834/713/32	595/470/28	707/578/23	593/577/33	708/708/27	741/676/36	891/827/29	736/623/36	888/762/30
5	2	635/508/26	766/632/22	629/629/31	762/781/25	778/725/33	918/868/26	797/688/34	949/830/28	674/546/25	826/687/20	662/669/28	790/814/23	838/785/31	1013/961/25	834/724/32	1010/886/26	707/578/23	854/714/19	708/721/27	865/896/22	891/838/29	1062/1010/23	888/773/30	1103/971/25
5	3	608/753/19	731/923/16	723/723/27	851/867/21	879/817/28	1083/1018/23	906/778/30	1126/977/25	651/812/18	772/980/15	777/783/25	938/960/21	937/874/26	1138/1072/21	968/835/28	1187/1032/23	688/864/17	840/1070/14	826/837/24	983/1009/19	1024/959/25	1234/1166/20	1021/883/26	1232/1073/21
10	1	522/401/38	635/508/31	538/511/50	629/618/40	650/583/52	778/715/42	645/538/49	797/678/41	560/437/35	674/546/29	563/541/46	681/675/38	689/624/48	838/774/39	702/590/47	834/713/38	595/470/33	707/578/27	593/577/43	708/708/35	741/676/46	891/827/37	736/623/43	888/762/35
10	2	635/508/31	766/632/26	629/629/40	762/781/33	778/725/42	918/868/33	797/688/41	949/830/33	674/546/29	826/687/24	662/669/37	790/814/30	838/785/39	1013/961/32	834/724/31	1010/886/31	707/578/27	854/714/22	708/721/35	865/896/29	891/838/37	1062/1010/30	888/773/35	1103/971/30
10	3	608/753/23	731/923/19	723/723/35	851/867/28	879/817/36	1083/1018/30	906/778/35	1126/977/30	651/812/21	772/980/17	777/783/33	938/960/27	937/874/33	1138/1072/27	968/835/33	1187/1032/27	688/864/20	840/1070/17	826/837/31	983/1009/25	1024/959/32	1234/1166/26	1021/883/31	1232/1073/25
Wind Speed [mph]		170								180															
0	1	624/499/26	753/621/22	634/623/27	750/754/22	765/702/27	937/873/23	784/667/31	967/833/26	664/537/25	794/659/20	654/648/25	785/794/20	805/743/26	973/910/21	826/706/29	1007/870/24								
0	2	753/621/22	930/782/18	750/767/22	904/941/18	937/885/23	1097/1047/18	967/845/26	1144/1009/20	794/659/20	971/820/17	785/808/20	934/975/16	973/922/21	1172/1121/17	1007/883/24	1225/1083/20								
0	3	719/908/16	863/1104/13	868/883/19	1061/1093/16	1065/1001/20	1325/1254/16	1107/960/22	1323/1155/18	773/980/15	920/1180/12	901/921/18	1084/1120/14	1143/1076/19	1336/1266/15	1140/991/20	1408/1231/17								
5	1	624/499/26	753/621/22	634/623/31	750/754/25	765/702/33	937/873/27	784/667/34	967/833/29	664/537/25	794/659/20	654/648/29	785/794/24	805/743/31	973/910/25	826/706/32	1007/870/27								
5	2	753/621/22	930/782/18	750/767/25	904/941/21	937/885/21	1097/1047/21	967/845/29	1144/1009/23	794/659/20	971/820/17	785/808/24	934/975/19	973/922/25	1172/1121/20	1007/883/27	1225/1083/22								
5	3	719/908/16	863/1104/13	868/883/22	1061/1093/18	1065/1001/23	1325/1254/20	1107/960/25	1323/1155/20	773/980/15	920/1180/12	901/921/21	1084/1120/17	1143/1076/22	1336/1266/18	1140/991/23	1408/1231/19								
10	1	624/499/31	753/621/26	634/623/41	750/754/33	765/702/42	937/873/35	784/667/41	967/833/34	664/537/30	794/659/24	654/648/38	785/794/31	805/743/39	973/910/32	826/706/39	1007/870/32								
10	2	753/621/26	930/782/21	750/767/33	904/941/27	937/885/35	1097/1047/27	967/845/34	1144/1009/27	794/659/24	971/820/20	785/808/31	934/975/25	973/922/32	1172/1121/26	1007/883/32	1225/1083/26								
10	3	719/908/19	863/1104/15	868/883/29	1061/1093/24	1065/1001/30	1325/1254/25	1107/960/30	1323/1155/24	773/980/18	920/1180/14	901/921/27	1084/1120/22	1143/1076/28	1336/1266/22	1140/991/27	1408/1231/23								
Wind Speed [mph]		190								200															
0	1	702/571/24	830/693/19	687/684/24	843/856/20	867/803/25	1041/976/20	863/740/27	1079/935/23	736/603/23	889/745/19	737/738/23	868/885/18	896/833/23	1105/1039/20	924/794/26	1102/957/21								
0	2	830/693/19	1041/882/16	814/842/19	995/1042/16	1041/989/20	1242/1190/16	1079/948/23	1302/1152/19	889/745/19	1066/906/15	868/900/18	1053/1105/15	1059/1009/19	1306/1254/16	1102/971/21	1373/1216/18								
0	3	790/1005/14	972/1250/12	964/988/17	1149/1190/14	1161/1096/17	1404/1333/14	1214/1057/20	1485/1300/16	836/1066/13	1019/1313/11	980/1008/16	1208/1253/13	1224/1157/16	1555/1478/14	1282/1118/19	1553/1361/15								
5	1	702/571/24	830/693/19	687/684/28	843/856/23	867/803/30	1041/976/24	863/740/31	1079/935/26	736/603/23	889/745/19	737/738/27	868/885/21	896/833/28	1105/1039/23	924/794/30	1102/957/24								
5	2	830/693/19	1041/882/16	814/842/22	995/1042/18	1041/989/24	1242/1190/20	1079/948/26	1302/1152/21	889/745/19	1066/906/15	868/900/21	1053/1105/18	1059/1009/22	1306/1254/19	1102/971/24	1373/1216/20								
5	3	790/1005/14	972/1250/12	964/988/20	1149/1190/16	1161/1096/20	1404/1333/17	1214/1057/22	1485/1300/18	836/1066/13	1019/1313/11	980/1008/18	1208/1253/15	1224/1157/20	1555/1478/17	1282/1118/21	1553/1361/17								
10	1	702/571/28	830/693/23	687/684/36	843/856/30	867/803/38	1041/976/31	863/740/36	1079/935/31	736/603/27	889/745/22	737/738/35	868/885/28	896/833/36	1105/1039/30	924/794/35	1102/957/28								
10	2	830/693/23	1041/882/19	814/842/29	995/1042/24	1041/989/31	1242/1190/25	1079/948/31	1302/1152/25	889/745/22	1066/906/18	868/900/28	1053/1105/23	1059/1009/28	1306/1254/24	1102/971/28	1373/1216/24								
10	3	790/1005/17	972/1250/14	964/988/26	1149/1190/21	1161/1096/26	1404/1333/21	1214/1057/26	1485/1300/21	836/1066/16	1019/1313/13	980/1008/24	1208/1253/20	1224/1157/25	1555/1478/21	1282/1118/25	1553/1361/20								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		
		15	1	482 / 284 / 52	537 / 383 / 45	497 / 389 / 77	530 / 491 / 63	519 / 447 / 79	632 / 565 / 66	513 / 413 / 72	627 / 521 / 60	498 / 308 / 51	548 / 406 / 44	508 / 414 / 74	533 / 507 / 60	543 / 472 / 76	657 / 591 / 63	537 / 436 / 69	653 / 545 / 57	507 / 326 / 50	559 / 427 / 42	509 / 430 / 71	553 / 530 / 57	565 / 495 / 73	679 / 614 / 60	560 / 458 / 67
Exposure Category : D	15	2	537 / 383 / 45	603 / 480 / 37	520 / 490 / 62	614 / 611 / 51	618 / 560 / 64	744 / 690 / 52	627 / 529 / 60	761 / 655 / 49	548 / 406 / 44	627 / 503 / 36	533 / 516 / 60	636 / 637 / 48	657 / 599 / 63	787 / 733 / 51	653 / 553 / 57	783 / 677 / 46	559 / 427 / 42	664 / 537 / 35	553 / 540 / 57	654 / 659 / 46	679 / 622 / 60	805 / 753 / 48	675 / 575 / 55	826 / 716 / 45
	15	3	492 / 589 / 34	582 / 718 / 27	589 / 571 / 55	691 / 688 / 44	720 / 655 / 57	871 / 807 / 46	716 / 604 / 52	868 / 744 / 42	509 / 614 / 32	615 / 762 / 27	612 / 597 / 52	731 / 732 / 42	744 / 680 / 54	889 / 827 / 43	760 / 644 / 51	916 / 788 / 41	538 / 653 / 32	646 / 805 / 26	632 / 621 / 50	747 / 751 / 40	763 / 700 / 51	933 / 870 / 42	781 / 664 / 48	963 / 830 / 40
	20	1	521 / 275 / 58	575 / 376 / 51	523 / 370 / 87	574 / 491 / 75	519 / 447 / 95	632 / 565 / 79	513 / 413 / 82	627 / 521 / 68	527 / 293 / 56	585 / 398 / 49	540 / 400 / 85	572 / 507 / 71	543 / 472 / 91	657 / 591 / 75	537 / 436 / 79	653 / 545 / 65	542 / 316 / 55	605 / 427 / 48	547 / 423 / 82	580 / 530 / 68	565 / 495 / 88	679 / 614 / 72	560 / 458 / 76	675 / 566 / 62
	20	2	575 / 376 / 51	622 / 480 / 43	562 / 490 / 73	614 / 611 / 60	618 / 560 / 77	744 / 690 / 63	627 / 529 / 68	761 / 655 / 56	585 / 398 / 49	632 / 503 / 41	572 / 516 / 71	636 / 637 / 57	657 / 599 / 75	787 / 733 / 61	653 / 553 / 65	783 / 677 / 53	605 / 427 / 48	664 / 537 / 40	580 / 540 / 68	654 / 659 / 54	679 / 622 / 72	805 / 753 / 57	675 / 575 / 62	826 / 716 / 51
	25	1	521 / 275 / 58	575 / 376 / 51	523 / 370 / 87	574 / 491 / 75	519 / 447 / 95	632 / 565 / 79	513 / 413 / 82	627 / 521 / 68	527 / 293 / 56	585 / 398 / 49	540 / 400 / 85	572 / 507 / 71	543 / 472 / 91	657 / 591 / 75	537 / 436 / 79	653 / 545 / 65	542 / 316 / 55	605 / 427 / 48	547 / 423 / 82	580 / 530 / 68	565 / 495 / 105	679 / 614 / 86	560 / 458 / 88	675 / 566 / 72
	25	2	575 / 376 / 51	622 / 480 / 43	562 / 490 / 73	614 / 611 / 60	618 / 560 / 92	744 / 690 / 75	627 / 529 / 79	761 / 655 / 65	585 / 398 / 49	632 / 503 / 41	572 / 516 / 71	636 / 637 / 57	657 / 599 / 90	787 / 733 / 73	653 / 553 / 76	783 / 677 / 61	605 / 427 / 48	664 / 537 / 40	580 / 540 / 68	654 / 659 / 54	679 / 622 / 86	805 / 753 / 69	675 / 575 / 72	826 / 716 / 60
	25	3	524 / 589 / 39	582 / 718 / 31	599 / 571 / 65	691 / 688 / 52	720 / 655 / 82	871 / 807 / 67	716 / 604 / 69	868 / 744 / 56	529 / 614 / 37	615 / 762 / 30	612 / 597 / 62	731 / 732 / 50	744 / 680 / 77	889 / 827 / 62	760 / 644 / 67	916 / 788 / 54	546 / 653 / 36	646 / 805 / 29	632 / 621 / 59	747 / 751 / 47	763 / 700 / 61	933 / 870 / 50	781 / 664 / 55	963 / 830 / 45
	15	1	524 / 350 / 49	571 / 447 / 41	517 / 452 / 68	572 / 552 / 55	586 / 517 / 70	698 / 634 / 57	580 / 477 / 64	712 / 600 / 53	531 / 368 / 47	589 / 466 / 39	525 / 473 / 66	602 / 585 / 53	604 / 537 / 67	734 / 669 / 55	612 / 507 / 63	729 / 617 / 51	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36
	15	2	571 / 447 / 41	684 / 556 / 33	572 / 562 / 55	689 / 697 / 45	698 / 643 / 57	845 / 792 / 46	712 / 609 / 53	868 / 754 / 44	589 / 466 / 39	719 / 588 / 32	588 / 582 / 52	702 / 713 / 42	734 / 678 / 55	883 / 830 / 45	729 / 626 / 51	908 / 791 / 42	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36
	20	1	547 / 333 / 53	613 / 447 / 46	564 / 452 / 81	586 / 552 / 65	586 / 517 / 84	698 / 634 / 68	580 / 477 / 73	712 / 600 / 61	562 / 355 / 52	619 / 466 / 44	570 / 473 / 78	605 / 585 / 63	604 / 537 / 81	734 / 669 / 66	612 / 507 / 72	729 / 617 / 58	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36
	20	2	613 / 447 / 46	684 / 556 / 38	586 / 562 / 65	689 / 697 / 53	698 / 643 / 68	845 / 792 / 56	712 / 609 / 61	868 / 754 / 50	619 / 466 / 44	719 / 588 / 37	591 / 582 / 52	702 / 713 / 50	734 / 678 / 66	883 / 830 / 54	729 / 626 / 58	908 / 791 / 48	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36
	25	1	547 / 333 / 53	613 / 447 / 46	564 / 452 / 81	586 / 552 / 65	586 / 517 / 101	698 / 634 / 82	580 / 477 / 85	712 / 600 / 70	562 / 355 / 52	619 / 466 / 44	570 / 473 / 78	605 / 585 / 63	604 / 537 / 96	734 / 669 / 79	612 / 507 / 83	729 / 617 / 67	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36
25	2	613 / 447 / 46	684 / 556 / 38	586 / 562 / 65	689 / 697 / 53	698 / 643 / 82	845 / 792 / 67	712 / 609 / 70	868 / 754 / 58	619 / 466 / 44	719 / 588 / 37	591 / 582 / 62	702 / 713 / 50	734 / 678 / 79	883 / 830 / 64	729 / 626 / 67	908 / 791 / 56	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	
15	3	550 / 672 / 30	654 / 819 / 24	649 / 641 / 47	783 / 791 / 39	802 / 738 / 49	975 / 911 / 40	822 / 701 / 46	972 / 839 / 37	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	
20	1	577 / 378 / 51	624 / 482 / 43	575 / 493 / 75	616 / 603 / 60	635 / 567 / 79	747 / 683 / 63	630 / 524 / 68	764 / 648 / 56	562 / 355 / 52	619 / 466 / 44	570 / 473 / 78	605 / 585 / 63	604 / 537 / 81	734 / 669 / 66	612 / 507 / 72	729 / 617 / 58	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	
20	2	624 / 482 / 43	734 / 603 / 35	601 / 599 / 59	733 / 748 / 49	747 / 693 / 63	919 / 866 / 52	764 / 658 / 56	915 / 799 / 45	619 / 466 / 44	719 / 588 / 37	591 / 582 / 62	702 / 713 / 50	734 / 678 / 66	883 / 830 / 54	729 / 626 / 58	908 / 791 / 48	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	
25	1	577 / 378 / 51	624 / 482 / 43	575 / 493 / 75	616 / 603 / 60	635 / 567 / 94	747 / 683 / 75	630 / 524 / 79	764 / 648 / 65	562 / 355 / 52	619 / 466 / 44	570 / 473 / 78	605 / 585 / 63	604 / 537 / 96	734 / 669 / 79	612 / 507 / 83	729 / 617 / 67	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	
25	2	624 / 482 / 43	734 / 603 / 35	601 / 599 / 59	733 / 748 / 49	747 / 693 / 75	919 / 866 / 62	764 / 658 / 65	915 / 799 / 52	619 / 466 / 44	719 / 588 / 37	591 / 582 / 62	702 / 713 / 50	734 / 678 / 79	883 / 830 / 64	729 / 626 / 67	908 / 791 / 56	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	
25	3	584 / 721 / 31	707 / 891 / 26	693 / 691 / 52	851 / 865 / 43	875 / 811 / 56	1050 / 985 / 45	871 / 747 / 48	1048 / 908 / 39	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 44	839 / 775 / 57	1014 / 950 / 47	835 / 715 / 50	1011 / 875 / 41	577 / 708 / 29	682 / 856 / 23	682 / 676 / 46	818 / 829 / 37	839 / 775 / 48	1014 / 950 / 39	835 / 715 / 44	1011 / 875 / 36	

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge									
		15	1	544 / 401 / 44	635 / 508 / 36	538 / 511 / 61	629 / 618 / 48	650 / 583 / 63	778 / 715 / 51	645 / 538 / 57	797 / 678 / 48	564 / 437 / 41	674 / 546 / 34	563 / 541 / 56	681 / 675 / 46	689 / 624 / 58	838 / 774 / 48	702 / 590 / 55	834 / 713 / 44	595 / 470 / 39	707 / 578 / 32	593 / 577 / 52	708 / 708 / 42	741 / 676 / 55	891 / 827 / 45	736 / 623 / 51	888 / 762 / 41	635 / 508 / 36	766 / 632 / 30	629 / 629 / 48	762 / 781 / 40	778 / 725 / 51	918 / 868 / 40	797 / 688 / 48	949 / 830 / 38	674 / 546 / 34	826 / 687 / 28	662 / 669 / 45	790 / 814 / 36	838 / 785 / 48	1013 / 961 / 39	834 / 724 / 44	1010 / 886 / 36	707 / 578 / 32	854 / 714 / 26	708 / 721 / 42	865 / 896 / 35	891 / 838 / 45	1062 / 1010 / 36

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
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	3 = 3

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs																																																
Wind Speed [mph]		95																100																105																																
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																				
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																						
		30	1	523 / 275 / 58	577 / 376 / 51	525 / 370 / 87	575 / 491 / 75	544 / 447 / 132	632 / 565 / 110	513 / 413 / 109	627 / 521 / 91	529 / 293 / 56	586 / 398 / 49	542 / 400 / 86	573 / 507 / 71	556 / 472 / 127	657 / 591 / 105	537 / 436 / 105	653 / 545 / 86	544 / 316 / 55	606 / 427 / 48	549 / 423 / 83	581 / 530 / 68	567 / 495 / 122	679 / 614 / 100	560 / 458 / 101	675 / 566 / 82	35	1	541 / 266 / 61	598 / 369 / 54	549 / 364 / 94	604 / 491 / 83	568 / 447 / 151	632 / 565 / 125	513 / 413 / 123	627 / 521 / 102	555 / 288 / 60	606 / 391 / 52	555 / 386 / 91	600 / 507 / 78	579 / 472 / 145	657 / 591 / 120	537 / 436 / 118	653 / 545 / 97	559 / 305 / 57	624 / 419 / 51	570 / 415 / 90	607 / 530 / 75	589 / 495 / 140	679 / 614 / 114	560 / 458 / 113	675 / 566 / 93													
40	2		577 / 376 / 51	623 / 480 / 43	564 / 490 / 74	614 / 611 / 61	618 / 560 / 107	744 / 690 / 88	627 / 529 / 91	761 / 655 / 74	586 / 398 / 49	634 / 503 / 41	573 / 516 / 71	636 / 637 / 58	657 / 599 / 105	787 / 733 / 85	653 / 553 / 86	783 / 677 / 70	606 / 427 / 48	664 / 537 / 40	581 / 540 / 68	654 / 659 / 55	679 / 622 / 100	805 / 753 / 80	675 / 575 / 82	40	2		598 / 369 / 54	650 / 480 / 46	592 / 490 / 81	632 / 611 / 67	618 / 560 / 123	744 / 690 / 100	627 / 529 / 102	761 / 655 / 83	606 / 391 / 52	660 / 503 / 44	600 / 516 / 78	640 / 637 / 64	657 / 599 / 120	787 / 733 / 97	653 / 553 / 97	783 / 677 / 79	624 / 419 / 51	683 / 537 / 43	607 / 540 / 75	654 / 659 / 60	679 / 622 / 114	805 / 753 / 91	675 / 575 / 93	826 / 716 / 76														
	30		3	525 / 589 / 39	582 / 718 / 31	601 / 571 / 65	691 / 688 / 52	720 / 655 / 95	871 / 807 / 78	716 / 604 / 78	868 / 744 / 64	530 / 614 / 37	615 / 762 / 31	612 / 597 / 62	731 / 732 / 50	744 / 680 / 90	889 / 827 / 73	760 / 644 / 76	916 / 788 / 62	547 / 653 / 36	646 / 805 / 30	632 / 621 / 59	747 / 751 / 47	763 / 700 / 85	933 / 870 / 70		781 / 664 / 72		40	3	549 / 333 / 53	614 / 447 / 46	565 / 452 / 81	587 / 552 / 65	586 / 517 / 117	698 / 634 / 95	580 / 477 / 97	712 / 600 / 80	564 / 355 / 52	620 / 466 / 45	571 / 473 / 78	606 / 585 / 64	604 / 537 / 112	734 / 669 / 92	612 / 507 / 95	729 / 617 / 76	614 / 447 / 46	684 / 556 / 38	587 / 562 / 65	689 / 697 / 53	698 / 643 / 95	845 / 792 / 78	712 / 609 / 80	868 / 754 / 66	620 / 466 / 45	719 / 588 / 37	592 / 582 / 62	702 / 713 / 50	734 / 678 / 92	883 / 830 / 75	729 / 626 / 76	908 / 791 / 64				
			35	1	577 / 376 / 51	623 / 480 / 43	564 / 490 / 74	614 / 611 / 61	618 / 560 / 107	744 / 690 / 88	627 / 529 / 91	761 / 655 / 74	586 / 398 / 49	634 / 503 / 41	573 / 516 / 71	636 / 637 / 58	657 / 599 / 105	787 / 733 / 85	653 / 553 / 86	783 / 677 / 70	606 / 427 / 48	664 / 537 / 40	581 / 540 / 68	654 / 659 / 55	679 / 622 / 100		805 / 753 / 80			675 / 575 / 82	40	1	572 / 327 / 56	630 / 438 / 49	586 / 444 / 88	613 / 552 / 72	598 / 517 / 134	698 / 634 / 108	580 / 477 / 109	712 / 600 / 90	586 / 349 / 55	649 / 466 / 48	590 / 464 / 85	631 / 585 / 70	605 / 537 / 128	734 / 669 / 106	612 / 507 / 106	729 / 617 / 86	630 / 438 / 49	689 / 556 / 41	613 / 562 / 72	689 / 697 / 59	698 / 643 / 108	845 / 792 / 89	712 / 609 / 90	868 / 754 / 74	649 / 466 / 48	719 / 588 / 40	616 / 582 / 68	702 / 713 / 56	734 / 678 / 106	883 / 830 / 86	729 / 626 / 86	908 / 791 / 72		
				40	2	577 / 376 / 51	623 / 480 / 43	564 / 490 / 74	614 / 611 / 61	618 / 560 / 107	744 / 690 / 88	627 / 529 / 91	761 / 655 / 74	586 / 398 / 49	634 / 503 / 41	573 / 516 / 71	636 / 637 / 58	657 / 599 / 105	787 / 733 / 85	653 / 553 / 86	783 / 677 / 70	606 / 427 / 48	664 / 537 / 40	581 / 540 / 68	654 / 659 / 55		679 / 622 / 100			805 / 753 / 80		675 / 575 / 82	40	2	594 / 321 / 60	646 / 429 / 52	594 / 428 / 95	638 / 552 / 81	620 / 517 / 151	698 / 634 / 122	580 / 477 / 121	712 / 600 / 100	607 / 342 / 59	663 / 456 / 51	608 / 455 / 93	656 / 585 / 79	626 / 537 / 144	734 / 669 / 119	612 / 507 / 118	729 / 617 / 95	646 / 429 / 52	713 / 556 / 44	638 / 562 / 81	689 / 697 / 66	698 / 643 / 122	845 / 792 / 100	712 / 609 / 100	868 / 754 / 82	663 / 456 / 51	734 / 588 / 43	640 / 582 / 77	702 / 713 / 62	734 / 678 / 96	883 / 830 / 95	729 / 626 / 80	908 / 791 / 80

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			30-60ft	70in x 41in	Load: Up / Down / Side , lbs																						
Wind Speed [mph]			140								150								160								
Panal Angle			0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
30	1	582 / 393 / 49	643 / 508 / 42	580 / 511 / 72	629 / 618 / 58	650 / 583 / 105	778 / 715 / 85	645 / 538 / 86	797 / 678 / 72	610 / 437 / 47	674 / 546 / 39	584 / 541 / 66	681 / 675 / 55	689 / 624 / 97	838 / 774 / 80	702 / 590 / 82	834 / 713 / 66	624 / 470 / 45	707 / 578 / 36	596 / 577 / 62	708 / 708 / 50	741 / 676 / 92	891 / 827 / 75	736 / 623 / 76	888 / 762 / 62		
	2	643 / 508 / 42	766 / 632 / 34	629 / 629 / 58	762 / 781 / 47	778 / 725 / 85	918 / 868 / 68	797 / 688 / 72	949 / 830 / 58	674 / 546 / 39	826 / 687 / 32	662 / 669 / 53	790 / 814 / 43	838 / 785 / 80	1013 / 961 / 65	834 / 724 / 66	1010 / 886 / 54	707 / 578 / 36	854 / 714 / 30	708 / 721 / 50	865 / 896 / 42	891 / 838 / 75	1062 / 1010 / 60	888 / 773 / 62	1103 / 971 / 52		
	3	608 / 753 / 31	731 / 923 / 25	723 / 723 / 50	851 / 867 / 40	879 / 817 / 73	1083 / 1018 / 60	906 / 778 / 62	1126 / 977 / 52	651 / 812 / 29	772 / 980 / 23	777 / 783 / 47	938 / 960 / 39	937 / 874 / 68	1138 / 1072 / 55	968 / 835 / 58	1187 / 1032 / 48	688 / 864 / 27	840 / 1070 / 22	826 / 837 / 44	983 / 1009 / 36	1024 / 959 / 65	1234 / 1166 / 53	1021 / 883 / 54	1232 / 1073 / 43		
	1	601 / 386 / 52	669 / 508 / 45	608 / 511 / 80	634 / 618 / 64	650 / 583 / 120	778 / 715 / 97	645 / 538 / 97	797 / 678 / 81	627 / 428 / 50	686 / 546 / 42	610 / 541 / 73	681 / 675 / 60	689 / 624 / 111	838 / 774 / 91	702 / 590 / 93	834 / 713 / 74	653 / 470 / 48	707 / 578 / 39	620 / 577 / 68	708 / 708 / 56	741 / 676 / 106	891 / 827 / 86	736 / 623 / 86	888 / 762 / 70		
	2	669 / 508 / 45	766 / 632 / 37	634 / 629 / 64	762 / 781 / 52	778 / 725 / 97	918 / 868 / 77	797 / 688 / 81	949 / 830 / 65	686 / 546 / 42	826 / 687 / 35	662 / 669 / 59	790 / 814 / 47	838 / 785 / 91	1013 / 961 / 74	834 / 724 / 60	1010 / 886 / 60	707 / 578 / 39	854 / 714 / 32	708 / 721 / 56	865 / 896 / 46	891 / 838 / 86	1062 / 1010 / 69	888 / 773 / 70	1103 / 971 / 58		
	3	608 / 753 / 33	731 / 923 / 27	723 / 723 / 56	851 / 867 / 44	879 / 817 / 83	1083 / 1018 / 69	906 / 778 / 70	1126 / 977 / 58	651 / 812 / 31	772 / 980 / 25	777 / 783 / 52	938 / 960 / 43	937 / 874 / 77	1138 / 1072 / 63	968 / 835 / 65	1187 / 1032 / 53	688 / 864 / 29	840 / 1070 / 24	826 / 837 / 49	983 / 1009 / 39	1024 / 959 / 74	1234 / 1166 / 60	1021 / 883 / 60	1232 / 1073 / 49		
	1	620 / 378 / 55	696 / 508 / 49	636 / 511 / 90	657 / 618 / 72	650 / 583 / 135	778 / 715 / 109	645 / 538 / 108	797 / 678 / 90	644 / 420 / 53	711 / 546 / 45	636 / 541 / 82	686 / 675 / 68	689 / 624 / 125	838 / 774 / 103	702 / 590 / 103	834 / 713 / 82	667 / 460 / 51	721 / 578 / 42	644 / 577 / 77	708 / 708 / 62	741 / 676 / 119	891 / 827 / 96	736 / 623 / 95	888 / 762 / 77		
	2	696 / 508 / 49	766 / 632 / 40	657 / 629 / 72	762 / 781 / 59	778 / 725 / 109	918 / 868 / 87	797 / 688 / 90	949 / 830 / 72	711 / 546 / 45	826 / 687 / 38	668 / 669 / 66	790 / 814 / 53	838 / 785 / 103	1013 / 961 / 84	834 / 724 / 82	1010 / 886 / 67	721 / 578 / 42	854 / 714 / 35	708 / 721 / 62	865 / 896 / 52	891 / 838 / 96	1062 / 1010 / 77	888 / 773 / 77	1103 / 971 / 64		
	3	616 / 753 / 36	731 / 923 / 29	723 / 723 / 62	851 / 867 / 50	879 / 817 / 93	1083 / 1018 / 77	906 / 778 / 77	1126 / 977 / 64	651 / 812 / 33	772 / 980 / 27	777 / 783 / 59	938 / 960 / 48	937 / 874 / 87	1138 / 1072 / 71	968 / 835 / 72	1187 / 1032 / 59	688 / 864 / 31	840 / 1070 / 26	826 / 837 / 55	983 / 1009 / 44	1024 / 959 / 84	1234 / 1166 / 68	1021 / 883 / 67	1232 / 1073 / 54		
Wind Speed [mph]			170								180																
30	1	635 / 499 / 42	753 / 621 / 34	634 / 623 / 59	750 / 754 / 47	765 / 702 / 85	937 / 873 / 70	784 / 667 / 72	967 / 833 / 60	664 / 537 / 40	794 / 659 / 32	654 / 648 / 55	785 / 794 / 44	805 / 743 / 80	973 / 910 / 65	826 / 706 / 68	1007 / 870 / 56										
	2	753 / 621 / 34	930 / 782 / 29	750 / 767 / 47	904 / 941 / 39	937 / 885 / 70	1097 / 1047 / 55	967 / 845 / 60	1144 / 1009 / 48	794 / 659 / 32	971 / 820 / 27	785 / 808 / 44	934 / 975 / 36	973 / 922 / 65	1172 / 1121 / 53	1007 / 883 / 56	1225 / 1083 / 46										
	3	719 / 908 / 25	863 / 1104 / 20	868 / 883 / 42	1061 / 1093 / 34	1065 / 1001 / 60	1325 / 1254 / 50	1107 / 960 / 52	1323 / 1155 / 41	773 / 980 / 24	920 / 1180 / 19	901 / 921 / 39	1084 / 1120 / 31	1143 / 1076 / 58	1336 / 1266 / 45	1140 / 991 / 48	1408 / 1231 / 39										
	1	662 / 499 / 45	753 / 621 / 37	643 / 623 / 65	750 / 754 / 52	765 / 702 / 97	937 / 873 / 80	784 / 667 / 81	967 / 833 / 67	683 / 537 / 43	794 / 659 / 35	654 / 648 / 60	785 / 794 / 49	805 / 743 / 91	973 / 910 / 74	826 / 706 / 76	1007 / 870 / 63										
	2	753 / 621 / 37	930 / 782 / 31	750 / 767 / 52	904 / 941 / 43	937 / 885 / 63	1097 / 1047 / 63	967 / 845 / 67	1144 / 1009 / 53	794 / 659 / 35	971 / 820 / 29	785 / 808 / 49	934 / 975 / 39	973 / 922 / 74	1172 / 1121 / 60	1007 / 883 / 63	1225 / 1083 / 51										
	3	719 / 908 / 27	863 / 1104 / 22	868 / 883 / 46	1061 / 1093 / 38	1065 / 1001 / 69	1325 / 1254 / 57	1107 / 960 / 58	1323 / 1155 / 47	773 / 980 / 26	920 / 1180 / 21	901 / 921 / 43	1084 / 1120 / 34	1143 / 1076 / 66	1336 / 1266 / 52	1140 / 991 / 53	1408 / 1231 / 44										
	1	688 / 499 / 49	753 / 621 / 40	666 / 623 / 73	750 / 754 / 59	765 / 702 / 109	937 / 873 / 90	784 / 667 / 90	967 / 833 / 75	708 / 537 / 47	794 / 659 / 38	667 / 648 / 68	785 / 794 / 55	805 / 743 / 103	973 / 910 / 84	826 / 706 / 85	1007 / 870 / 70										
	2	753 / 621 / 40	930 / 782 / 33	750 / 767 / 59	904 / 941 / 48	937 / 885 / 90	1097 / 1047 / 71	967 / 845 / 75	1144 / 1009 / 59	794 / 659 / 38	971 / 820 / 31	785 / 808 / 55	934 / 975 / 44	973 / 922 / 84	1172 / 1121 / 68	1007 / 883 / 70	1225 / 1083 / 57										
	3	719 / 908 / 29	863 / 1104 / 24	868 / 883 / 52	1061 / 1093 / 42	1065 / 1001 / 77	1325 / 1254 / 64	1107 / 960 / 64	1323 / 1155 / 52	773 / 980 / 28	920 / 1180 / 22	901 / 921 / 48	1084 / 1120 / 39	1143 / 1076 / 74	1336 / 1266 / 58	1140 / 991 / 59	1408 / 1231 / 49										
Wind Speed [mph]			190								200																
30	1	702 / 571 / 38	830 / 693 / 31	687 / 684 / 52	843 / 856 / 43	867 / 803 / 78	1041 / 976 / 63	863 / 740 / 64	1079 / 935 / 54	736 / 603 / 36	889 / 745 / 30	737 / 738 / 50	868 / 885 / 40	896 / 833 / 73	1105 / 1039 / 60	924 / 794 / 62	1102 / 957 / 50										
	2	830 / 693 / 31	1041 / 882 / 26	814 / 842 / 42	995 / 1042 / 34	1041 / 989 / 63	1242 / 1190 / 50	1079 / 948 / 54	1302 / 1152 / 43	889 / 745 / 30	1066 / 906 / 24	868 / 900 / 40	1053 / 1105 / 33	1059 / 1009 / 58	1306 / 1254 / 48	1102 / 971 / 50	1373 / 1216 / 41										
	3	790 / 1005 / 22	972 / 1250 / 18	964 / 988 / 37	1149 / 1190 / 30	1161 / 1096 / 53	1404 / 1333 / 43	1214 / 1057 / 46	1485 / 1300 / 37	836 / 1066 / 21	1019 / 1313 / 17	980 / 1008 / 34	1208 / 1253 / 28	1224 / 1157 / 50	1555 / 1478 / 43	1282 / 1118 / 43	1553 / 1361 / 35										
	1	702 / 571 / 41	830 / 693 / 33	687 / 684 / 57	843 / 856 / 47	867 / 803 / 89	1041 / 976 / 71	863 / 740 / 72	1079 / 935 / 60	736 / 603 / 39	889 / 745 / 32	737 / 738 / 56	868 / 885 / 44	896 / 833 / 83	1105 / 1039 / 69	924 / 794 / 70	1102 / 957 / 56										
	2	830 / 693 / 33	1041 / 882 / 28	814 / 842 / 46	995 / 1042 / 38	1041 / 989 / 71	1242 / 1190 / 57	1079 / 948 / 60	1302 / 1152 / 49	889 / 745 / 32	1066 / 906 / 26	868 / 900 / 44	1053 / 1105 / 36	1059 / 1009 / 66	1306 / 1254 / 54	1102 / 971 / 56	1373 / 1216 / 47										
	3	790 / 1005 / 24	972 / 1250 / 20	964 / 988 / 41	1149 / 1190 / 33	1161 / 1096 / 60	1404 / 1333 / 49	1214 / 1057 / 51	1485 / 1300 / 42	836 / 1066 / 23	1019 / 1313 / 19	980 / 1008 / 38	1208 / 1253 / 31	1224 / 1157 / 57	1555 / 1478 / 49	1282 / 1118 / 49	1553 / 1361 / 40										
	1	726 / 571 / 44	830 / 693 / 36	687 / 684 / 64	843 / 856 / 53	867 / 803 / 100	1041 / 976 / 80	863 / 740 / 80	1079 / 935 / 67	742 / 603 / 42	889 / 745 / 35	737 / 738 / 62	868 / 885 / 50	896 / 833 / 93	1105 / 1039 / 77	924 / 794 / 77	1102 / 957 / 62										
	2	830 / 693 / 36	1041 / 882 / 30	814 / 842 / 52	995 / 1042 / 42	1041 / 989 / 80	1242 / 1190 / 64	1079 / 948 / 67	1302 / 1152 / 54	889 / 745 / 35	1066 / 906 / 28	868 / 900 / 50	1053 / 1105 / 41	1059 / 1009 / 74	1306 / 1254 / 61	1102 / 971 / 62	1373 / 1216 / 52										
	3	790 / 1005 / 26	972 / 1250 / 21	964 / 988 / 46	1149 / 1190 / 37	1161 / 1096 / 68	1404 / 1333 / 55	1214 / 1057 / 57	1485 / 1300 / 47	836 / 1066 / 25	1019 / 1313 / 20	980 / 1008 / 42	1208 / 1253 / 35	1224 / 1157 / 64	1555 / 1478 / 55	1282 / 1118 / 54	1553 / 1361 / 44										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof										30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]										95								100								105							
Panal Angle										0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		1	581 / 252 / 108	624 / 349 / 96	584 / 345 / 145	636 / 472 / 129	605 / 439 / 189	663 / 565 / 160	513 / 413 / 150	627 / 521 / 124	592 / 273 / 106	641 / 375 / 94	597 / 373 / 142	655 / 507 / 126	614 / 463 / 182	673 / 591 / 153	537 / 436 / 144	653 / 545 / 119	604 / 294 / 104	657 / 402 / 92	610 / 400 / 140	660 / 530 / 121	634 / 495 / 179	681 / 614 / 146	560 / 458 / 138	675 / 566 / 113							

Exposure Category : D

Wind Speed [mph]										110								115								ASCE Group Zone			
Panal Angle										0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		Panal Angle		Mono Slope	
45	1	615 / 315 / 102	674 / 429 / 90	612 / 420 / 134	663 / 552 / 116	641 / 517 / 171	698 / 634 / 139	580 / 477 / 133	712 / 600 / 110	627 / 336 / 100	675 / 446 / 87	625 / 447 / 132	680 / 585 / 113	647 / 537 / 164	734 / 669 / 135	612 / 507 / 130	729 / 617 / 105	0 - 7.5	1 = 1	2 = 2	3 = 3								
		674 / 429 / 90	737 / 556 / 77	663 / 562 / 116	708 / 697 / 95	698 / 643 / 139	845 / 792 / 113	712 / 609 / 110	868 / 754 / 90	675 / 446 / 87	758 / 588 / 75	664 / 582 / 111	707 / 713 / 90	734 / 678 / 135	883 / 830 / 110	729 / 626 / 105	908 / 791 / 88					7.5 - 15	2 = 2	3 = 3					
		614 / 672 / 69	654 / 819 / 56	689 / 641 / 100	783 / 791 / 82	802 / 738 / 120	975 / 911 / 99	822 / 701 / 96	972 / 839 / 76	629 / 708 / 67	682 / 856 / 54	708 / 676 / 98	818 / 829 / 79	839 / 775 / 117	1014 / 950 / 95	835 / 715 / 90	1011 / 875 / 74								15 - 30	1 = 1	2 = 2	3 = 3	
	635 / 309 / 108	687 / 420 / 96	628 / 411 / 143	688 / 552 / 126	663 / 517 / 187	704 / 634 / 151	580 / 477 / 145	712 / 600 / 120	633 / 323 / 104	702 / 446 / 94	640 / 438 / 140	705 / 585 / 123	667 / 537 / 179	734 / 669 / 147	612 / 507 / 142	729 / 617 / 114	30 - 45		1 = 1	2 = 2	3 = 3								
	687 / 420 / 96	761 / 556 / 83	688 / 562 / 126	729 / 697 / 103	704 / 643 / 151	845 / 792 / 123	712 / 609 / 120	868 / 754 / 99	702 / 446 / 94	781 / 588 / 81	688 / 582 / 120	727 / 713 / 98	734 / 678 / 147	883 / 830 / 119	729 / 626 / 114	908 / 791 / 96													
	636 / 672 / 75	671 / 819 / 61	711 / 641 / 109	783 / 791 / 89	802 / 738 / 131	975 / 911 / 107	822 / 701 / 105	972 / 839 / 83	650 / 708 / 73	685 / 856 / 59	729 / 676 / 106	818 / 829 / 86	839 / 775 / 127	1014 / 950 / 103	835 / 715 / 99	1011 / 875 / 80													

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				70in x 41in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		45	1	637 / 371 / 94	706 / 497 / 83	651 / 500 / 126	679 / 618 / 103	668 / 583 / 153	778 / 715 / 124	645 / 538 / 119	797 / 678 / 99	658 / 411 / 90	735 / 546 / 79	661 / 541 / 119	707 / 675 / 98	689 / 624 / 142	838 / 774 / 117	702 / 590 / 113	834 / 713 / 90	679 / 450 / 87	743 / 578 / 73	668 / 577 / 111	712 / 708 / 90	741 / 676 / 135	891 / 827 / 110
Wind Speed [mph]		170								180															
45	1	699 / 488 / 83	767 / 621 / 69	689 / 623 / 105	750 / 754 / 84	765 / 702 / 124	937 / 873 / 102	784 / 667 / 99	967 / 833 / 82	734 / 537 / 81	794 / 659 / 65	688 / 648 / 98	785 / 794 / 79	805 / 743 / 117	973 / 910 / 95	826 / 706 / 93	1007 / 870 / 76	ASCE Group Zone							
45	2	767 / 621 / 69	930 / 782 / 58	750 / 767 / 84	904 / 941 / 69	937 / 885 / 102	1097 / 1047 / 80	967 / 845 / 82	1144 / 1009 / 65	794 / 659 / 65	971 / 820 / 54	785 / 808 / 79	934 / 975 / 63	973 / 922 / 95	1172 / 1121 / 77	1007 / 883 / 76	1225 / 1083 / 62	Panal Angle							
	3	719 / 908 / 50	863 / 1104 / 41	868 / 883 / 74	1061 / 1093 / 61	1065 / 1001 / 88	1325 / 1254 / 73	1107 / 960 / 71	1323 / 1155 / 57	773 / 980 / 48	920 / 1180 / 39	901 / 921 / 69	1084 / 1120 / 56	1143 / 1076 / 84	1336 / 1266 / 66	1140 / 991 / 65	1408 / 1231 / 54	Mono Slope							
50	1	724 / 488 / 90	788 / 621 / 75	711 / 623 / 115	751 / 754 / 92	765 / 702 / 135	937 / 873 / 111	784 / 667 / 108	967 / 833 / 89	741 / 524 / 85	807 / 659 / 71	709 / 648 / 106	785 / 794 / 86	805 / 743 / 127	973 / 910 / 103	826 / 706 / 102	1007 / 870 / 83	0 - 7.5							
	2	788 / 621 / 75	930 / 782 / 63	751 / 767 / 92	904 / 941 / 75	937 / 885 / 88	1097 / 1047 / 88	967 / 845 / 89	1144 / 1009 / 71	807 / 659 / 71	971 / 820 / 59	785 / 808 / 86	934 / 975 / 69	973 / 922 / 103	1172 / 1121 / 84	1007 / 883 / 83	1225 / 1083 / 68	7.5 - 15							
60	1	758 / 477 / 101	832 / 621 / 87	757 / 623 / 133	787 / 754 / 107	767 / 702 / 157	937 / 873 / 130	784 / 667 / 126	967 / 833 / 104	771 / 511 / 96	848 / 659 / 82	751 / 648 / 123	800 / 794 / 100	805 / 743 / 148	973 / 910 / 121	826 / 706 / 119	1007 / 870 / 97	15 - 30							
	2	832 / 621 / 87	930 / 782 / 72	787 / 767 / 107	904 / 941 / 87	937 / 885 / 130	1097 / 1047 / 102	967 / 845 / 104	1144 / 1009 / 83	848 / 659 / 82	971 / 820 / 68	785 / 808 / 100	934 / 975 / 80	973 / 922 / 121	1172 / 1121 / 97	1007 / 883 / 97	1225 / 1083 / 79	30 - 45							
60	3	732 / 908 / 63	863 / 1104 / 51	868 / 883 / 93	1061 / 1093 / 77	1065 / 1001 / 111	1325 / 1254 / 93	1107 / 960 / 90	1323 / 1155 / 72	773 / 980 / 60	920 / 1180 / 48	901 / 921 / 87	1084 / 1120 / 70	1143 / 1076 / 107	1336 / 1266 / 84	1140 / 991 / 83	1408 / 1231 / 68	ASCE Group Zone							
	1	750 / 571 / 77	830 / 693 / 62	702 / 684 / 92	843 / 856 / 77	867 / 803 / 113	1041 / 976 / 91	863 / 740 / 88	1079 / 935 / 74	765 / 603 / 73	889 / 745 / 60	737 / 738 / 90	868 / 885 / 71	896 / 833 / 106	1105 / 1039 / 88	924 / 794 / 85	1102 / 957 / 68	Panal Angle							
45	2	830 / 693 / 62	1041 / 882 / 52	814 / 842 / 74	995 / 1042 / 61	1041 / 989 / 91	1242 / 1190 / 73	1079 / 948 / 74	1302 / 1152 / 60	889 / 745 / 60	1066 / 906 / 48	868 / 900 / 71	1053 / 1105 / 58	1059 / 1009 / 84	1306 / 1254 / 70	1102 / 971 / 68	1373 / 1216 / 57	Mono Slope							
	3	790 / 1005 / 44	972 / 1250 / 37	964 / 988 / 66	1149 / 1190 / 53	1161 / 1096 / 77	1404 / 1333 / 62	1214 / 1057 / 51	1485 / 1300 / 51	836 / 1066 / 43	1019 / 1313 / 35	980 / 1008 / 61	1208 / 1253 / 50	1224 / 1157 / 73	1555 / 1478 / 62	1282 / 1118 / 60	1553 / 1361 / 48	0 - 7.5							
50	1	774 / 571 / 83	830 / 693 / 67	722 / 684 / 100	843 / 856 / 83	867 / 803 / 123	1041 / 976 / 100	863 / 740 / 96	1079 / 935 / 80	788 / 603 / 79	889 / 745 / 65	753 / 738 / 98	868 / 885 / 78	896 / 833 / 115	1105 / 1039 / 96	924 / 794 / 93	1102 / 957 / 74	7.5 - 15							
	2	830 / 693 / 67	1041 / 882 / 56	814 / 842 / 80	995 / 1042 / 66	1041 / 989 / 100	1242 / 1190 / 80	1079 / 948 / 80	1302 / 1152 / 65	889 / 745 / 65	1066 / 906 / 52	868 / 900 / 78	1053 / 1105 / 63	1059 / 1009 / 92	1306 / 1254 / 76	1102 / 971 / 74	1373 / 1216 / 62	15 - 30							
60	1	802 / 557 / 94	860 / 693 / 77	762 / 684 / 117	843 / 856 / 97	867 / 803 / 144	1041 / 976 / 116	863 / 740 / 111	1079 / 935 / 94	811 / 587 / 89	896 / 745 / 75	792 / 738 / 113	868 / 885 / 90	896 / 833 / 134	1105 / 1039 / 111	924 / 794 / 108	1102 / 957 / 86	30 - 45							
	2	860 / 693 / 77	1041 / 882 / 65	814 / 842 / 93	995 / 1042 / 77	1041 / 989 / 116	1242 / 1190 / 93	1079 / 948 / 94	1302 / 1152 / 76	896 / 745 / 75	1066 / 906 / 60	868 / 900 / 90	1053 / 1105 / 73	1059 / 1009 / 107	1306 / 1254 / 88	1102 / 971 / 86	1373 / 1216 / 72	ASCE Group Zone							
60	3	790 / 1005 / 56	972 / 1250 / 46	964 / 988 / 83	1149 / 1190 / 67	1161 / 1096 / 97	1404 / 1333 / 79	1214 / 1057 / 79	1485 / 1300 / 65	836 / 1066 / 53	1019 / 1313 / 44	980 / 1008 / 77	1208 / 1253 / 63	1224 / 1157 / 93	1555 / 1478 / 79	1282 / 1118 / 76	1553 / 1361 / 61	Panal Angle							
	1	758 / 477 / 101	832 / 621 / 87	757 / 623 / 133	787 / 754 / 107	767 / 702 / 157	937 / 873 / 130	784 / 667 / 126	967 / 833 / 104	771 / 511 / 96	848 / 659 / 82	751 / 648 / 123	800 / 794 / 100	805 / 743 / 148	973 / 910 / 121	826 / 706 / 119	1007 / 870 / 97	Mono Slope							

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
7.5 - 15	3 = 3
	1 = 1
15 - 30	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								70in x 41in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge														
100	1	765 / 203 / 166	803 / 293 / 155	760 / 283 / 233	810 / 404 / 217	735 / 371 / 328	805 / 513 / 298	583 / 406 / 293	645 / 521 / 248	783 / 223 / 166	808 / 314 / 151	780 / 311 / 233	817 / 433 / 212	745 / 398 / 320	822 / 549 / 291	605 / 436 / 287	656 / 545 / 237	783 / 240 / 162	833 / 344 / 151	783 / 332 / 228	825 / 461 / 207	774 / 435 / 320	839 / 583 / 283	614 / 458 / 276	675 / 566 / 225
	2	803 / 293 / 155	847 / 405 / 140	810 / 412 / 217	868 / 566 / 197	805 / 521 / 298	885 / 690 / 261	645 / 529 / 248	761 / 655 / 203	808 / 314 / 151	857 / 433 / 137	817 / 441 / 212	882 / 604 / 191	822 / 556 / 291	908 / 733 / 253	656 / 553 / 237	783 / 677 / 192	833 / 344 / 151	891 / 473 / 137	825 / 470 / 207	896 / 641 / 186	839 / 591 / 283	903 / 753 / 238	675 / 575 / 225	826 / 716 / 186
	3	849 / 575 / 148	840 / 718 / 122	844 / 506 / 202	924 / 688 / 181	848 / 621 / 268	943 / 807 / 231	716 / 604 / 214	868 / 744 / 175	859 / 614 / 144	852 / 762 / 118	856 / 540 / 197	943 / 732 / 176	869 / 661 / 261	938 / 827 / 216	760 / 644 / 208	916 / 788 / 169	868 / 653 / 140	864 / 805 / 115	868 / 574 / 191	932 / 751 / 166	890 / 700 / 253	962 / 870 / 209	781 / 664 / 197	963 / 830 / 163

Wind Speed [mph]		110								115															
100	1	784 / 256 / 159	838 / 365 / 148	786 / 354 / 222	833 / 489 / 202	785 / 462 / 313	856 / 617 / 276	621 / 477 / 265	712 / 600 / 220	803 / 278 / 159	844 / 386 / 144	789 / 375 / 217	840 / 517 / 197	796 / 489 / 305	872 / 651 / 268	641 / 507 / 259	729 / 617 / 208	844 / 386 / 144	912 / 528 / 129	840 / 526 / 197	921 / 713 / 176	872 / 660 / 268	942 / 830 / 224	729 / 626 / 208	908 / 791 / 175
	2	838 / 365 / 148	902 / 500 / 133	833 / 498 / 202	909 / 678 / 181	856 / 626 / 276	923 / 792 / 231	712 / 609 / 220	868 / 754 / 180	844 / 386 / 144	912 / 528 / 129	840 / 526 / 197	921 / 713 / 176	872 / 660 / 268	942 / 830 / 224	729 / 626 / 208	908 / 791 / 175	860 / 708 / 129	854 / 856 / 104	890 / 640 / 181	962 / 829 / 155	928 / 775 / 238	1014 / 950 / 194	835 / 715 / 180	1011 / 875 / 147
	3	853 / 672 / 133	845 / 819 / 107	879 / 607 / 186	947 / 791 / 160	910 / 738 / 246	984 / 911 / 201	822 / 701 / 192	972 / 839 / 152	860 / 708 / 129	854 / 856 / 104	890 / 640 / 181	962 / 829 / 155	928 / 775 / 238	1014 / 950 / 194	835 / 715 / 180	1011 / 875 / 147								

Wind Speed [mph]		120								130															
100	1	804 / 294 / 155	848 / 407 / 140	811 / 406 / 217	870 / 559 / 197	807 / 516 / 298	887 / 683 / 261	647 / 524 / 248	764 / 648 / 203	803 / 278 / 159	844 / 386 / 144	789 / 375 / 217	840 / 517 / 197	796 / 489 / 305	872 / 651 / 268	641 / 507 / 259	729 / 617 / 208	844 / 386 / 144	912 / 528 / 129	840 / 526 / 197	921 / 713 / 176	872 / 660 / 268	942 / 830 / 224	729 / 626 / 208	908 / 791 / 175
	2	848 / 407 / 140	921 / 554 / 126	870 / 569 / 197	933 / 748 / 171	887 / 693 / 261	960 / 866 / 216	764 / 658 / 203	915 / 799 / 163	844 / 386 / 144	912 / 528 / 129	840 / 526 / 197	921 / 713 / 176	872 / 660 / 268	942 / 830 / 224	729 / 626 / 208	908 / 791 / 175	860 / 708 / 129	854 / 856 / 104	890 / 640 / 181	962 / 829 / 155	928 / 775 / 238	1014 / 950 / 194	835 / 715 / 180	1011 / 875 / 147
	3	842 / 721 / 122	861 / 891 / 100	900 / 671 / 176	975 / 865 / 150	946 / 811 / 231	1050 / 985 / 186	871 / 747 / 175	1048 / 908 / 141	860 / 708 / 129	854 / 856 / 104	890 / 640 / 181	962 / 829 / 155	928 / 775 / 238	1014 / 950 / 194	835 / 715 / 180	1011 / 875 / 147								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof | 30-60ft | 70in x 41in | Load: Up / Down / Side , lbs

Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	804 / 310 / 151	876 / 439 / 140	814 / 427 / 212	877 / 586 / 191	817 / 542 / 291	902 / 715 / 253	650 / 538 / 237	797 / 678 / 197	825 / 350 / 148	884 / 480 / 133	839 / 481 / 207	889 / 639 / 181	836 / 592 / 276	928 / 774 / 238	702 / 590 / 225	834 / 713 / 180	847 / 390 / 144	917 / 533 / 129	844 / 522 / 197	926 / 708 / 176	877 / 657 / 268	949 / 827 / 224	736 / 623 / 208	888 / 762 / 169
	2	876 / 439 / 140	930 / 579 / 122	877 / 597 / 191	943 / 781 / 166	902 / 725 / 253	941 / 868 / 201	797 / 688 / 197	949 / 830 / 158	884 / 480 / 133	975 / 647 / 118	889 / 650 / 181	929 / 814 / 150	928 / 785 / 238	1013 / 961 / 194	834 / 724 / 180	1010 / 886 / 147	917 / 533 / 129	1020 / 714 / 115	926 / 721 / 176	974 / 896 / 145	949 / 838 / 224	1062 / 1010 / 179	888 / 773 / 169	1103 / 971 / 141
	3	847 / 753 / 118	866 / 923 / 96	937 / 723 / 176	952 / 867 / 140	930 / 817 / 216	1083 / 1018 / 179	906 / 778 / 169	1126 / 977 / 141	855 / 812 / 111	873 / 980 / 89	954 / 783 / 166	1005 / 960 / 135	955 / 874 / 201	1138 / 1072 / 164	968 / 835 / 158	1187 / 1032 / 130	859 / 864 / 104	911 / 1070 / 85	968 / 837 / 155	1016 / 1009 / 124	1024 / 959 / 194	1234 / 1166 / 157	1021 / 883 / 147	1232 / 1073 / 119

Wind Speed [mph]		170								180																										
100	1	869 / 431 / 140	949 / 586 / 126	870 / 576 / 191	934 / 754 / 166	892 / 702 / 253	964 / 873 / 209	784 / 667 / 197	967 / 833 / 163	891 / 473 / 137	952 / 620 / 118	896 / 630 / 186	937 / 794 / 155	903 / 743 / 238	973 / 910 / 194	826 / 706 / 186	1007 / 870 / 152	949 / 586 / 126	1029 / 756 / 107	934 / 767 / 166	980 / 941 / 135	964 / 885 / 209	1097 / 1047 / 164	967 / 845 / 163	1144 / 1009 / 130	952 / 620 / 118	1071 / 820 / 104	937 / 808 / 155	979 / 975 / 124	973 / 922 / 194	1172 / 1121 / 157	1007 / 883 / 152	1225 / 1083 / 124			
	2	857 / 908 / 96	904 / 1104 / 78	976 / 883 / 145	1063 / 1093 / 119	1065 / 1001 / 179	1325 / 1254 / 149	1107 / 960 / 141	1323 / 1155 / 113	885 / 980 / 93	935 / 1180 / 74	978 / 921 / 135	1084 / 1120 / 109	1143 / 1076 / 172	1336 / 1266 / 134	1140 / 991 / 130	1408 / 1231 / 107																			
	3																																			

Wind Speed [mph]		190								200																										
100	1	888 / 500 / 129	982 / 671 / 115	922 / 684 / 181	969 / 856 / 150	940 / 803 / 231	1041 / 976 / 186	863 / 740 / 175	1079 / 935 / 147	909 / 540 / 126	1012 / 721 / 111	919 / 716 / 171	965 / 885 / 140	943 / 833 / 216	1105 / 1039 / 179	924 / 794 / 169	1102 / 957 / 135	982 / 671 / 115	1111 / 882 / 100	936 / 842 / 145	1013 / 1042 / 119	1041 / 989 / 186	1242 / 1190 / 149	1079 / 948 / 147	1302 / 1152 / 119	1012 / 721 / 111	1105 / 906 / 93	965 / 900 / 140	1053 / 1105 / 114	1059 / 1009 / 172	1306 / 1254 / 142	1102 / 971 / 135	1373 / 1216 / 113			
	2	874 / 1005 / 85	972 / 1250 / 70	1013 / 988 / 129	1149 / 1190 / 104	1161 / 1096 / 157	1404 / 1333 / 127	1214 / 1057 / 124	1485 / 1300 / 102	896 / 1066 / 81	1019 / 1313 / 67	1002 / 1008 / 119	1208 / 1253 / 99	1224 / 1157 / 149	1555 / 1478 / 127	1282 / 1118 / 119	1553 / 1361 / 96																			
	3																																			

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge														
		0	1	300 / 177 / 48	377 / 253 / 43	321 / 247 / 53	404 / 345 / 47	392 / 307 / 57	481 / 403 / 49	383 / 285 / 62	482 / 380 / 54	314 / 192 / 47	395 / 272 / 42	336 / 266 / 52	424 / 368 / 46	411 / 328 / 55	504 / 427 / 47	403 / 304 / 60	497 / 395 / 51	328 / 206 / 45	413 / 289 / 40	351 / 284 / 50	443 / 391 / 44	430 / 348 / 54	525 / 450 / 45
110	1	347 / 223 / 45	437 / 311 / 40	366 / 302 / 49	461 / 413 / 43	449 / 368 / 52	545 / 471 / 43	448 / 346 / 57	539 / 436 / 47	360 / 237 / 44	454 / 328 / 39	385 / 324 / 48	479 / 434 / 42	466 / 387 / 50	564 / 491 / 42	467 / 364 / 56	558 / 454 / 45								
115	1	378 / 255 / 43	470 / 345 / 37	399 / 341 / 47	486 / 446 / 39	483 / 405 / 49	581 / 510 / 40	484 / 381 / 54	587 / 481 / 45	360 / 237 / 44	454 / 328 / 39	385 / 324 / 48	479 / 434 / 42	466 / 387 / 50	564 / 491 / 42	467 / 364 / 56	558 / 454 / 45								

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
0	1	391/268/42	485/360/36	419/364/46	501/463/38	498/421/47	609/538/39	500/397/52	604/497/43	428/303/40	521/395/34	452/402/44	526/495/35	535/460/44	649/580/37	529/426/48	644/535/40	458/332/39	544/419/32	475/431/41	557/532/33	569/496/42	684/616/34	563/459/45	679/568/37																								
	2	485/360/36	582/456/30	501/472/38	594/584/31	609/545/39	723/665/32	604/504/43	737/631/35	521/395/34	620/493/28	526/504/35	629/626/29	634/574/36	759/704/29	644/543/40	777/669/33	544/419/32	669/538/27	557/541/33	659/661/27	684/624/34	810/755/27	679/577/37	831/719/31																								
	3	477/563/27	569/695/22	568/543/33	672/663/27	697/629/34	826/761/27	692/580/37	848/723/31	504/604/25	612/754/21	591/572/30	705/702/25	737/670/32	886/821/26	732/618/34	882/756/28	541/655/24	650/808/20	636/622/29	751/754/23	767/702/29	938/873/24	785/667/33	968/833/27																								
5	1	391/268/42	485/360/36	419/364/53	501/463/44	498/421/58	609/538/49	500/397/59	604/497/49	428/303/40	521/395/34	452/402/51	526/495/41	535/460/55	649/580/45	529/426/55	644/535/46	458/332/39	544/419/32	475/431/47	557/532/38	569/496/52	684/616/42	563/459/52	679/568/43																								
	2	485/360/36	582/456/30	501/472/44	594/584/36	609/545/49	723/665/39	604/504/49	737/631/40	521/395/34	620/493/28	526/504/41	629/626/33	634/574/44	759/704/36	644/543/46	777/669/37	544/419/32	669/538/27	557/541/38	659/661/31	684/624/42	810/755/34	679/577/43	831/719/35																								
	3	477/563/27	569/695/22	568/543/38	672/663/31	697/629/42	826/761/34	692/580/43	848/723/35	504/604/25	612/754/21	591/572/35	705/702/28	737/670/39	886/821/32	732/618/39	882/756/32	541/655/24	650/808/20	636/622/33	751/754/27	767/702/36	938/873/30	785/667/37	968/833/31																								
10	1	431/268/49	485/360/43	442/364/69	501/463/57	498/421/75	609/538/63	500/397/72	604/497/59	455/303/48	521/395/41	460/402/65	526/495/53	535/460/71	649/580/59	529/426/67	644/535/56	471/332/46	544/419/38	475/431/61	557/532/49	569/496/67	684/616/55	563/459/63	679/568/52																								
	2	485/360/43	582/456/35	501/472/57	594/584/46	609/545/63	723/665/51	604/504/59	737/631/49	521/395/41	620/493/33	526/504/53	629/626/43	634/574/58	759/704/47	644/543/56	777/669/45	544/419/38	669/538/32	557/541/49	659/661/40	684/624/55	810/755/44	679/577/52	831/719/43																								
	3	477/563/32	569/695/26	568/543/49	672/663/40	697/629/55	826/761/44	692/580/52	848/723/43	504/604/30	612/754/25	591/572/45	705/702/37	737/670/51	886/821/41	732/618/48	882/756/39	541/655/29	650/808/24	636/622/43	751/754/35	767/702/47	938/873/39	785/667/45	968/833/38																								
0	1	486/360/37	584/457/30	502/464/39	584/563/31	599/528/39	711/645/32	594/488/43	725/611/35	511/385/35	610/483/29	517/484/36	621/605/30	639/569/38	751/686/30	634/525/41	768/650/34																																
	2	584/457/30	697/566/25	584/574/31	700/708/25	711/654/32	854/801/26	725/620/35	879/764/29	610/483/29	738/604/24	605/600/29	737/750/24	751/695/30	892/839/24	768/660/34	920/802/27																																
	3	559/683/22	684/855/19	661/652/27	792/799/22	812/748/27	981/916/22	834/711/31	1016/877/25	588/724/21	711/894/17	698/693/25	827/838/20	851/787/26	1056/989/22	876/750/29	1053/911/23																																
5	1	486/360/37	584/457/30	502/464/45	584/563/36	599/528/49	711/645/39	594/488/49	725/611/40	511/385/35	610/483/29	517/484/42	621/605/34	639/569/46	751/686/37	634/525/47	768/650/38																																
	2	584/457/30	697/566/25	584/574/36	700/708/29	711/654/39	854/801/32	725/620/36	879/764/33	610/483/29	738/604/24	605/600/33	737/750/28	751/695/37	892/839/30	768/660/38	920/802/31																																
	3	559/683/22	684/855/19	661/652/31	792/799/25	812/748/34	981/916/28	834/711/35	1016/877/29	588/724/21	711/894/17	698/693/29	827/838/24	851/787/32	1056/989/27	876/750/33	1053/911/27																																
10	1	486/360/44	584/457/36	502/464/58	584/563/46	599/528/63	711/645/51	594/488/59	725/611/49	511/385/41	610/483/34	517/484/54	621/605/44	639/569/60	751/686/48	634/525/57	768/650/47																																
	2	584/457/36	697/566/29	584/574/46	700/708/38	711/654/51	854/801/41	725/620/49	879/764/40	610/483/34	738/604/28	605/600/43	737/750/36	751/695/48	892/839/39	768/660/47	920/802/38																																
	3	559/683/26	684/855/22	661/652/40	792/799/32	812/748/44	981/916/36	834/711/43	1016/877/35	588/724/25	711/894/21	698/693/38	827/838/30	851/787/41	1056/989/34	876/750/40	1053/911/33																																
0	1	534/409/33	646/517/27	549/520/35	654/643/28	660/592/35	786/722/28	655/547/38	806/685/32	553/429/31	679/548/26	567/543/32	685/677/27	693/626/33	842/777/27	688/578/36	839/716/30																																
	2	646/517/27	775/639/22	638/637/27	769/787/22	786/731/28	956/903/23	806/696/32	988/864/26	679/548/26	807/669/21	666/671/26	794/817/21	816/763/27	1018/965/22	839/726/30	1015/890/24																																
	3	633/783/20	761/961/17	730/730/24	886/902/20	915/849/25	1080/1015/20	911/783/27	1124/975/23	655/815/19	776/984/15	782/786/23	943/963/19	942/877/23	1143/1077/19	973/838/26	1193/1036/22																																
5	1	534/409/33	646/517/27	549/520/40	654/643/33	660/592/43	786/722/35	655/547/44	806/685/36	553/429/31	679/548/26	567/543/38	685/677/31	693/626/41	842/777/34	688/578/42	839/716/34																																
	2	646/517/27	775/639/22	638/637/32	769/787/26	786/731/35	956/903/29	806/696/36	988/864/30	679/548/26	807/669/21	666/671/30	794/817/24	816/763/33	1018/965/28	839/726/34	1015/890/28																																
	3	633/783/20	761/961/17	730/730/28	886/902/23	915/849/31	1080/1015/25	911/783/31	1124/975/26	655/815/19	776/984/15	782/786/27	943/963/22	942/877/29	1143/1077/23	973/838/30	1193/1036/25																																
10	1	534/409/39	646/517/32	549/520/52	654/643/42	660/592/56	786/722/45	655/547/53	806/685/44	553/429/37	679/548/31	567/543/48	685/677/40	693/626/53	842/777/44	688/578/50	839/716/41																																
	2	646/517/32	775/639/26	638/637/41	769/787/33	786/731/45	956/903/37	806/696/44	988/864/36	679/548/31	807/669/25	666/671/39	794/817/31	816/763/43	1018/965/36	839/726/41	1015/890/34																																
	3	633/783/24	761/961/20	730/730/36	886/902/29	915/849/40	1080/1015/32	911/783/38	1124/975/31	655/815/23	776/984/18	782/786/35	943/963/28	942/877/37	1143/1077/30	973/838/36	1193/1036/30																																

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15- 30		30 - 45		0 - 7.5		7.5 - 15		15- 30		30 - 45		0 - 7.5		7.5 - 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		15	1	414 / 161 / 60	468 / 242 / 57	423 / 230 / 90	479 / 335 / 84	415 / 307 / 113	481 / 403 / 96	383 / 285 / 102	482 / 380 / 88	423 / 176 / 59	482 / 263 / 56	434 / 251 / 89	487 / 357 / 81	426 / 328 / 109	504 / 427 / 93	403 / 304 / 99	497 / 395 / 83	432 / 192 / 59	496 / 285 / 55	445 / 272 / 88	503 / 385 / 80	437 / 348 / 106	525 / 450 / 89

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge													
		1	479 / 260 / 56	537 / 360 / 50	491 / 358 / 83	529 / 463 / 70	498 / 421 / 93	609 / 538 / 78	500 / 397 / 85	604 / 497 / 70	499 / 293 / 54	555 / 395 / 47	507 / 395 / 79	536 / 495 / 64	535 / 460 / 88	649 / 580 / 72	529 / 426 / 79	644 / 535 / 65	520 / 326 / 53	560 / 419 / 44	520 / 431 / 75	557 / 532 / 60	569 / 496 / 83	684 / 616 / 67	563 / 459 / 74

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof										0-30ft				74in x 41.2in				Load: Up / Down / Side , lbs								
Wind Speed [mph]										95				100				105								
Panal Angle										0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge														
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1

Exposure Category : B

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft(m).
 h = Mean roof height, in ft(m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160															
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge									
		30	1	536 / 244 / 64	587 / 341 / 58	542 / 335 / 99	591 / 455 / 88	563 / 421 / 160	615 / 538 / 134	500 / 397 / 133	604 / 497 / 109	551 / 274 / 62	598 / 373 / 54	560 / 376 / 96	604 / 495 / 83	581 / 460 / 152	649 / 580 / 126	529 / 426 / 124	644 / 535 / 102	567 / 305 / 60	620 / 411 / 52	578 / 416 / 93	614 / 532 / 78	596 / 496 / 143	684 / 616 / 117	563 / 459 / 116	679 / 568 / 95						
Wind Speed [mph]		170								180								190								200							
30	1	582 / 335 / 58	640 / 448 / 50	596 / 455 / 89	622 / 563 / 72	608 / 528 / 134	711 / 645 / 108	594 / 488 / 109	725 / 611 / 90	596 / 364 / 56	660 / 483 / 48	601 / 484 / 84	640 / 605 / 69	639 / 569 / 128	751 / 686 / 102	634 / 525 / 105	768 / 650 / 86	ASCE Group Zone															
30	2	640 / 448 / 50	698 / 566 / 42	622 / 574 / 72	700 / 708 / 59	711 / 654 / 108	854 / 801 / 88	725 / 620 / 90	879 / 764 / 74	660 / 483 / 48	738 / 604 / 40	625 / 600 / 67	737 / 750 / 56	751 / 695 / 102	892 / 839 / 82	768 / 660 / 86	920 / 802 / 69	ASCE Group Zone															
30	3	577 / 683 / 38	684 / 855 / 31	661 / 652 / 62	792 / 799 / 51	812 / 748 / 94	981 / 916 / 76	834 / 711 / 79	1016 / 877 / 64	589 / 724 / 35	711 / 894 / 29	698 / 693 / 59	827 / 838 / 47	851 / 787 / 88	1056 / 989 / 73	876 / 750 / 74	1053 / 911 / 60	ASCE Group Zone															
35	1	609 / 329 / 62	660 / 438 / 54	608 / 438 / 97	651 / 563 / 82	633 / 528 / 154	711 / 645 / 124	594 / 488 / 123	725 / 611 / 102	621 / 357 / 59	692 / 483 / 52	635 / 484 / 95	668 / 605 / 78	655 / 569 / 147	751 / 686 / 117	634 / 525 / 118	768 / 650 / 97	ASCE Group Zone															
35	2	660 / 438 / 54	726 / 566 / 45	651 / 574 / 82	700 / 708 / 67	711 / 654 / 100	854 / 801 / 83	725 / 620 / 83	879 / 764 / 78	692 / 483 / 52	746 / 604 / 43	652 / 600 / 76	737 / 750 / 63	751 / 695 / 117	892 / 839 / 94	768 / 660 / 97	920 / 802 / 78	ASCE Group Zone															
35	3	602 / 683 / 41	684 / 855 / 34	679 / 652 / 71	792 / 799 / 57	812 / 748 / 107	981 / 916 / 87	834 / 711 / 89	1016 / 877 / 73	613 / 724 / 39	711 / 894 / 32	698 / 693 / 67	827 / 838 / 54	851 / 787 / 100	1056 / 989 / 84	876 / 750 / 83	1053 / 911 / 67	ASCE Group Zone															
40	1	622 / 316 / 104	677 / 429 / 92	630 / 429 / 140	680 / 563 / 120	658 / 528 / 178	711 / 645 / 143	594 / 488 / 137	725 / 611 / 113	645 / 350 / 102	708 / 472 / 90	642 / 465 / 134	696 / 605 / 115	679 / 569 / 170	751 / 686 / 135	634 / 525 / 131	768 / 650 / 108	ASCE Group Zone															
40	2	677 / 429 / 92	754 / 566 / 80	680 / 574 / 120	722 / 708 / 98	711 / 654 / 143	854 / 801 / 116	725 / 620 / 113	879 / 764 / 93	708 / 472 / 90	773 / 604 / 76	679 / 600 / 112	738 / 750 / 92	751 / 695 / 135	892 / 839 / 108	768 / 660 / 108	920 / 802 / 87	ASCE Group Zone															
40	3	627 / 683 / 72	685 / 855 / 59	704 / 652 / 103	792 / 799 / 84	812 / 748 / 124	981 / 916 / 101	834 / 711 / 99	1016 / 877 / 81	637 / 724 / 68	711 / 894 / 55	720 / 693 / 98	827 / 838 / 78	851 / 787 / 116	1056 / 989 / 97	876 / 750 / 93	1053 / 911 / 75	ASCE Group Zone															
30	1	610 / 393 / 53	677 / 517 / 46	617 / 520 / 81	657 / 643 / 66	660 / 592 / 120	786 / 722 / 96	655 / 547 / 98	806 / 685 / 81	635 / 429 / 52	693 / 548 / 44	617 / 543 / 76	685 / 677 / 62	693 / 626 / 114	842 / 777 / 94	688 / 578 / 93	839 / 716 / 76	ASCE Group Zone															
30	2	677 / 517 / 46	775 / 639 / 38	640 / 637 / 64	769 / 787 / 52	786 / 731 / 96	956 / 903 / 79	806 / 696 / 81	988 / 864 / 67	693 / 548 / 44	807 / 669 / 35	666 / 671 / 61	794 / 817 / 49	816 / 763 / 91	1018 / 965 / 76	839 / 726 / 76	1015 / 890 / 62	ASCE Group Zone															
30	3	633 / 783 / 34	761 / 961 / 28	730 / 730 / 56	886 / 902 / 46	915 / 849 / 85	1080 / 1015 / 67	911 / 783 / 69	1124 / 975 / 57	655 / 815 / 32	776 / 984 / 26	782 / 786 / 54	943 / 963 / 44	942 / 877 / 79	1143 / 1077 / 64	973 / 838 / 67	1193 / 1036 / 55	ASCE Group Zone															
35	1	632 / 385 / 57	708 / 517 / 50	649 / 520 / 92	684 / 643 / 75	660 / 592 / 137	786 / 722 / 110	655 / 547 / 110	806 / 685 / 91	656 / 420 / 56	723 / 548 / 48	648 / 543 / 86	697 / 677 / 71	693 / 626 / 130	842 / 777 / 107	688 / 578 / 105	839 / 716 / 86	ASCE Group Zone															
35	2	708 / 517 / 50	775 / 639 / 41	666 / 637 / 73	769 / 787 / 59	786 / 731 / 110	956 / 903 / 90	806 / 696 / 91	988 / 864 / 75	723 / 548 / 48	807 / 669 / 39	678 / 671 / 69	794 / 817 / 56	816 / 763 / 104	1018 / 965 / 87	839 / 726 / 86	1015 / 890 / 70	ASCE Group Zone															
35	3	641 / 783 / 37	761 / 961 / 30	730 / 730 / 63	886 / 902 / 52	915 / 849 / 97	1080 / 1015 / 77	911 / 783 / 78	1124 / 975 / 65	655 / 815 / 35	776 / 984 / 28	782 / 786 / 61	943 / 963 / 50	942 / 877 / 90	1143 / 1077 / 74	973 / 838 / 75	1193 / 1036 / 62	ASCE Group Zone															
40	1	654 / 377 / 98	722 / 505 / 86	668 / 509 / 131	710 / 643 / 109	681 / 592 / 158	786 / 722 / 128	655 / 547 / 122	806 / 685 / 102	676 / 412 / 96	752 / 548 / 84	678 / 543 / 126	722 / 677 / 103	697 / 626 / 151	842 / 777 / 124	688 / 578 / 116	839 / 716 / 96	ASCE Group Zone															
40	2	722 / 505 / 86	789 / 639 / 72	692 / 637 / 106	769 / 787 / 87	786 / 731 / 128	956 / 903 / 104	806 / 696 / 102	988 / 864 / 84	752 / 548 / 84	807 / 669 / 68	702 / 671 / 101	794 / 817 / 81	816 / 763 / 120	1018 / 965 / 101	839 / 726 / 96	1015 / 890 / 78	ASCE Group Zone															
40	3	664 / 783 / 65	761 / 961 / 53	733 / 730 / 92	886 / 902 / 76	915 / 849 / 112	1080 / 1015 / 89	911 / 783 / 87	1124 / 975 / 72	669 / 815 / 61	776 / 984 / 49	782 / 786 / 90	943 / 963 / 73	942 / 877 / 104	1143 / 1077 / 85	973 / 838 / 84	1193 / 1036 / 69	ASCE Group Zone															

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]			95								100								105							
Panal Angle			0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge									
45	1	576 / 140 / 134	605 / 209 / 125	573 / 200 / 184	599 / 288 / 169	559 / 270 / 251	605 / 375 / 225	428 / 281 / 217	488 / 380 / 191	580 / 153 / 132	612 / 226 / 123	578 / 218 / 181	609 / 311 / 166	570 / 292 / 246	610 / 396 / 217	445 / 304 / 213	497 / 395 / 181	583 / 166 / 129	620 / 244 / 121	584 / 235 / 178	618 / 334 / 163	572 / 309 / 238	626 / 424 / 212	462 / 328 / 210	519 / 416 / 174	
	2	605 / 209 / 125	642 / 297 / 114	599 / 293 / 169	646 / 411 / 153	605 / 380 / 225	659 / 504 / 196	488 / 385 / 191	585 / 486 / 158	612 / 226 / 123	654 / 320 / 112	609 / 317 / 166	660 / 442 / 150	610 / 401 / 217	681 / 540 / 191	497 / 401 / 181	611 / 510 / 151	620 / 244 / 121	667 / 343 / 109	618 / 341 / 163	675 / 473 / 147	626 / 430 / 212	687 / 563 / 183	519 / 422 / 174	634 / 533 / 145	
	3	624 / 411 / 116	647 / 544 / 101	637 / 370 / 160	687 / 501 / 141	641 / 459 / 204	707 / 596 / 174	545 / 442 / 164	659 / 550 / 135	634 / 443 / 114	647 / 570 / 96	637 / 391 / 153	705 / 538 / 138	661 / 493 / 200	714 / 621 / 166	569 / 465 / 158	701 / 587 / 132	645 / 475 / 112	645 / 593 / 92	650 / 419 / 150	708 / 561 / 132	667 / 515 / 191	739 / 660 / 162	592 / 486 / 151	723 / 609 / 125	
50	1	599 / 135 / 141	622 / 201 / 131	594 / 194 / 194	625 / 282 / 180	581 / 266 / 269	622 / 368 / 241	443 / 281 / 237	502 / 380 / 208	601 / 148 / 138	628 / 218 / 129	598 / 210 / 190	633 / 305 / 177	581 / 282 / 260	625 / 388 / 232	459 / 304 / 233	505 / 395 / 197	614 / 163 / 138	634 / 235 / 126	602 / 227 / 187	642 / 328 / 174	592 / 304 / 255	640 / 416 / 227	469 / 323 / 226	519 / 416 / 190	
	2	622 / 201 / 131	665 / 291 / 121	625 / 288 / 180	666 / 403 / 164	622 / 373 / 241	684 / 504 / 213	502 / 385 / 208	585 / 486 / 172	628 / 218 / 129	676 / 314 / 119	633 / 311 / 177	679 / 433 / 160	625 / 394 / 232	690 / 528 / 204	505 / 401 / 197	611 / 510 / 165	634 / 235 / 126	688 / 336 / 116	642 / 334 / 174	693 / 463 / 157	640 / 422 / 227	711 / 563 / 200	519 / 422 / 190	634 / 533 / 158	
	3	648 / 403 / 124	679 / 544 / 109	646 / 356 / 167	702 / 491 / 150	653 / 449 / 218	729 / 596 / 190	545 / 442 / 180	659 / 550 / 147	658 / 434 / 121	678 / 570 / 104	658 / 383 / 164	720 / 526 / 147	673 / 482 / 213	736 / 621 / 181	569 / 465 / 172	701 / 587 / 144	667 / 465 / 119	675 / 593 / 100	669 / 411 / 160	737 / 561 / 144	692 / 515 / 209	760 / 660 / 176	592 / 486 / 165	723 / 609 / 137	
60	1	673 / 128 / 155	673 / 194 / 146	640 / 184 / 214	660 / 267 / 199	611 / 252 / 299	653 / 353 / 272	466 / 277 / 273	528 / 380 / 243	660 / 140 / 152	677 / 210 / 143	640 / 199 / 210	666 / 288 / 195	619 / 272 / 294	666 / 380 / 267	482 / 300 / 268	530 / 395 / 231	660 / 155 / 152	681 / 226 / 141	654 / 219 / 210	685 / 315 / 195	628 / 293 / 288	680 / 407 / 261	490 / 318 / 260	541 / 416 / 222	
	2	673 / 194 / 146	707 / 279 / 135	660 / 272 / 199	703 / 386 / 183	653 / 358 / 272	702 / 482 / 240	528 / 385 / 243	585 / 486 / 201	677 / 210 / 143	716 / 301 / 132	666 / 293 / 195	714 / 415 / 179	666 / 386 / 267	721 / 516 / 234	530 / 401 / 231	611 / 510 / 193	681 / 226 / 141	725 / 322 / 129	685 / 321 / 195	725 / 444 / 175	680 / 413 / 261	740 / 550 / 229	541 / 422 / 222	634 / 533 / 185	
	3	693 / 387 / 138	727 / 532 / 124	685 / 342 / 187	747 / 480 / 171	690 / 440 / 250	755 / 581 / 218	552 / 442 / 210	659 / 550 / 172	700 / 417 / 135	739 / 570 / 121	695 / 368 / 183	744 / 502 / 164	707 / 472 / 245	778 / 621 / 212	569 / 465 / 201	701 / 587 / 168	707 / 446 / 132	733 / 593 / 115	704 / 394 / 179	758 / 535 / 160	725 / 504 / 240	801 / 660 / 207	592 / 486 / 193	723 / 609 / 160	

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		70	1	735 / 121 / 166	705 / 183 / 157	699 / 174 / 231	701 / 256 / 218	647 / 243 / 333	679 / 339 / 302	488 / 272 / 307	545 / 373 / 274	735 / 135 / 166	721 / 202 / 157	699 / 192 / 231	704 / 276 / 213	653 / 262 / 327	690 / 365 / 295	503 / 295 / 303	555 / 395 / 264	721 / 146 / 163	723 / 217 / 153	687 / 207 / 227	723 / 303 / 213	660 / 282 / 320	702 / 390 / 289

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
		70	1	719 / 199 / 157	747 / 284 / 144	702 / 273 / 213	739 / 385 / 196	687 / 360 / 295	746 / 491 / 264	551 / 390 / 264	606 / 497 / 221	731 / 227 / 153	768 / 322 / 141	717 / 310 / 209	764 / 435 / 191	715 / 407 / 289	766 / 539 / 251	570 / 426 / 250	644 / 535 / 207	729 / 250 / 147	772 / 352 / 134	734 / 348 / 204	789 / 485 / 187	727 / 446 / 277	805 / 600 / 245
2	747 / 284 / 144		799 / 398 / 131	739 / 392 / 196	802 / 543 / 178	746 / 498 / 264	831 / 665 / 233	606 / 504 / 221	737 / 631 / 183	768 / 322 / 141	811 / 437 / 125	764 / 442 / 191	817 / 595 / 169	766 / 547 / 251	835 / 704 / 214	644 / 543 / 207	777 / 669 / 168	772 / 352 / 134	842 / 487 / 122	789 / 494 / 187	853 / 661 / 165	805 / 609 / 245	857 / 755 / 201	679 / 577 / 192	831 / 719 / 159
3	778 / 550 / 134		784 / 695 / 112	778 / 484 / 182	863 / 663 / 165	794 / 597 / 239	870 / 761 / 201	692 / 580 / 192	848 / 723 / 159	787 / 604 / 128	796 / 754 / 106	810 / 545 / 178	859 / 702 / 151	842 / 670 / 233	899 / 821 / 189	732 / 618 / 178	882 / 756 / 144	794 / 655 / 122	805 / 808 / 99	822 / 591 / 169	874 / 754 / 142	841 / 702 / 214	938 / 873 / 176	785 / 667 / 168	968 / 833 / 140
80	1	757 / 191 / 168	775 / 272 / 154	751 / 267 / 235	781 / 376 / 215	722 / 353 / 328	773 / 479 / 292	566 / 383 / 292	627 / 497 / 249	767 / 218 / 165	793 / 307 / 150	748 / 297 / 225	803 / 424 / 210	732 / 390 / 314	810 / 539 / 285	593 / 426 / 281	646 / 535 / 233	778 / 245 / 161	812 / 344 / 147	762 / 333 / 220	806 / 462 / 200	758 / 436 / 306	826 / 585 / 271	608 / 459 / 265	679 / 568 / 217
	2	775 / 272 / 154	837 / 388 / 143	781 / 383 / 215	835 / 530 / 195	773 / 486 / 292	848 / 647 / 257	627 / 504 / 249	737 / 631 / 206	793 / 307 / 150	844 / 426 / 136	803 / 432 / 210	846 / 579 / 185	810 / 547 / 285	872 / 704 / 242	646 / 543 / 233	777 / 669 / 190	812 / 344 / 147	873 / 474 / 133	806 / 471 / 200	879 / 643 / 180	826 / 593 / 271	892 / 755 / 228	679 / 577 / 217	831 / 719 / 179
	3	819 / 536 / 147	834 / 695 / 125	813 / 472 / 200	889 / 646 / 180	836 / 597 / 271	905 / 761 / 228	692 / 580 / 217	848 / 723 / 179	823 / 588 / 140	843 / 754 / 118	843 / 531 / 195	905 / 702 / 170	858 / 652 / 257	932 / 821 / 214	732 / 618 / 200	882 / 756 / 163	849 / 655 / 136	849 / 808 / 111	851 / 576 / 185	918 / 754 / 160	878 / 702 / 242	953 / 873 / 200	785 / 667 / 190	968 / 833 / 157
90	1	808 / 183 / 178	817 / 265 / 167	780 / 256 / 250	820 / 367 / 233	756 / 345 / 359	798 / 468 / 319	580 / 376 / 319	648 / 497 / 277	797 / 208 / 174	833 / 300 / 163	791 / 290 / 244	819 / 404 / 222	762 / 381 / 343	832 / 526 / 311	605 / 418 / 307	665 / 535 / 259	805 / 234 / 171	850 / 336 / 159	803 / 325 / 238	839 / 451 / 216	786 / 426 / 335	844 / 570 / 295	630 / 459 / 295	679 / 568 / 241
	2	817 / 265 / 167	872 / 378 / 155	820 / 374 / 233	866 / 516 / 211	798 / 474 / 319	887 / 647 / 287	648 / 504 / 277	737 / 631 / 229	833 / 300 / 163	875 / 415 / 147	819 / 412 / 222	896 / 579 / 205	832 / 533 / 311	909 / 704 / 271	665 / 543 / 259	777 / 669 / 211	850 / 336 / 159	901 / 461 / 143	839 / 459 / 216	902 / 626 / 194	844 / 577 / 295	927 / 755 / 255	679 / 577 / 241	831 / 719 / 199
	3	856 / 523 / 159	884 / 695 / 139	846 / 461 / 216	911 / 628 / 194	854 / 582 / 295	940 / 761 / 255	692 / 580 / 241	848 / 723 / 199	857 / 573 / 151	890 / 754 / 131	873 / 518 / 211	951 / 702 / 189	873 / 634 / 279	965 / 821 / 239	732 / 618 / 223	882 / 756 / 181	879 / 637 / 147	893 / 808 / 123	877 / 560 / 200	961 / 754 / 178	916 / 702 / 271	984 / 873 / 223	785 / 667 / 211	968 / 833 / 175

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft	74in x 41.2in	Load: Up / Down / Side , lbs																												
Wind Speed [mph]	95									100									105													
Panel Angle	0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
	1	874 / 103 / 191	874 / 164 / 191	850 / 150 / 274	831 / 230 / 268	743 / 220 / 423	767 / 311 / 388	539 / 255 / 397	590 / 353 / 358	874 / 114 / 191	854 / 177 / 187	850 / 166 / 274	812 / 248 / 262	745 / 237 / 414	772 / 334 / 379	551 / 276 / 391	596 / 373 / 344	874 / 126 / 191	854 / 195 / 187	850 / 183 / 274	823 / 271 / 262	746 / 254 / 405	778 / 356 / 370	564 / 297 / 384	614 / 400 / 338							
100	2	874 / 164 / 191	839 / 239 / 178	831 / 235 / 268	836 / 337 / 250	767 / 315 / 388	813 / 438 / 352	590 / 359 / 358	650 / 476 / 311	854 / 177 / 187	860 / 262 / 178	812 / 252 / 262	838 / 361 / 244	772 / 338 / 379	825 / 468 / 344	596 / 379 / 344	674 / 510 / 305	854 / 195 / 187	860 / 280 / 174	823 / 276 / 262	862 / 394 / 244	778 / 361 / 370	836 / 498 / 335	614 / 406 / 338	682 / 533 / 292							
	3	835 / 332 / 183	868 / 471 / 170	828 / 299 / 256	874 / 425 / 238	794 / 392 / 361	860 / 538 / 326	630 / 433 / 325	687 / 550 / 272	833 / 356 / 178	871 / 504 / 165	829 / 321 / 250	880 / 454 / 232	803 / 419 / 352	876 / 573 / 317	652 / 465 / 318	713 / 587 / 265	852 / 389 / 178	898 / 550 / 165	850 / 351 / 250	886 / 483 / 226	834 / 458 / 352	891 / 608 / 308	660 / 486 / 305	723 / 609 / 252							

Wind Speed [mph]	110									115															
100	1	874 / 139 / 191	835 / 208 / 183	850 / 200 / 274	821 / 289 / 256	748 / 271 / 396	803 / 388 / 370	566 / 313 / 371	631 / 427 / 331	874 / 151 / 191	844 / 226 / 183	831 / 213 / 268	839 / 314 / 256	766 / 295 / 396	809 / 411 / 361	579 / 334 / 364	635 / 445 / 318	874 / 151 / 191	844 / 226 / 183	831 / 213 / 268	839 / 314 / 256	766 / 295 / 396	809 / 411 / 361	579 / 334 / 364	635 / 445 / 318
	2	835 / 208 / 183	859 / 298 / 170	821 / 295 / 256	864 / 419 / 238	803 / 394 / 370	846 / 527 / 326	631 / 434 / 331	688 / 553 / 278	844 / 226 / 183	881 / 324 / 170	839 / 320 / 256	866 / 443 / 232	809 / 417 / 361	880 / 572 / 326	635 / 452 / 318	692 / 571 / 265	871 / 449 / 174	904 / 614 / 157	852 / 395 / 238	922 / 554 / 220	853 / 513 / 335	919 / 675 / 291	686 / 536 / 285	778 / 660 / 232
100	3	850 / 414 / 174	901 / 582 / 161	851 / 373 / 244	891 / 511 / 220	843 / 486 / 344	906 / 642 / 300	681 / 517 / 298	762 / 644 / 245	871 / 449 / 174	904 / 614 / 157	852 / 395 / 238	922 / 554 / 220	853 / 513 / 335	919 / 675 / 291	686 / 536 / 285	778 / 660 / 232								
Wind Speed [mph]	120									130															
100	1	874 / 165 / 191	840 / 240 / 178	831 / 231 / 268	837 / 332 / 250	768 / 312 / 388	815 / 434 / 352	591 / 355 / 358	652 / 471 / 311	874 / 151 / 191	844 / 226 / 183	831 / 213 / 268	839 / 314 / 256	766 / 295 / 396	809 / 411 / 361	579 / 334 / 364	635 / 445 / 318	874 / 151 / 191	844 / 226 / 183	831 / 213 / 268	839 / 314 / 256	766 / 295 / 396	809 / 411 / 361	579 / 334 / 364	635 / 445 / 318
	2	840 / 240 / 178	881 / 342 / 165	837 / 338 / 250	891 / 479 / 232	815 / 440 / 352	891 / 601 / 317	652 / 478 / 311	712 / 601 / 258	844 / 226 / 183	881 / 324 / 170	839 / 320 / 256	866 / 443 / 232	809 / 417 / 361	880 / 572 / 326	635 / 452 / 318	692 / 571 / 265	871 / 449 / 174	904 / 614 / 157	852 / 395 / 238	922 / 554 / 220	853 / 513 / 335	919 / 675 / 291	686 / 536 / 285	778 / 660 / 232
100	3	869 / 473 / 170	932 / 663 / 157	875 / 427 / 238	927 / 583 / 213	862 / 540 / 326	961 / 729 / 291	689 / 552 / 272	814 / 692 / 225	871 / 449 / 174	904 / 614 / 157	852 / 395 / 238	922 / 554 / 220	853 / 513 / 335	919 / 675 / 291	686 / 536 / 285	778 / 660 / 232								

Panel Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs									
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	854 / 175 / 187	857 / 259 / 178	812 / 245 / 262	835 / 350 / 244	769 / 330 / 379	820 / 456 / 344	604 / 376 / 351	668 / 497 / 305	854 / 203 / 187	870 / 293 / 174	812 / 277 / 256	852 / 394 / 238	790 / 372 / 370	852 / 512 / 335	616 / 409 / 331	685 / 535 / 285	846 / 229 / 183	884 / 327 / 170	841 / 318 / 256	869 / 439 / 232	812 / 415 / 361	861 / 554 / 317	639 / 449 / 318	697 / 568 / 265		
	2	857 / 259 / 178	904 / 369 / 165	835 / 356 / 244	893 / 503 / 226	820 / 462 / 344	901 / 629 / 308	668 / 504 / 305	737 / 631 / 252	870 / 293 / 174	903 / 403 / 157	852 / 401 / 238	921 / 564 / 220	852 / 519 / 335	919 / 683 / 291	685 / 543 / 285	777 / 669 / 232	884 / 327 / 170	926 / 448 / 152	869 / 447 / 232	923 / 608 / 207	861 / 562 / 317	962 / 755 / 282	697 / 577 / 265	831 / 719 / 219		
	3	890 / 510 / 170	934 / 695 / 152	876 / 449 / 232	932 / 610 / 207	870 / 566 / 317	975 / 761 / 282	707 / 580 / 265	848 / 723 / 219	887 / 558 / 161	938 / 754 / 144	900 / 504 / 226	968 / 681 / 201	911 / 634 / 308	997 / 821 / 264	732 / 618 / 245	882 / 756 / 199	907 / 620 / 157	938 / 808 / 135	926 / 560 / 220	1005 / 754 / 195	925 / 682 / 291	1014 / 873 / 247	785 / 667 / 232	968 / 833 / 192		
Wind Speed [mph]		170								180																	
100	1	853 / 254 / 178	899 / 362 / 165	851 / 352 / 250	887 / 485 / 226	835 / 460 / 352	893 / 610 / 308	661 / 488 / 305	725 / 611 / 252	860 / 280 / 174	913 / 397 / 161	862 / 387 / 244	905 / 531 / 220	836 / 491 / 335	924 / 666 / 300	682 / 525 / 292	768 / 650 / 239										
	2	899 / 362 / 165	949 / 494 / 148	887 / 494 / 226	950 / 668 / 201	893 / 618 / 308	974 / 801 / 264	725 / 620 / 252	879 / 764 / 206	913 / 397 / 161	973 / 539 / 144	905 / 540 / 220	977 / 728 / 195	924 / 675 / 300	979 / 839 / 247	768 / 660 / 239	920 / 802 / 192										
	3	928 / 683 / 152	934 / 855 / 126	924 / 599 / 207	1008 / 799 / 183	964 / 748 / 282	1025 / 916 / 229	834 / 711 / 219	1016 / 877 / 179	920 / 724 / 144	925 / 894 / 118	948 / 654 / 201	1006 / 838 / 171	971 / 787 / 264	1069 / 989 / 220	876 / 750 / 206	1053 / 911 / 166										
Wind Speed [mph]		190								200																	
100	1	867 / 307 / 170	928 / 433 / 157	872 / 423 / 238	923 / 577 / 213	858 / 535 / 326	956 / 722 / 291	684 / 547 / 272	806 / 685 / 225	874 / 333 / 165	943 / 468 / 152	883 / 458 / 232	941 / 622 / 207	879 / 578 / 317	956 / 752 / 273	699 / 578 / 258	839 / 716 / 212										
	2	928 / 433 / 157	996 / 584 / 139	923 / 587 / 213	1004 / 787 / 189	956 / 731 / 291	1017 / 903 / 238	806 / 696 / 225	988 / 864 / 186	943 / 468 / 152	1018 / 628 / 135	941 / 634 / 207	995 / 817 / 177	956 / 763 / 273	1052 / 965 / 229	839 / 726 / 212	1015 / 890 / 172										
	3	939 / 783 / 139	948 / 961 / 113	972 / 708 / 195	1037 / 902 / 165	1008 / 849 / 256	1080 / 1015 / 203	911 / 783 / 192	1124 / 975 / 159	926 / 815 / 131	931 / 984 / 105	995 / 761 / 189	1066 / 963 / 159	1006 / 877 / 238	1143 / 1077 / 194	973 / 838 / 186	1193 / 1036 / 153										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
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30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	2	361 / 238 / 44	455 / 329 / 39	386 / 325 / 48	471 / 427 / 41	467 / 388 / 50	565 / 493 / 42	468 / 365 / 56	559 / 455 / 45	378 / 255 / 42	477 / 351 / 37	405 / 347 / 47	493 / 453 / 39	490 / 411 / 49	590 / 518 / 40	483 / 381 / 53	584 / 479 / 44	401 / 276 / 42	489 / 365 / 35	423 / 369 / 45	504 / 468 / 37	511 / 434 / 47	612 / 542 / 38
0	2	455 / 329 / 39	551 / 424 / 32	471 / 435 / 41	554 / 537 / 33	565 / 499 / 42	679 / 619 / 34	559 / 462 / 45	674 / 572 / 37	477 / 351 / 37	575 / 448 / 31	484 / 453 / 39	576 / 563 / 32	590 / 525 / 40	702 / 644 / 33	584 / 486 / 44	716 / 611 / 36	489 / 365 / 35	597 / 470 / 30	504 / 477 / 37	595 / 587 / 30	612 / 549 / 38	722 / 666 / 31	607 / 508 / 42	738 / 632 / 34
0	2	455 / 529 / 30	537 / 650 / 24	528 / 497 / 35	632 / 618 / 29	652 / 582 / 37	784 / 717 / 30	647 / 537 / 40	780 / 662 / 33	473 / 555 / 29	554 / 674 / 23	550 / 523 / 34	653 / 643 / 27	677 / 608 / 35	806 / 741 / 28	672 / 561 / 38	826 / 703 / 32	489 / 579 / 27	584 / 715 / 22	571 / 547 / 32	672 / 664 / 26	699 / 631 / 33	849 / 783 / 27	694 / 582 / 36	845 / 722 / 30

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof										0-30ft					74in x 41.2in					Load: Up / Down / Side , lbs													
Wind Speed [mph]										140					150					160													
Panal Angle										0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge				
		0	1	471 / 346 / 37	568 / 442 / 31	488 / 447 / 39	582 / 559 / 32	583 / 512 / 40	713 / 645 / 33	577 / 473 / 44	708 / 595 / 36	498 / 374 / 35	607 / 480 / 29	514 / 479 / 37	604 / 587 / 30	622 / 552 / 38	752 / 685 / 31	617 / 510 / 41	747 / 632 / 34	530 / 406 / 33	641 / 513 / 27	545 / 516 / 35	650 / 638 / 28	656 / 588 / 35	804 / 738 / 29	667 / 556 / 39	800 / 680 / 32						
Wind Speed [mph]										170					180																		
0	1	559 / 434 / 31	686 / 554 / 26	573 / 549 / 32	674 / 667 / 26	701 / 633 / 33	852 / 786 / 27	696 / 584 / 36	848 / 724 / 30	597 / 470 / 30	710 / 578 / 24	595 / 577 / 30	710 / 708 / 25	742 / 675 / 32	893 / 827 / 26	738 / 623 / 34	889 / 762 / 28																
0	2	686 / 554 / 26	816 / 677 / 21	674 / 679 / 26	803 / 827 / 21	825 / 772 / 27	990 / 938 / 22	848 / 735 / 30	1026 / 900 / 24	710 / 578 / 24	856 / 714 / 20	710 / 720 / 25	867 / 896 / 20	893 / 838 / 26	1063 / 1011 / 21	889 / 774 / 28	1105 / 971 / 23																
0	3	662 / 825 / 19	785 / 995 / 15	766 / 770 / 22	917 / 937 / 18	952 / 888 / 23	1156 / 1089 / 19	984 / 848 / 26	1206 / 1048 / 22	690 / 865 / 18	841 / 1070 / 15	828 / 837 / 22	985 / 1010 / 18	1026 / 959 / 22	1236 / 1166 / 18	1023 / 884 / 24	1233 / 1074 / 20																
5	1	559 / 434 / 31	686 / 554 / 26	573 / 549 / 38	674 / 667 / 30	701 / 633 / 41	852 / 786 / 34	696 / 584 / 42	848 / 724 / 34	597 / 470 / 30	710 / 578 / 24	595 / 577 / 35	710 / 708 / 28	742 / 675 / 39	893 / 827 / 32	738 / 623 / 39	889 / 762 / 32																
5	2	686 / 554 / 26	816 / 677 / 21	674 / 679 / 30	803 / 827 / 24	825 / 772 / 33	990 / 938 / 27	848 / 735 / 34	1026 / 900 / 28	710 / 578 / 24	856 / 714 / 20	710 / 720 / 28	867 / 896 / 24	893 / 838 / 32	1063 / 1011 / 26	889 / 774 / 32	1105 / 971 / 27																
5	3	662 / 825 / 19	785 / 995 / 15	766 / 770 / 26	917 / 937 / 21	952 / 888 / 29	1156 / 1089 / 23	984 / 848 / 30	1206 / 1048 / 25	690 / 865 / 18	841 / 1070 / 15	828 / 837 / 25	985 / 1010 / 20	1026 / 959 / 28	1236 / 1166 / 22	1023 / 884 / 28	1233 / 1074 / 23																
10	1	559 / 434 / 37	686 / 554 / 31	573 / 549 / 48	674 / 667 / 39	701 / 633 / 53	852 / 786 / 44	696 / 584 / 50	848 / 724 / 41	597 / 470 / 35	710 / 578 / 29	595 / 577 / 45	710 / 708 / 37	742 / 675 / 51	893 / 827 / 41	738 / 623 / 48	889 / 762 / 39																
10	2	686 / 554 / 31	816 / 677 / 25	674 / 679 / 39	803 / 827 / 31	825 / 772 / 43	990 / 938 / 34	848 / 735 / 41	1026 / 900 / 34	710 / 578 / 29	856 / 714 / 24	710 / 720 / 37	867 / 896 / 30	893 / 838 / 41	1063 / 1011 / 33	889 / 774 / 39	1105 / 971 / 33																
10	3	662 / 825 / 23	785 / 995 / 18	766 / 770 / 33	917 / 937 / 27	952 / 888 / 37	1156 / 1089 / 30	984 / 848 / 36	1206 / 1048 / 30	690 / 865 / 21	841 / 1070 / 18	828 / 837 / 32	985 / 1010 / 26	1026 / 959 / 36	1236 / 1166 / 29	1023 / 884 / 34	1233 / 1074 / 27																

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs														
Wind Speed [mph]		140								150								160														
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																							
		15	1	524 / 340 / 51	575 / 442 / 43	525 / 447 / 72	582 / 559 / 59	583 / 512 / 79	713 / 645 / 66	577 / 473 / 71	708 / 595 / 59	541 / 374 / 48	607 / 480 / 40	533 / 479 / 67	604 / 587 / 54	622 / 552 / 74	752 / 685 / 61	617 / 510 / 67	747 / 632 / 55	556 / 406 / 46	641 / 513 / 38	547 / 516 / 63	650 / 638 / 51	656 / 588 / 69	804 / 738 / 57	667 / 556 / 64	800 / 680 / 52					
20	1		559 / 328 / 56	621 / 442 / 49	564 / 439 / 84	607 / 559 / 70	583 / 512 / 98	713 / 645 / 81	577 / 473 / 83	708 / 595 / 69	582 / 367 / 54	639 / 480 / 46	578 / 479 / 79	608 / 587 / 64	622 / 552 / 91	752 / 685 / 75	617 / 510 / 78	747 / 632 / 64	593 / 398 / 51	652 / 513 / 43	591 / 516 / 75	650 / 638 / 61	656 / 588 / 85	804 / 738 / 71	667 / 556 / 74	800 / 680 / 60						
	25		1	615 / 434 / 49	686 / 554 / 41	600 / 549 / 70	674 / 667 / 56	701 / 633 / 81	852 / 786 / 67	696 / 584 / 69	848 / 724 / 57	635 / 470 / 47	710 / 578 / 38	595 / 577 / 65	710 / 708 / 53	742 / 675 / 77	893 / 827 / 63	738 / 623 / 66	889 / 762 / 53	615 / 434 / 49	686 / 554 / 41	600 / 549 / 70	674 / 667 / 56	701 / 633 / 81	852 / 786 / 67	696 / 584 / 69	848 / 724 / 57					
			30	1	619 / 492 / 39	746 / 612 / 32	628 / 614 / 53	742 / 744 / 42	780 / 713 / 59	926 / 862 / 47	776 / 658 / 53	956 / 822 / 44	651 / 523 / 37	800 / 661 / 31	658 / 648 / 50	794 / 800 / 41	812 / 747 / 56	988 / 922 / 46	808 / 688 / 50	985 / 849 / 41	619 / 492 / 39	746 / 612 / 32	628 / 614 / 53	742 / 744 / 42	780 / 713 / 59	926 / 862 / 47	776 / 658 / 53	956 / 822 / 44				
				35	1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52			
					40	1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52		
						45	1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	
							50	1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52
								55	1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62
		60							1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62
65									1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62
	70								1	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62	956 / 822 / 52	656 / 523 / 42	800 / 661 / 35	658 / 648 / 59	794 / 800 / 48	812 / 747 / 69	988 / 922 / 56	808 / 688 / 59	985 / 849 / 48	639 / 492 / 44	746 / 612 / 36	628 / 614 / 62	742 / 744 / 50	780 / 713 / 73	926 / 862 / 58	776 / 658 / 62

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		30	1	521 / 214 / 66	565 / 302 / 60	524 / 296 / 103	576 / 412 / 93	535 / 374 / 166	593 / 493 / 143	468 / 365 / 142	559 / 455 / 116	532 / 232 / 65	580 / 327 / 59	536 / 321 / 101	583 / 437 / 89	554 / 404 / 163	604 / 518 / 137	483 / 381 / 135	584 / 479 / 112	543 / 251 / 64	585 / 345 / 57	549 / 346 / 99	600 / 468 / 88	563 / 426 / 158	614 / 542 / 131
Wind Speed [mph]		110								115															
30	1	554 / 270 / 63	600 / 369 / 56	552 / 364 / 96	606 / 491 / 84	581 / 456 / 155	632 / 563 / 126	525 / 421 / 126	627 / 520 / 102	555 / 285 / 61	616 / 394 / 54	565 / 389 / 94	610 / 511 / 81	589 / 476 / 149	666 / 596 / 123	544 / 440 / 121	660 / 550 / 100								
Wind Speed [mph]		120								130															
30	1	566 / 304 / 60	618 / 410 / 52	577 / 414 / 93	613 / 530 / 78	595 / 495 / 143	681 / 614 / 117	562 / 457 / 116	677 / 566 / 95	555 / 285 / 61	616 / 394 / 54	565 / 389 / 94	610 / 511 / 81	589 / 476 / 149	666 / 596 / 123	544 / 440 / 121	660 / 550 / 100								

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		30	1	577 / 323 / 59	633 / 433 / 51	579 / 431 / 89	629 / 559 / 76	599 / 512 / 137	713 / 645 / 114	577 / 473 / 112	708 / 595 / 93	598 / 360 / 57	662 / 480 / 49	603 / 479 / 86	628 / 587 / 69	622 / 552 / 128	752 / 685 / 105	617 / 510 / 105	747 / 632 / 86	607 / 390 / 53	674 / 513 / 46	614 / 516 / 81	654 / 638 / 66	656 / 588 / 120	804 / 738 / 99

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																																																							
Wind Speed [mph]		95																								100																								105																							
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																											
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																					
		45	1	602 / 197 / 127	636 / 281 / 116	595 / 272 / 172	638 / 382 / 156	595 / 355 / 229	646 / 472 / 200	482 / 365 / 197	559 / 455 / 161	609 / 213 / 125	648 / 303 / 114	604 / 294 / 169	652 / 412 / 153	600 / 375 / 221	667 / 507 / 196	487 / 381 / 187	584 / 479 / 155	616 / 230 / 123	659 / 326 / 112	613 / 316 / 166	652 / 432 / 147	615 / 403 / 217	688 / 542 / 191	504 / 402 / 181	607 / 500 / 148	659 / 326 / 112	711 / 440 / 98	652 / 440 / 147	711 / 587 / 129	688 / 549 / 191	725 / 666 / 153	607 / 508 / 148	738 / 632 / 122	652 / 579 / 105	670 / 715 / 78	696 / 535 / 135	731 / 664 / 111	722 / 631 / 166	849 / 783 / 136	694 / 582 / 128	845 / 722 / 105																														
50	1	620 / 190 / 133	660 / 275 / 124	622 / 267 / 184	659 / 375 / 167	613 / 348 / 246	671 / 472 / 218	496 / 365 / 215	559 / 455 / 176	626 / 206 / 131	671 / 297 / 121	630 / 289 / 180	672 / 404 / 164	616 / 368 / 237	677 / 496 / 209	500 / 381 / 205	584 / 479 / 169	631 / 222 / 129	667 / 313 / 116	637 / 311 / 177	685 / 432 / 160	630 / 395 / 232	697 / 530 / 204	511 / 402 / 197	607 / 500 / 162	667 / 313 / 116	726 / 430 / 104	685 / 440 / 160	740 / 587 / 140	697 / 537 / 204	745 / 666 / 167	607 / 508 / 162	738 / 632 / 133	687 / 529 / 114	683 / 650 / 92	693 / 467 / 154	753 / 618 / 134	714 / 568 / 195	785 / 717 / 163	647 / 537 / 154	780 / 662 / 126	686 / 555 / 109	680 / 674 / 87	710 / 501 / 150	755 / 643 / 127	739 / 608 / 190	806 / 741 / 153	672 / 561 / 147	826 / 703 / 122	683 / 579 / 104	695 / 715 / 85	726 / 535 / 147	755 / 664 / 120	744 / 631 / 181	849 / 783 / 149	694 / 582 / 140	845 / 722 / 115																
60	1	661 / 179 / 146	690 / 259 / 135	659 / 252 / 202	698 / 360 / 187	646 / 335 / 278	692 / 452 / 245	514 / 359 / 248	560 / 455 / 206	664 / 194 / 143	698 / 279 / 132	664 / 273 / 199	708 / 387 / 183	658 / 361 / 272	710 / 485 / 240	526 / 381 / 239	584 / 479 / 197	680 / 214 / 143	721 / 306 / 132	669 / 293 / 195	719 / 414 / 179	671 / 387 / 267	728 / 518 / 234	536 / 402 / 231	607 / 500 / 189	690 / 259 / 135	743 / 366 / 124	698 / 367 / 187	747 / 502 / 167	692 / 459 / 245	778 / 619 / 218	560 / 462 / 206	674 / 572 / 168	698 / 279 / 132	756 / 393 / 121	708 / 394 / 183	763 / 538 / 164	710 / 492 / 240	782 / 644 / 207	584 / 486 / 197	716 / 611 / 164	721 / 306 / 132	769 / 420 / 118	719 / 422 / 179	778 / 573 / 160	728 / 525 / 234	784 / 666 / 196	607 / 508 / 189	738 / 632 / 155	722 / 607 / 127	737 / 650 / 107	723 / 446 / 171	787 / 602 / 152	742 / 555 / 223	823 / 717 / 191	647 / 537 / 181	780 / 662 / 147	734 / 543 / 124	732 / 674 / 101	737 / 479 / 167	807 / 643 / 148	764 / 593 / 218	826 / 741 / 180	672 / 561 / 172	826 / 703 / 143	745 / 579 / 121	746 / 715 / 99	750 / 511 / 164	804 / 664 / 140	786 / 631 / 212	852 / 783 / 174	694 / 582 / 164	845 / 722 / 134
45	1	623 / 248 / 121	657 / 341 / 107	621 / 339 / 163	665 / 461 / 144	630 / 430 / 212	693 / 563 / 183	525 / 421 / 174	627 / 520 / 141	630 / 265 / 118	668 / 363 / 105	630 / 362 / 160	678 / 490 / 141	646 / 457 / 208	713 / 596 / 179	544 / 440 / 168	660 / 550 / 138	657 / 341 / 107	728 / 468 / 96	665 / 470 / 144	712 / 608 / 123	693 / 571 / 183	760 / 704 / 149	627 / 528 / 141	777 / 668 / 118	668 / 363 / 105	744 / 496 / 94	678 / 499 / 141	729 / 643 / 120	696 / 590 / 174	773 / 719 / 140	660 / 558 / 138	793 / 684 / 112	650 / 601 / 92	666 / 733 / 74	713 / 569 / 132	750 / 702 / 108	726 / 651 / 157	862 / 798 / 128	732 / 617 / 125	887 / 759 / 102	646 / 620 / 87	679 / 770 / 72	712 / 588 / 126	769 / 739 / 104	753 / 686 / 153	900 / 835 / 123	748 / 633 / 118	927 / 796 / 99	643 / 255 / 124	687 / 355 / 112	653 / 355 / 170	694 / 479 / 150	659 / 448 / 223	736 / 596 / 195	544 / 440 / 183	660 / 550 / 151																
50	1	637 / 238 / 126	677 / 334 / 114	645 / 333 / 174	682 / 451 / 154	644 / 421 / 227	716 / 563 / 200	525 / 421 / 190	627 / 520 / 154	643 / 255 / 124	687 / 355 / 112	653 / 355 / 170	694 / 479 / 150	659 / 448 / 223	736 / 596 / 195	544 / 440 / 183	660 / 550 / 151	677 / 334 / 114	741 / 457 / 102	682 / 460 / 154	739 / 608 / 134	716 / 571 / 200	767 / 704 / 163	627 / 528 / 129	777 / 668 / 122	687 / 355 / 112	756 / 484 / 100	694 / 488 / 150	755 / 643 / 130	718 / 590 / 190	773 / 719 / 151	660 / 558 / 151	793 / 684 / 122	679 / 601 / 100	689 / 733 / 80	742 / 569 / 144	774 / 702 / 117	746 / 651 / 172	862 / 798 / 139	732 / 617 / 137	887 / 759 / 111	674 / 620 / 95	702 / 770 / 78	740 / 588 / 137	792 / 739 / 114	767 / 686 / 167	900 / 835 / 135	748 / 633 / 129	927 / 796 / 108	688 / 245 / 138	737 / 347 / 127	694 / 341 / 191	739 / 469 / 171	682 / 429 / 250	763 / 582 / 214	660 / 550 / 176																	
60	1	684 / 229 / 141	729 / 327 / 129	674 / 313 / 191	729 / 442 / 175	670 / 404 / 256	746 / 550 / 229	546 / 421 / 222	627 / 520 / 181	737 / 347 / 127	795 / 472 / 113	739 / 477 / 171	808 / 643 / 152	763 / 590 / 223	802 / 719 / 180	660 / 558 / 176	793 / 684 / 143	738 / 601 / 115	736 / 733 / 93	763 / 542 / 160	822 / 702 / 136	787 / 651 / 201	862 / 798 / 163	732 / 617 / 160	887 / 759 / 130	729 / 620 / 110	748 / 770 / 90	777 / 574 / 156	839 / 739 / 133	807 / 686 / 196	900 / 835 / 158	748 / 633 / 151	927 / 796 / 126	729 / 327 / 129	782 / 446 / 115	729 / 450 / 175	793 / 608 / 156	746 / 558 / 229	805 / 704 / 191	627 / 528 / 181	777 / 668 / 151	737 / 347 / 127	795 / 472 / 113	739 / 477 / 171	808 / 643 / 152	763 / 590 / 223	802 / 719 / 180	660 / 558 / 176	793 / 684 / 143																								
45	1	637 / 282 / 116	679 / 385 / 103	639 / 384 / 156	691 / 518 / 138	647 / 474 / 200	715 / 614 / 170	562 / 457 / 161	677 / 566 / 132	630 / 265 / 118	668 / 363 / 105	630 / 362 / 160	678 / 490 / 141	646 / 457 / 208	713 / 596 / 179	544 / 440 / 168	660 / 550 / 138	679 / 385 / 103	760 / 523 / 92	691 / 528 / 138	726 / 659 / 114	715 / 622 / 170	807 / 753 / 136	677 / 575 / 109	828 / 716 / 112	668 / 363 / 105	744 / 496 / 94	678 / 499 / 141	729 / 643 / 120	696 / 590 / 174	773 / 719 / 140	660 / 558 / 138	793 / 684 / 112	657 / 652 / 85	692 / 805 / 69	728 / 620 / 123	764 / 751 / 98	765 / 700 / 145	935 / 870 / 119	783 / 664 / 115	965 / 830 / 96	646 / 620 / 87	679 / 770 / 72	712 / 588 / 126	769 / 739 / 104	753 / 686 / 153	900 / 835 / 123	748 / 633 / 118	927 / 796 / 99	643 / 255 / 124	687 / 355 / 112	653 / 355 / 170	694 / 479 / 150	659 / 448 / 223	736 / 596 / 195	544 / 440 / 183	660 / 550 / 151																
50	1	661 / 277 / 124	697 / 376 / 109	661 / 377 / 167	706 / 507 / 147	673 / 474 / 218	736 / 614 / 186	562 / 457 / 176	677 / 566 / 144	643 / 255 / 124	687 / 355 / 112	653 / 355 / 170	694 / 479 / 150	659 / 448 / 223	736 / 596 / 195	544 / 440 / 183	660 / 550 / 151	697 / 376 / 109	770 / 511 / 97	706 / 516 / 147	751 / 659 / 124	736 / 622 / 186	807 / 753 / 149	677 / 575 / 144	828 / 716 / 119	687 / 355 / 112	756 / 484 / 100	694 / 488 / 150	755 / 643 / 130	718 / 590 / 190	773 / 719 / 151	660 / 558 / 151	793 / 684 / 122	684 / 652 / 92	714 / 805 / 75	755 / 620 / 134	785 / 751 / 107	765 / 700 / 158	935 / 870 / 130	783 / 664 / 126	965 / 830 / 104	674 / 620 / 95	702 / 770 / 78	740 / 588 / 137	792 / 739 / 114	767 / 686 / 167	900 / 835 / 135	748 / 633 / 129	927 / 796 / 108	688 / 245 / 138	737 / 347 / 127	694 / 341 / 191	739 / 469 / 171	682 / 429 / 250	763 / 582 / 214	660 / 550 / 176																	
60	1	691 / 260 / 135	744 / 368 / 124	699 / 362 / 187	748 / 495 / 167	694 / 454 / 245	780 / 614 / 218	562 / 457 / 206	677 / 566 / 168	737 / 347 / 127	795 / 472 / 113	739 / 477 / 171	808 / 643 / 152	763 / 590 / 223	802 / 719 / 180	660 / 558 / 176	793 / 684 / 143	744 / 368 / 124	807 / 498 / 110	748 / 504 / 167	801 / 659 / 144	780 / 622 / 218	821 / 753 / 174	677 / 575 / 168	828 / 716 / 139	737 / 347 / 127	795 / 472 / 113	739 / 477 / 171	808 / 643 / 152	763 / 590 / 223	802 / 719 / 180	660 / 558 / 176	793 / 684 / 143	739 / 652 / 107	759 / 805 / 87	789 / 605 / 152	829 / 751 / 125	802 / 700 / 185	935 / 870 / 153	783 / 664 / 147	965 / 830 / 122	729 / 620 / 110	748 / 770 / 90	777 / 574 / 156	839 / 739 / 133	807 / 686 / 196	900 / 835 / 158	748 / 633 / 151	927 / 796 / 126																								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																																																																																																																																																																																																							
Wind Speed [mph]		140																150																160																																																																																																																																																																																							
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																																																																																																																																																																											
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																																																																																																																																
		45	1	644 / 299 / 114	690 / 406 / 101	648 / 407 / 153	704 / 546 / 135	662 / 501 / 196	733 / 645 / 166	577 / 473 / 155	708 / 595 / 128	658 / 333 / 109	711 / 448 / 96	665 / 451 / 147	712 / 587 / 126	690 / 552 / 187	752 / 685 / 153	617 / 510 / 145	747 / 632 / 118	672 / 367 / 105	749 / 501 / 94	682 / 495 / 141	733 / 638 / 120	700 / 588 / 174	804 / 738 / 145	667 / 556 / 138	800 / 680 / 112	690 / 406 / 101	776 / 550 / 89	704 / 556 / 135	741 / 691 / 111	714 / 637 / 162	839 / 785 / 132	708 / 603 / 128	862 / 748 / 105	711 / 448 / 96	806 / 603 / 85	712 / 598 / 126	746 / 729 / 101	752 / 694 / 153	898 / 845 / 123	747 / 641 / 118	926 / 806 / 99	749 / 501 / 94	810 / 634 / 78	715 / 633 / 117	768 / 781 / 95	781 / 726 / 140	949 / 896 / 115	800 / 690 / 112	981 / 857 / 92	650 / 666 / 81	680 / 811 / 65	724 / 635 / 117	780 / 784 / 95	797 / 732 / 140	968 / 903 / 115	816 / 695 / 112	1001 / 863 / 92	668 / 724 / 76	698 / 869 / 61	751 / 693 / 111	833 / 843 / 89	856 / 791 / 132	1027 / 961 / 106	880 / 752 / 105	1065 / 921 / 86	684 / 778 / 72	756 / 954 / 58	752 / 725 / 101	880 / 895 / 83	908 / 843 / 123	1073 / 1008 / 98	936 / 804 / 99	1116 / 968 / 79	667 / 293 / 121	722 / 406 / 109	668 / 399 / 164	718 / 534 / 144	687 / 501 / 213	754 / 645 / 181	577 / 473 / 169	708 / 595 / 140	679 / 326 / 116	742 / 448 / 104	683 / 442 / 157	740 / 587 / 137	698 / 540 / 200	766 / 685 / 167	617 / 510 / 158	747 / 632 / 129	690 / 359 / 112	760 / 489 / 100	698 / 484 / 150	760 / 638 / 130	723 / 588 / 190	804 / 738 / 158	667 / 556 / 151	800 / 680 / 122	722 / 406 / 109	785 / 537 / 95	718 / 544 / 144	765 / 691 / 120	735 / 637 / 176	839 / 785 / 144	708 / 603 / 140	862 / 748 / 115	742 / 448 / 104	811 / 587 / 90	740 / 598 / 137	768 / 729 / 110	766 / 694 / 167	898 / 845 / 135	747 / 641 / 129	926 / 806 / 108	760 / 489 / 100	835 / 634 / 85	740 / 633 / 127	789 / 781 / 104	781 / 726 / 153	949 / 896 / 126	800 / 690 / 122	981 / 857 / 101	675 / 666 / 87	701 / 811 / 71	750 / 635 / 127	801 / 784 / 104	797 / 732 / 153	968 / 903 / 126	816 / 695 / 122	1001 / 863 / 101	692 / 724 / 83	718 / 869 / 66	775 / 693 / 120	833 / 843 / 97	856 / 791 / 144	1027 / 961 / 116	880 / 752 / 115	1065 / 921 / 94	707 / 778 / 78	758 / 954 / 63	774 / 725 / 110	880 / 895 / 90	908 / 843 / 135	1073 / 1008 / 107	936 / 804 / 108	1116 / 968 / 86	709 / 282 / 135	752 / 388 / 121	705 / 382 / 183	758 / 522 / 164	705 / 479 / 240	797 / 645 / 212	577 / 473 / 197	708 / 595 / 164	717 / 313 / 129	766 / 428 / 115	716 / 423 / 175	776 / 573 / 156	728 / 527 / 229	806 / 685 / 196	617 / 510 / 185	747 / 632 / 151	740 / 351 / 127	799 / 477 / 113	742 / 473 / 171	813 / 638 / 152	768 / 588 / 223	832 / 738 / 185	667 / 556 / 176	800 / 680 / 143	752 / 388 / 121	819 / 523 / 107	758 / 531 / 164	814 / 691 / 140	776 / 637 / 207	839 / 785 / 169	708 / 603 / 164	862 / 748 / 134	766 / 428 / 115	841 / 571 / 101	776 / 583 / 156	813 / 729 / 129	806 / 694 / 196	898 / 845 / 158	747 / 641 / 151	926 / 806 / 126	799 / 477 / 113	885 / 634 / 99	792 / 633 / 148	831 / 781 / 121	808 / 726 / 180	949 / 896 / 147	800 / 690 / 143	981 / 857 / 118	727 / 666 / 101	743 / 811 / 82	801 / 635 / 148	843 / 784 / 121	819 / 732 / 180	968 / 903 / 147	816 / 695 / 143	1001 / 863 / 118	741 / 724 / 96	756 / 869 / 76	824 / 693 / 140	867 / 843 / 113	856 / 791 / 169	1027 / 961 / 136	880 / 752 / 134	1065 / 921 / 109	752 / 778 / 90	795 / 954 / 73	819 / 725 / 129	885 / 895 / 105	908 / 843 / 158	1073 / 1008 / 125

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				74in x 41.2in				Load: Up / Down / Side , lbs				100				105							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		70	1	707 / 172 / 160	727 / 248 / 147	701 / 243 / 222	732 / 345 / 204	674 / 322 / 308	725 / 442 / 277	532 / 353 / 279	582 / 455 / 235	708 / 187 / 157	749 / 273 / 147	705 / 262 / 218	740 / 371 / 200	685 / 346 / 302	741 / 474 / 270	542 / 374 / 269	594 / 479 / 226	709 / 201 / 153	754 / 293 / 144	708 / 281 / 213	747 / 396 / 196	695 / 371 / 295	757 / 506 / 264

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
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Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		70	1	746 / 270 / 147	795 / 379 / 134	736 / 366 / 200	796 / 509 / 182	736 / 468 / 270	818 / 628 / 239	589 / 473 / 226	708 / 595 / 187	749 / 299 / 141	805 / 417 / 128	759 / 414 / 196	810 / 559 / 173	755 / 515 / 258	845 / 685 / 226	617 / 510 / 211	747 / 632 / 173	768 / 335 / 137	835 / 465 / 125	765 / 452 / 187	844 / 622 / 169	793 / 574 / 251	869 / 738 / 214	667 / 556 / 202	800 / 680 / 164	799 / 574 / 251	869 / 738 / 214	667 / 556 / 202	800 / 680 / 164	799 / 574 / 251	869 / 738 / 214	667 / 556 / 202	800 / 680 / 164	799 / 574 / 251	869 / 738 / 214	667 / 556 / 202	800 / 680 / 164	799 / 574 / 251	869 / 738 / 214	667 / 556 / 202	800 / 680 / 164	799 / 574 / 251	869 / 738 / 214	667 / 556 / 202	800 / 680 / 164		

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
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7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
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30 - 45	1 = 1
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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
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θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																											
Wind Speed [mph]		95										100										105											
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
100	1	874 / 152 / 191	845 / 227 / 183	831 / 214 / 268	839 / 315 / 256	767 / 296 / 396	810 / 412 / 361	580 / 335 / 364	636 / 446 / 318	874 / 168 / 191	844 / 244 / 178	831 / 235 / 268	841 / 338 / 250	772 / 318 / 388	820 / 441 / 352	585 / 354 / 351	658 / 479 / 311	854 / 180 / 187	864 / 267 / 178	812 / 252 / 262	842 / 360 / 244	777 / 340 / 379	831 / 470 / 344	602 / 380 / 344	666 / 500 / 298								
	2	845 / 227 / 183	882 / 325 / 170	839 / 321 / 256	867 / 444 / 232	810 / 418 / 361	882 / 573 / 326	636 / 453 / 318	693 / 572 / 265	844 / 244 / 178	886 / 347 / 165	841 / 344 / 250	897 / 487 / 232	820 / 447 / 352	899 / 611 / 317	658 / 486 / 311	720 / 611 / 258	864 / 267 / 178	890 / 370 / 161	842 / 367 / 244	903 / 517 / 226	831 / 476 / 344	915 / 648 / 308	666 / 508 / 298	738 / 632 / 245								
	3	871 / 450 / 174	904 / 616 / 157	853 / 396 / 238	923 / 556 / 220	854 / 514 / 335	921 / 676 / 291	687 / 537 / 285	780 / 662 / 232	874 / 481 / 170	912 / 656 / 152	880 / 434 / 238	934 / 592 / 213	869 / 549 / 326	941 / 718 / 282	696 / 561 / 272	826 / 703 / 225	876 / 512 / 165	946 / 715 / 152	885 / 462 / 232	944 / 628 / 207	883 / 583 / 317	961 / 759 / 273	703 / 582 / 258	845 / 722 / 212								
Wind Speed [mph]		110										115																					
100	1	854 / 197 / 187	863 / 284 / 174	826 / 275 / 262	865 / 393 / 244	782 / 361 / 370	841 / 498 / 335	618 / 406 / 338	672 / 520 / 285	835 / 210 / 183	862 / 301 / 170	823 / 292 / 256	867 / 415 / 238	806 / 392 / 370	850 / 525 / 326	622 / 423 / 325	692 / 550 / 278	863 / 284 / 174	918 / 403 / 161	865 / 400 / 244	910 / 548 / 220	841 / 505 / 335	931 / 684 / 300	672 / 528 / 285	777 / 668 / 239	862 / 301 / 170	922 / 425 / 157	867 / 423 / 238	916 / 577 / 213	850 / 533 / 326	946 / 719 / 291	692 / 558 / 278	793 / 684 / 225
	2	863 / 284 / 174	918 / 403 / 161	865 / 400 / 244	910 / 548 / 220	841 / 505 / 335	931 / 684 / 300	672 / 528 / 285	777 / 668 / 239	862 / 301 / 170	922 / 425 / 157	867 / 423 / 238	916 / 577 / 213	850 / 533 / 326	946 / 719 / 291	692 / 558 / 278	793 / 684 / 225	902 / 557 / 165	925 / 733 / 144	890 / 490 / 226	954 / 662 / 201	897 / 616 / 308	979 / 798 / 264	732 / 617 / 252	887 / 759 / 206	904 / 588 / 161	931 / 770 / 139	895 / 516 / 220	963 / 696 / 195	910 / 648 / 300	997 / 835 / 256	748 / 633 / 239	927 / 796 / 199
	3	902 / 557 / 165	925 / 733 / 144	890 / 490 / 226	954 / 662 / 201	897 / 616 / 308	979 / 798 / 264	732 / 617 / 252	887 / 759 / 206	904 / 588 / 161	931 / 770 / 139	895 / 516 / 220	963 / 696 / 195	910 / 648 / 300	997 / 835 / 256	748 / 633 / 239	927 / 796 / 199																
Wind Speed [mph]		120										130																					
100	1	845 / 228 / 183	883 / 326 / 170	840 / 316 / 256	868 / 438 / 232	811 / 414 / 361	860 / 552 / 317	638 / 448 / 318	695 / 566 / 265	835 / 210 / 183	862 / 301 / 170	823 / 292 / 256	867 / 415 / 238	806 / 392 / 370	850 / 525 / 326	622 / 423 / 325	692 / 550 / 278	883 / 326 / 170	925 / 447 / 152	868 / 446 / 232	948 / 623 / 213	860 / 560 / 317	960 / 753 / 282	695 / 575 / 265	828 / 716 / 219	862 / 301 / 170	922 / 425 / 157	867 / 423 / 238	916 / 577 / 213	850 / 533 / 326	946 / 719 / 291	692 / 558 / 278	793 / 684 / 225
	2	883 / 326 / 170	925 / 447 / 152	868 / 446 / 232	948 / 623 / 213	860 / 560 / 317	960 / 753 / 282	695 / 575 / 265	828 / 716 / 219	862 / 301 / 170	922 / 425 / 157	867 / 423 / 238	916 / 577 / 213	850 / 533 / 326	946 / 719 / 291	692 / 558 / 278	793 / 684 / 225	906 / 618 / 157	936 / 805 / 135	924 / 558 / 220	1003 / 751 / 195	923 / 679 / 291	1012 / 870 / 247	783 / 664 / 232	965 / 830 / 192	904 / 588 / 161	931 / 770 / 139	895 / 516 / 220	963 / 696 / 195	910 / 648 / 300	997 / 835 / 256	748 / 633 / 239	927 / 796 / 199
	3	906 / 618 / 157	936 / 805 / 135	924 / 558 / 220	1003 / 751 / 195	923 / 679 / 291	1012 / 870 / 247	783 / 664 / 232	965 / 830 / 192	904 / 588 / 161	931 / 770 / 139	895 / 516 / 220	963 / 696 / 195	910 / 648 / 300	997 / 835 / 256	748 / 633 / 239	927 / 796 / 199																

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		140										150										160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
100	1	841 / 241 / 178	882 / 343 / 165	838 / 334 / 250	892 / 472 / 232	816 / 436 / 352	893 / 595 / 317	653 / 473 / 311	714 / 595 / 258	852 / 272 / 174	903 / 386 / 161	854 / 376 / 244	894 / 516 / 220	846 / 490 / 344	910 / 647 / 300	669 / 510 / 292	747 / 632 / 239	865 / 304 / 170	925 / 429 / 157	870 / 420 / 238	920 / 573 / 213	855 / 531 / 326	952 / 716 / 291	697 / 556 / 278	800 / 680 / 225						
	2	882 / 343 / 165	955 / 482 / 152	892 / 481 / 232	954 / 652 / 207	893 / 603 / 317	973 / 785 / 273	714 / 603 / 258	862 / 748 / 212	903 / 386 / 161	960 / 524 / 144	894 / 525 / 220	963 / 707 / 195	910 / 656 / 300	996 / 845 / 256	747 / 641 / 239	926 / 806 / 199	925 / 429 / 157	992 / 580 / 139	920 / 583 / 213	1000 / 781 / 189	952 / 726 / 291	1011 / 896 / 238	800 / 690 / 225	981 / 857 / 186						
	3	933 / 666 / 157	909 / 811 / 126	929 / 585 / 213	1011 / 784 / 189	934 / 709 / 282	1026 / 903 / 238	816 / 695 / 225	1001 / 863 / 186	936 / 724 / 148	911 / 869 / 118	963 / 654 / 207	1024 / 843 / 177	986 / 791 / 273	1048 / 961 / 220	880 / 752 / 212	1065 / 921 / 172	936 / 778 / 139	944 / 954 / 113	968 / 703 / 195	1032 / 895 / 165	1003 / 843 / 256	1073 / 1008 / 203	936 / 804 / 199	1116 / 968 / 159						
Wind Speed [mph]		170										180																			
100	1	877 / 337 / 165	947 / 473 / 152	887 / 464 / 232	946 / 630 / 207	885 / 585 / 317	963 / 761 / 273	705 / 584 / 258	848 / 724 / 212	890 / 370 / 161	970 / 517 / 148	903 / 508 / 226	972 / 687 / 201	915 / 639 / 308	1003 / 827 / 264	738 / 623 / 245	889 / 762 / 199														
	2	947 / 473 / 152	1025 / 636 / 135	946 / 641 / 207	1002 / 827 / 177	963 / 772 / 273	1020 / 938 / 220	848 / 735 / 212	1026 / 900 / 172	970 / 517 / 148	1057 / 691 / 131	972 / 699 / 201	1036 / 896 / 171	1003 / 838 / 264	1064 / 1011 / 212	889 / 774 / 199	1105 / 971 / 166														
	3	932 / 825 / 131	937 / 995 / 105	1002 / 770 / 189	1032 / 937 / 153	1014 / 888 / 238	1156 / 1089 / 194	984 / 848 / 186	1206 / 1048 / 153	924 / 865 / 122	965 / 1070 / 100	1035 / 837 / 183	1069 / 1010 / 147	1058 / 959 / 229	1236 / 1166 / 185	1023 / 884 / 172	1233 / 1074 / 139														
Wind Speed [mph]		190										200																			
100	1	902 / 403 / 157	992 / 561 / 144	920 / 553 / 220	998 / 744 / 195	918 / 673 / 291	1006 / 862 / 247	776 / 658 / 232	956 / 822 / 192	915 / 436 / 152	1013 / 604 / 139	937 / 597 / 213	1023 / 800 / 189	946 / 724 / 282	1041 / 922 / 238	808 / 688 / 219	985 / 849 / 179														
	2	992 / 561 / 144	1088 / 746 / 126	998 / 757 / 195	1029 / 928 / 159	1006 / 873 / 247	1134 / 1080 / 203	956 / 834 / 192	1131 / 996 / 153	1013 / 604 / 139	1119 / 800 / 122	990 / 788 / 183	1058 / 990 / 153	1002 / 900 / 229	1145 / 1094 / 185	985 / 862 / 179	1197 / 1057 / 146														
	3	946 / 930 / 118	990 / 1142 / 96	1030 / 872 / 171	1104 / 1079 / 140	1056 / 988 / 212	1310 / 1239 / 176	1094 / 948 / 166	1307 / 1140 / 133	930 / 956 / 109	965 / 1151 / 87	1019 / 898 / 159	1084 / 1093 / 128	1117 / 1050 / 203	1377 / 1305 / 168	1162 / 1009 / 159	1375 / 1201 / 126														

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	399 / 275 / 42	486 / 362 / 35	428 / 373 / 46	512 / 475 / 38	509 / 432 / 47	609 / 539 / 38	502 / 399 / 51	603 / 497 / 42	418 / 294 / 40	509 / 384 / 34	449 / 397 / 44	524 / 492 / 36	522 / 448 / 44	633 / 564 / 37	526 / 422 / 49	628 / 521 / 40	437 / 313 / 39	530 / 405 / 33	461 / 414 / 42	545 / 516 / 35	544 / 471 / 43	655 / 587 / 35	548 / 444 / 47	666 / 555 / 39
	2	486 / 362 / 35	594 / 467 / 30	502 / 474 / 37	592 / 584 / 30	609 / 546 / 38	719 / 662 / 31	603 / 505 / 42	734 / 629 / 34	509 / 384 / 34	618 / 491 / 29	524 / 501 / 36	614 / 609 / 29	633 / 572 / 37	761 / 705 / 30	628 / 529 / 40	779 / 670 / 34	530 / 405 / 33	641 / 512 / 27	533 / 514 / 34	632 / 632 / 27	655 / 595 / 35	780 / 725 / 28	666 / 563 / 39	799 / 690 / 32
	3	487 / 576 / 27	581 / 711 / 22	568 / 544 / 32	687 / 679 / 27	695 / 628 / 33	845 / 779 / 27	690 / 579 / 36	841 / 718 / 30	504 / 602 / 26	596 / 734 / 21	590 / 570 / 31	707 / 704 / 25	718 / 652 / 32	864 / 799 / 26	733 / 618 / 35	888 / 761 / 29	520 / 625 / 25	627 / 777 / 20	610 / 593 / 30	724 / 724 / 24	759 / 692 / 31	907 / 842 / 25	754 / 638 / 34	935 / 803 / 28
5	1	399 / 275 / 42	486 / 362 / 35	428 / 373 / 53	512 / 475 / 44	509 / 432 / 56	609 / 539 / 46	502 / 399 / 57	603 / 497 / 47	418 / 294 / 40	509 / 384 / 34	449 / 397 / 51	524 / 492 / 42	522 / 448 / 53	633 / 564 / 44	526 / 422 / 55	628 / 521 / 45	437 / 313 / 39	530 / 405 / 33	461 / 414 / 49	545 / 516 / 40	544 / 471 / 51	655 / 587 / 42	548 / 444 / 53	666 / 555 / 44
	2	486 / 362 / 35	594 / 467 / 30	502 / 474 / 43	592 / 584 / 35	609 / 546 / 46	719 / 662 / 37	603 / 505 / 47	734 / 629 / 39	509 / 384 / 34	618 / 491 / 29	524 / 501 / 42	614 / 609 / 33	633 / 572 / 44	761 / 705 / 36	628 / 529 / 45	779 / 670 / 37	530 / 405 / 33	641 / 512 / 27	533 / 514 / 39	632 / 632 / 32	655 / 595 / 42	780 / 725 / 34	666 / 563 / 44	799 / 690 / 35
	3	487 / 576 / 27	581 / 711 / 22	568 / 544 / 38	687 / 679 / 31	695 / 628 / 40	845 / 779 / 33	690 / 579 / 41	841 / 718 / 33	504 / 602 / 26	596 / 734 / 21	590 / 570 / 36	707 / 704 / 29	718 / 652 / 38	864 / 799 / 31	733 / 618 / 40	888 / 761 / 32	520 / 625 / 25	627 / 777 / 20	610 / 593 / 34	724 / 724 / 28	759 / 692 / 37	907 / 842 / 30	754 / 638 / 37	935 / 803 / 31
10	1	437 / 275 / 49	486 / 362 / 42	448 / 373 / 69	512 / 475 / 57	509 / 432 / 71	609 / 539 / 58	502 / 399 / 68	603 / 497 / 56	447 / 294 / 48	509 / 384 / 41	460 / 397 / 66	524 / 492 / 54	522 / 448 / 68	633 / 564 / 56	526 / 422 / 66	628 / 521 / 53	457 / 313 / 47	530 / 405 / 39	463 / 414 / 63	545 / 516 / 52	544 / 471 / 65	655 / 587 / 53	548 / 444 / 63	666 / 555 / 52
	2	486 / 362 / 42	594 / 467 / 35	502 / 474 / 56	592 / 584 / 45	609 / 546 / 58	719 / 662 / 47	603 / 505 / 56	734 / 629 / 46	509 / 384 / 41	618 / 491 / 34	524 / 501 / 54	614 / 609 / 43	633 / 572 / 56	761 / 705 / 46	628 / 529 / 53	779 / 670 / 45	530 / 405 / 39	641 / 512 / 32	533 / 514 / 50	632 / 632 / 41	655 / 595 / 53	780 / 725 / 43	666 / 563 / 52	799 / 690 / 42
	3	487 / 576 / 32	581 / 711 / 26	568 / 544 / 48	687 / 679 / 40	695 / 628 / 51	845 / 779 / 42	690 / 579 / 48	841 / 718 / 40	504 / 602 / 31	596 / 734 / 25	590 / 570 / 46	707 / 704 / 38	718 / 652 / 48	864 / 799 / 39	733 / 618 / 47	888 / 761 / 39	520 / 625 / 29	627 / 777 / 24	610 / 593 / 44	724 / 724 / 36	759 / 692 / 47	907 / 842 / 38	754 / 638 / 45	935 / 803 / 37

Exposure Category : D

Wind Speed [mph]		110								115							
0	1	455 / 331 / 38	549 / 424 / 32	480 / 436 / 41	563 / 538 / 33	575 / 502 / 42	691 / 623 / 34	569 / 464 / 45	686 / 575 / 37	472 / 348 / 37	568 / 443 / 30	497 / 457 / 39	580 / 558 / 32	594 / 523 / 40	708 / 641 / 33	589 / 483 / 44	722 / 607 / 36
	2	549 / 424 / 32	660 / 531 / 26	551 / 536 / 32	666 / 669 / 27	674 / 616 / 33	819 / 764 / 27	686 / 583 / 37	840 / 727 / 31	568 / 443 / 30	694 / 562 / 25	580 / 568 / 32	679 / 686 / 25	708 / 650 / 33	856 / 802 / 27	722 / 616 / 36	880 / 763 / 30
	3	533 / 645 / 24	636 / 791 / 19	627 / 614 / 28	760 / 763 / 23	776 / 710 / 29	949 / 883 / 24	794 / 674 / 33	945 / 814 / 26	558 / 680 / 23	663 / 828 / 19	659 / 648 / 27	794 / 800 / 22	812 / 747 / 28	988 / 922 / 23	808 / 689 / 31	985 / 849 / 25
5	1	455 / 331 / 38	549 / 424 / 32	480 / 436 / 47	563 / 538 / 38	575 / 502 / 50	691 / 623 / 41	569 / 464 / 51	686 / 575 / 42	472 / 348 / 37	568 / 443 / 30	497 / 457 / 46	580 / 558 / 37	594 / 523 / 48	708 / 641 / 39	589 / 483 / 49	722 / 607 / 41
	2	549 / 424 / 32	660 / 531 / 26	551 / 536 / 38	666 / 669 / 31	674 / 616 / 40	819 / 764 / 33	686 / 583 / 36	840 / 727 / 34	568 / 443 / 30	694 / 562 / 25	580 / 568 / 37	679 / 686 / 29	708 / 650 / 39	856 / 802 / 32	722 / 616 / 41	880 / 763 / 33
	3	533 / 645 / 24	636 / 791 / 19	627 / 614 / 33	760 / 763 / 27	776 / 710 / 35	949 / 883 / 29	794 / 674 / 36	945 / 814 / 29	558 / 680 / 23	663 / 828 / 19	659 / 648 / 32	794 / 800 / 26	812 / 747 / 34	988 / 922 / 28	808 / 689 / 34	985 / 849 / 28
10	1	466 / 331 / 45	549 / 424 / 38	480 / 436 / 61	563 / 538 / 49	575 / 502 / 64	691 / 623 / 52	569 / 464 / 61	686 / 575 / 50	475 / 348 / 44	568 / 443 / 36	497 / 457 / 59	580 / 558 / 47	594 / 523 / 61	708 / 641 / 49	589 / 483 / 58	722 / 607 / 48
	2	549 / 424 / 38	660 / 531 / 31	551 / 536 / 48	666 / 669 / 40	674 / 616 / 51	819 / 764 / 42	686 / 583 / 50	840 / 727 / 41	568 / 443 / 36	694 / 562 / 30	580 / 568 / 47	679 / 686 / 38	708 / 650 / 49	856 / 802 / 40	722 / 616 / 48	880 / 763 / 40
	3	533 / 645 / 28	636 / 791 / 23	627 / 614 / 42	760 / 763 / 35	776 / 710 / 44	949 / 883 / 37	794 / 674 / 44	945 / 814 / 35	558 / 680 / 27	663 / 828 / 22	659 / 648 / 41	794 / 800 / 33	812 / 747 / 43	988 / 922 / 35	808 / 689 / 41	985 / 849 / 34

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
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Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
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 B=Horizontal dimension of building measured normal to wind direction, in ft (m).
 h=Mean roof height, in ft (m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		140										150										160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge							
		0	1	512 / 386 / 35	612 / 484 / 29	518 / 485 / 36	622 / 606 / 30	641 / 570 / 38	753 / 687 / 30	635 / 526 / 41	770 / 652 / 34	540 / 415 / 32	650 / 522 / 27	554 / 527 / 34	658 / 647 / 27	681 / 612 / 35	811 / 746 / 28	676 / 565 / 38	807 / 687 / 31	573 / 447 / 30	701 / 568 / 25	586 / 564 / 32	686 / 680 / 25	715 / 648 / 33	864 / 799 / 27	710 / 598 / 35	860 / 736 / 29				
0	1	512 / 386 / 35	612 / 484 / 29	518 / 485 / 42	622 / 606 / 34	641 / 570 / 45	753 / 687 / 36	635 / 526 / 46	770 / 652 / 37	540 / 415 / 32	650 / 522 / 27	554 / 527 / 39	658 / 647 / 32	681 / 612 / 42	811 / 746 / 34	676 / 565 / 43	807 / 687 / 34	573 / 447 / 30	701 / 568 / 25	586 / 564 / 37	686 / 680 / 29	715 / 648 / 39	864 / 799 / 32	710 / 598 / 40	860 / 736 / 32						
0	1	512 / 386 / 41	612 / 484 / 34	518 / 485 / 54	622 / 606 / 44	641 / 570 / 57	753 / 687 / 46	635 / 526 / 55	770 / 652 / 45	540 / 415 / 38	650 / 522 / 32	554 / 527 / 50	658 / 647 / 41	681 / 612 / 53	811 / 746 / 43	676 / 565 / 51	807 / 687 / 41	573 / 447 / 36	701 / 568 / 30	586 / 564 / 47	686 / 680 / 38	715 / 648 / 49	864 / 799 / 40	710 / 598 / 47	860 / 736 / 39						
0	1	602 / 476 / 29	728 / 595 / 24	612 / 595 / 30	726 / 726 / 24	761 / 695 / 31	910 / 845 / 25	757 / 641 / 34	938 / 805 / 28	641 / 512 / 27	769 / 633 / 22	649 / 637 / 28	762 / 766 / 22	803 / 737 / 29	948 / 883 / 23	799 / 680 / 32	980 / 844 / 26	ASCE Group Zone													
0	2	728 / 595 / 24	903 / 755 / 20	726 / 739 / 24	881 / 913 / 20	910 / 856 / 25	1075 / 1023 / 20	938 / 817 / 28	1119 / 985 / 23	769 / 633 / 22	944 / 793 / 19	762 / 780 / 22	913 / 949 / 18	948 / 895 / 23	1151 / 1098 / 19	980 / 856 / 26	1201 / 1059 / 22	ASCE Group Zone													
0	3	701 / 881 / 17	849 / 1082 / 14	844 / 855 / 21	995 / 1022 / 17	1041 / 975 / 22	1242 / 1173 / 17	1079 / 934 / 24	1301 / 1134 / 20	755 / 952 / 17	906 / 1159 / 14	878 / 894 / 20	1065 / 1097 / 16	1071 / 1006 / 20	1321 / 1251 / 17	1115 / 967 / 23	1388 / 1212 / 19	ASCE Group Zone													
5	1	602 / 476 / 29	728 / 595 / 24	612 / 595 / 34	726 / 726 / 28	761 / 695 / 37	910 / 845 / 30	757 / 641 / 37	938 / 805 / 31	641 / 512 / 27	769 / 633 / 22	649 / 637 / 33	762 / 766 / 26	803 / 737 / 35	948 / 883 / 28	799 / 680 / 35	980 / 844 / 29	ASCE Group Zone													
5	2	728 / 595 / 24	903 / 755 / 20	726 / 739 / 28	881 / 913 / 23	910 / 856 / 24	1075 / 1023 / 24	938 / 817 / 31	1119 / 985 / 25	769 / 633 / 22	944 / 793 / 19	762 / 780 / 26	913 / 949 / 21	948 / 895 / 28	1151 / 1098 / 23	980 / 856 / 29	1201 / 1059 / 24	ASCE Group Zone													
5	3	701 / 881 / 17	849 / 1082 / 14	844 / 855 / 24	995 / 1022 / 19	1041 / 975 / 26	1242 / 1173 / 21	1079 / 934 / 27	1301 / 1134 / 22	755 / 952 / 17	906 / 1159 / 14	878 / 894 / 23	1065 / 1097 / 19	1071 / 1006 / 24	1321 / 1251 / 20	1115 / 967 / 25	1388 / 1212 / 21	ASCE Group Zone													
10	1	602 / 476 / 34	728 / 595 / 28	612 / 595 / 44	726 / 726 / 36	761 / 695 / 47	910 / 845 / 38	757 / 641 / 45	938 / 805 / 37	641 / 512 / 32	769 / 633 / 26	649 / 637 / 42	762 / 766 / 33	803 / 737 / 44	948 / 883 / 35	799 / 680 / 42	980 / 844 / 35	ASCE Group Zone													
10	2	728 / 595 / 28	903 / 755 / 24	726 / 739 / 36	881 / 913 / 29	910 / 856 / 38	1075 / 1023 / 30	938 / 817 / 37	1119 / 985 / 30	769 / 633 / 26	944 / 793 / 22	762 / 780 / 33	913 / 949 / 27	948 / 895 / 35	1151 / 1098 / 29	980 / 856 / 35	1201 / 1059 / 29	ASCE Group Zone													
10	3	701 / 881 / 21	849 / 1082 / 17	844 / 855 / 31	995 / 1022 / 25	1041 / 975 / 33	1242 / 1173 / 26	1079 / 934 / 32	1301 / 1134 / 26	755 / 952 / 20	906 / 1159 / 16	878 / 894 / 29	1065 / 1097 / 24	1071 / 1006 / 30	1321 / 1251 / 25	1115 / 967 / 30	1388 / 1212 / 25	ASCE Group Zone													
0	1	677 / 546 / 26	829 / 687 / 22	683 / 675 / 27	819 / 828 / 22	840 / 774 / 27	1015 / 949 / 22	836 / 714 / 30	1012 / 874 / 24	710 / 578 / 25	862 / 718 / 20	713 / 709 / 25	845 / 857 / 20	870 / 806 / 26	1036 / 972 / 21	896 / 767 / 29	1076 / 932 / 23	ASCE Group Zone													
0	2	829 / 687 / 22	977 / 824 / 17	792 / 815 / 21	974 / 1016 / 18	1015 / 962 / 22	1223 / 1169 / 18	1012 / 887 / 24	1278 / 1129 / 21	862 / 718 / 20	1040 / 881 / 17	845 / 873 / 20	1033 / 1080 / 17	1036 / 985 / 21	1289 / 1235 / 17	1076 / 946 / 23	1286 / 1138 / 19	ASCE Group Zone													
0	3	774 / 981 / 15	960 / 1230 / 13	940 / 960 / 19	1131 / 1168 / 15	1140 / 1073 / 19	1393 / 1321 / 16	1189 / 1033 / 22	1468 / 1283 / 18	820 / 1043 / 15	1009 / 1296 / 12	960 / 983 / 18	1192 / 1234 / 15	1204 / 1136 / 18	1457 / 1383 / 15	1259 / 1096 / 21	1540 / 1348 / 17	ASCE Group Zone													
5	1	677 / 546 / 26	829 / 687 / 22	683 / 675 / 31	819 / 828 / 25	840 / 774 / 33	1015 / 949 / 27	836 / 714 / 33	1012 / 874 / 27	710 / 578 / 25	862 / 718 / 20	713 / 709 / 29	845 / 857 / 24	870 / 806 / 31	1036 / 972 / 25	896 / 767 / 32	1076 / 932 / 26	ASCE Group Zone													
5	2	829 / 687 / 22	977 / 824 / 17	792 / 815 / 24	974 / 1016 / 20	1015 / 962 / 27	1223 / 1169 / 22	1012 / 887 / 27	1278 / 1129 / 23	862 / 718 / 20	1040 / 881 / 17	845 / 873 / 24	1033 / 1080 / 19	1036 / 985 / 25	1289 / 1235 / 21	1076 / 946 / 26	1286 / 1138 / 21	ASCE Group Zone													
5	3	774 / 981 / 15	960 / 1230 / 13	940 / 960 / 22	1131 / 1168 / 18	1140 / 1073 / 23	1393 / 1321 / 19	1189 / 1033 / 24	1468 / 1283 / 20	820 / 1043 / 15	1009 / 1296 / 12	960 / 983 / 20	1192 / 1234 / 17	1204 / 1136 / 22	1457 / 1383 / 18	1259 / 1096 / 23	1540 / 1348 / 19	ASCE Group Zone													
10	1	677 / 546 / 31	829 / 687 / 26	683 / 675 / 40	819 / 828 / 32	840 / 774 / 42	1015 / 949 / 34	836 / 714 / 40	1012 / 874 / 32	710 / 578 / 29	862 / 718 / 24	713 / 709 / 38	845 / 857 / 30	870 / 806 / 39	1036 / 972 / 31	896 / 767 / 39	1076 / 932 / 31	ASCE Group Zone													
10	2	829 / 687 / 26	977 / 824 / 21	792 / 815 / 31	974 / 1016 / 26	1015 / 962 / 34	1223 / 1169 / 28	1012 / 887 / 32	1278 / 1129 / 28	862 / 718 / 24	1040 / 881 / 20	845 / 873 / 30	1033 / 1080 / 25	1036 / 985 / 31	1289 / 1235 / 26	1076 / 946 / 31	1286 / 1138 / 25	ASCE Group Zone													
10	3	774 / 981 / 18	960 / 1230 / 15	940 / 960 / 28	1131 / 1168 / 23	1140 / 1073 / 29	1393 / 1321 / 24	1189 / 1033 / 29	1468 / 1283 / 24	820 / 1043 / 18	1009 / 1296 / 15	960 / 983 / 26	1192 / 1234 / 22	1204 / 1136 / 28	1457 / 1383 / 22	1259 / 1096 / 28	1540 / 1348 / 23	ASCE Group Zone													

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft			74in x 41.2in			Load: Up / Down / Side , lbs																													
Wind Speed [mph]			95									100									105																	
Panal Angle			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45		
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		
		15	1	477 / 262 / 55	535 / 362 / 49	490 / 361 / 81	537 / 475 / 70	509 / 432 / 87	609 / 539 / 71	502 / 399 / 79	603 / 497 / 65	492 / 285 / 54	545 / 384 / 47	507 / 391 / 80	537 / 492 / 66	522 / 448 / 82	633 / 564 / 68	526 / 422 / 76	628 / 521 / 62	508 / 308 / 53	555 / 405 / 46	516 / 414 / 77	547 / 516 / 63	544 / 471 / 79	655 / 587 / 65	548 / 444 / 74	666 / 555 / 61	555 / 405 / 46	641 / 512 / 38	536 / 514 / 62	632 / 632 / 50	655 / 595 / 65	780 / 725 / 52	666 / 563 / 61	799 / 690 / 49			
15	1	519 / 254 / 61	567 / 350 / 54	528 / 349 / 93	584 / 475 / 82	509 / 432 / 104	609 / 539 / 85	502 / 399 / 90	603 / 497 / 74	533 / 276 / 60	585 / 377 / 53	534 / 372 / 90	582 / 492 / 78	522 / 448 / 98	633 / 564 / 81	526 / 422 / 87	628 / 521 / 71	538 / 292 / 58	593 / 397 / 51	550 / 400 / 89	590 / 516 / 75	544 / 471 / 95	655 / 587 / 78	548 / 444 / 84	666 / 555 / 69	538 / 292 / 58	593 / 397 / 51	550 / 400 / 89	590 / 516 / 75	544 / 471 / 95	655 / 587 / 78	548 / 444 / 84	666 / 555 / 69					
15	1	515 / 325 / 52	564 / 424 / 44	524 / 436 / 75	563 / 538 / 60	575 / 502 / 77	691 / 623 / 63	569 / 464 / 71	686 / 575 / 58	530 / 348 / 51	571 / 443 / 42	532 / 457 / 72	580 / 558 / 58	594 / 523 / 74	708 / 641 / 60	589 / 483 / 68	722 / 607 / 56	571 / 443 / 42	694 / 562 / 35	580 / 568 / 58	679 / 686 / 46	708 / 650 / 60	856 / 802 / 49	722 / 616 / 56	880 / 763 / 46	558 / 680 / 32	663 / 828 / 26	659 / 648 / 50	794 / 800 / 41	812 / 747 / 52	988 / 922 / 43	808 / 689 / 48	985 / 849 / 39					
15	1	536 / 364 / 49	596 / 469 / 41	528 / 468 / 68	595 / 576 / 55	611 / 541 / 71	742 / 675 / 59	606 / 500 / 65	737 / 622 / 53	530 / 348 / 51	571 / 443 / 42	532 / 457 / 72	580 / 558 / 58	594 / 523 / 74	708 / 641 / 60	589 / 483 / 68	722 / 607 / 56	571 / 443 / 42	694 / 562 / 35	580 / 568 / 58	679 / 686 / 46	708 / 650 / 60	856 / 802 / 49	722 / 616 / 56	880 / 763 / 46	558 / 680 / 32	663 / 828 / 26	659 / 648 / 50	794 / 800 / 41	812 / 747 / 52	988 / 922 / 43	808 / 689 / 48	985 / 849 / 39					

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		15	1	551/386/48	612/484/40	533/485/66	622/606/54	641/570/70	753/687/55	635/526/64	770/652/52	559/415/45	650/522/37	554/527/62	658/647/50	681/612/65	811/746/52	676/565/59	807/687/48	575/447/42	701/568/35	586/564/58	686/680/46	715/648/60	864/799/49
170	1	602/476/40	728/595/33	612/595/54	726/726/44	761/695/57	910/845/46	757/641/52	938/805/43	641/512/38	769/633/31	649/637/51	762/766/41	803/737/54	948/883/43	799/680/49	980/844/41	602/476/40	728/595/33	612/595/54	726/726/44	761/695/57	910/845/46	757/641/52	938/805/43
190	1	677/546/36	829/687/30	683/675/49	819/828/40	840/774/51	1015/949/41	836/714/46	1012/874/38	710/578/34	862/718/28	713/709/46	845/857/37	870/806/48	1036/972/38	896/767/45	1076/932/36	677/546/36	829/687/30	683/675/49	819/828/40	840/774/51	1015/949/41	836/714/46	1012/874/38

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		30	1	521 / 254 / 61	568 / 350 / 54	530 / 349 / 94	586 / 475 / 83	551 / 432 / 145	609 / 539 / 119	502 / 399 / 120	603 / 497 / 98	535 / 276 / 60	587 / 377 / 53	536 / 372 / 91	584 / 492 / 78	552 / 448 / 137	633 / 564 / 114	526 / 422 / 115	628 / 521 / 94	539 / 292 / 58	594 / 397 / 51	551 / 400 / 89	591 / 516 / 75	562 / 471 / 132	655 / 587 / 108
110	1	553 / 314 / 57	613 / 424 / 50	557 / 421 / 86	598 / 538 / 72	583 / 502 / 129	691 / 623 / 106	569 / 464 / 107	686 / 575 / 87	567 / 336 / 56	618 / 443 / 48	572 / 449 / 84	603 / 558 / 69	594 / 523 / 124	708 / 641 / 100	589 / 483 / 102	722 / 607 / 85	618 / 443 / 48	694 / 562 / 40	603 / 568 / 69	679 / 686 / 55	708 / 650 / 100	856 / 802 / 82	722 / 616 / 85	880 / 763 / 70
115	1	553 / 314 / 57	613 / 424 / 50	557 / 421 / 86	598 / 538 / 72	583 / 502 / 129	691 / 623 / 106	569 / 464 / 107	686 / 575 / 87	567 / 336 / 56	618 / 443 / 48	572 / 449 / 84	603 / 558 / 69	594 / 523 / 124	708 / 641 / 100	589 / 483 / 102	722 / 607 / 85	618 / 443 / 48	694 / 562 / 40	603 / 568 / 69	679 / 686 / 55	708 / 650 / 100	856 / 802 / 82	722 / 616 / 85	880 / 763 / 70
120	1	570 / 351 / 54	636 / 469 / 47	576 / 468 / 81	606 / 576 / 66	611 / 541 / 119	742 / 675 / 98	606 / 500 / 98	737 / 622 / 81	567 / 336 / 56	618 / 443 / 48	572 / 449 / 84	603 / 558 / 69	594 / 523 / 124	708 / 641 / 100	589 / 483 / 102	722 / 607 / 85	570 / 351 / 54	636 / 469 / 47	576 / 468 / 81	606 / 576 / 66	611 / 541 / 119	742 / 675 / 98	606 / 500 / 98	737 / 622 / 81

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																																															
Wind Speed [mph]		140																150																160																															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																					
		30	1	583 / 372 / 53	639 / 484 / 45	579 / 485 / 78	623 / 606 / 64	641 / 570 / 116	753 / 687 / 92	635 / 526 / 96	770 / 652 / 78	609 / 415 / 51	656 / 522 / 42	595 / 527 / 73	658 / 647 / 60	681 / 612 / 108	811 / 746 / 87	676 / 565 / 89	807 / 687 / 72	622 / 447 / 48	701 / 568 / 40	607 / 564 / 69	686 / 680 / 55	715 / 648 / 100	864 / 799 / 82	710 / 598 / 83	860 / 736 / 68	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48																						
30	2	639 / 484 / 45	740 / 606 / 37	608 / 602 / 63	739 / 752 / 52	753 / 697 / 92	894 / 841 / 74	770 / 661 / 78	922 / 804 / 63	656 / 522 / 42	799 / 660 / 35	658 / 659 / 60	768 / 787 / 47	811 / 756 / 87	950 / 898 / 69	807 / 698 / 72	983 / 860 / 59	701 / 568 / 40	854 / 710 / 33	686 / 693 / 55	841 / 867 / 46	864 / 810 / 82	1037 / 984 / 66	860 / 747 / 68	1075 / 944 / 57	670 / 837 / 32	822 / 1044 / 26	802 / 808 / 54	961 / 983 / 43	998 / 931 / 82	1212 / 1142 / 67	994 / 858 / 66	1209 / 1052 / 54	670 / 837 / 32	822 / 1044 / 26	802 / 808 / 54	961 / 983 / 43	998 / 931 / 82	1212 / 1142 / 67	994 / 858 / 66	1209 / 1052 / 54																								
30	3	590 / 725 / 33	713 / 896 / 27	699 / 695 / 55	829 / 840 / 44	853 / 789 / 79	1058 / 992 / 66	878 / 752 / 68	1055 / 913 / 55	632 / 784 / 31	755 / 954 / 25	753 / 754 / 52	880 / 897 / 41	912 / 847 / 74	1115 / 1049 / 61	941 / 809 / 63	1161 / 1008 / 52	670 / 837 / 29	822 / 1044 / 24	802 / 808 / 49	961 / 983 / 39	998 / 931 / 71	1212 / 1142 / 58	994 / 858 / 59	1209 / 1052 / 48	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48																								
35	1	605 / 365 / 57	668 / 484 / 49	610 / 485 / 86	648 / 606 / 71	641 / 570 / 133	753 / 687 / 106	635 / 526 / 108	770 / 652 / 88	629 / 407 / 54	683 / 522 / 46	623 / 527 / 81	661 / 647 / 66	681 / 612 / 124	811 / 746 / 100	676 / 565 / 100	807 / 687 / 81	639 / 438 / 51	711 / 568 / 44	634 / 564 / 76	686 / 680 / 61	715 / 648 / 115	864 / 799 / 94	710 / 598 / 93	860 / 736 / 76	711 / 568 / 44	854 / 710 / 36	686 / 693 / 61	841 / 867 / 50	864 / 810 / 94	1037 / 984 / 76	860 / 747 / 76	1075 / 944 / 64	711 / 568 / 44	854 / 710 / 36	686 / 693 / 61	841 / 867 / 50	864 / 810 / 94	1037 / 984 / 76	860 / 747 / 76	1075 / 944 / 64																								
35	2	668 / 484 / 49	740 / 606 / 40	632 / 602 / 69	739 / 752 / 57	753 / 697 / 106	894 / 841 / 85	770 / 661 / 88	922 / 804 / 71	683 / 522 / 46	799 / 660 / 38	661 / 659 / 66	768 / 787 / 52	811 / 756 / 100	950 / 898 / 79	807 / 698 / 81	983 / 860 / 66	711 / 568 / 44	854 / 710 / 36	686 / 693 / 61	841 / 867 / 50	864 / 810 / 94	1037 / 984 / 76	860 / 747 / 76	1075 / 944 / 64	670 / 837 / 32	822 / 1044 / 26	802 / 808 / 54	961 / 983 / 43	998 / 931 / 82	1212 / 1142 / 67	994 / 858 / 66	1209 / 1052 / 54	670 / 837 / 32	822 / 1044 / 26	802 / 808 / 54	961 / 983 / 43	998 / 931 / 82	1212 / 1142 / 67	994 / 858 / 66	1209 / 1052 / 54																								
35	3	596 / 725 / 36	713 / 896 / 30	699 / 695 / 61	829 / 840 / 49	853 / 789 / 91	1058 / 992 / 76	878 / 752 / 76	1055 / 913 / 61	632 / 784 / 34	755 / 954 / 27	753 / 754 / 57	880 / 897 / 45	912 / 847 / 85	1115 / 1049 / 70	941 / 809 / 71	1161 / 1008 / 59	670 / 837 / 32	822 / 1044 / 26	802 / 808 / 54	961 / 983 / 43	998 / 931 / 82	1212 / 1142 / 67	994 / 858 / 66	1209 / 1052 / 54	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48																								
40	1	626 / 358 / 60	681 / 474 / 52	627 / 476 / 95	672 / 606 / 79	659 / 570 / 149	753 / 687 / 119	635 / 526 / 119	770 / 652 / 98	648 / 398 / 57	710 / 522 / 49	652 / 527 / 91	684 / 647 / 74	681 / 612 / 139	811 / 746 / 112	676 / 565 / 111	807 / 687 / 90	669 / 438 / 55	737 / 568 / 47	660 / 564 / 85	690 / 680 / 68	715 / 648 / 129	864 / 799 / 105	710 / 598 / 103	860 / 736 / 84	669 / 438 / 55	737 / 568 / 47	660 / 564 / 85	690 / 680 / 68	715 / 648 / 129	864 / 799 / 105	710 / 598 / 103	860 / 736 / 84	669 / 438 / 55	737 / 568 / 47	660 / 564 / 85	690 / 680 / 68	715 / 648 / 129	864 / 799 / 105	710 / 598 / 103	860 / 736 / 84																								
40	2	681 / 474 / 52	751 / 606 / 44	656 / 602 / 78	739 / 752 / 64	753 / 697 / 119	894 / 841 / 95	770 / 661 / 98	922 / 804 / 79	710 / 522 / 49	799 / 660 / 41	684 / 659 / 74	768 / 787 / 58	811 / 756 / 112	950 / 898 / 88	807 / 698 / 90	983 / 860 / 73	737 / 568 / 47	854 / 710 / 39	690 / 693 / 68	841 / 867 / 56	864 / 810 / 105	1037 / 984 / 85	860 / 747 / 84	1075 / 944 / 71	670 / 837 / 32	822 / 1044 / 26	802 / 808 / 54	961 / 983 / 43	998 / 931 / 82	1212 / 1142 / 67	994 / 858 / 66	1209 / 1052 / 54	670 / 837 / 32	822 / 1044 / 26	802 / 808 / 54	961 / 983 / 43	998 / 931 / 82	1212 / 1142 / 67	994 / 858 / 66	1209 / 1052 / 54																								
40	3	617 / 725 / 39	713 / 896 / 32	700 / 695 / 68	829 / 840 / 54	853 / 789 / 102	1058 / 992 / 85	878 / 752 / 84	1055 / 913 / 68	638 / 784 / 37	755 / 954 / 30	753 / 754 / 64	880 / 897 / 51	912 / 847 / 95	1115 / 1049 / 78	941 / 809 / 79	1161 / 1008 / 65	670 / 837 / 34	822 / 1044 / 28	802 / 808 / 60	961 / 983 / 49	998 / 931 / 92	1212 / 1142 / 75	994 / 858 / 73	1209 / 1052 / 60	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48	639 / 438 / 29	711 / 568 / 24	634 / 564 / 49	686 / 680 / 39	715 / 648 / 71	864 / 799 / 58	710 / 598 / 59	860 / 736 / 48																								
Wind Speed [mph]		170																180																190																200															
30	1	632 / 476 / 45	728 / 595 / 37	615 / 595 / 64	726 / 726 / 52	761 / 695 / 95	910 / 845 / 77	757 / 641 / 78	938 / 805 / 65	653 / 512 / 43	769 / 633 / 35	649 / 637 / 61	762 / 766 / 49	803 / 737 / 90	948 / 883 / 71	799 / 680 / 74	980 / 844 / 61	653 / 512 / 43	769 / 633 / 35	649 / 637 / 61	762 / 766 / 49	803 / 737 / 90	948 / 883 / 71	799 / 680 / 74	980 / 844 / 61	653 / 512 / 43	769 / 633 / 35	649 / 637 / 61	762 / 766 / 49	803 / 737 / 90	948 / 883 / 71	799 / 680 / 74	980 / 844 / 61	653 / 512 / 43	769 / 633 / 35	649 / 637 / 61	762 / 766 / 49	803 / 737 / 90	948 / 883 / 71	799 / 680 / 74	980 / 844 / 61																								
30	2	728 / 595 / 37	903 / 755 / 31	726 / 739 / 52	881 / 913 / 42	910 / 856 / 77	1075 / 1023 / 61	938 / 817 / 65	1119 / 985 / 52	769 / 633 / 35	944 / 793 / 29	762 / 780 / 49	913 / 949 / 39	948 / 895 / 71	1151 / 1098 / 58	980 / 856 / 61	1201 / 1059 / 50	769 / 633 / 35	944 / 793 / 29	762 / 780 / 49	913 / 949 / 39	948 / 895 / 71	1151 / 1098 / 58	980 / 856 / 61	1201 / 1059 / 50	769 / 633 / 35	944 / 793 / 29	762 / 780 / 49	913 / 949 / 39	948 / 895 / 71	1151 / 1098 / 58	980 / 856 / 61	1201 / 1059 / 50	769 / 633 / 35	944 / 793 / 29	762 / 780 / 49	913 / 949 / 39	948 / 895 / 71	1151 / 1098 / 58	980 / 856 / 61	1201 / 1059 / 50																								
30	3	701 / 881 / 27	849 / 1082 / 22	844 / 855 / 46	995 / 1022 / 36	1041 / 975 / 66	1242 / 1173 / 53	1079 / 934 / 57	1301 / 1134 / 46	755 / 952 / 26	906 / 1159 / 21	878 / 894 / 42	1065 / 1097 / 35	1071 / 1006 / 61	1321 / 1251 / 50	1115 / 967 / 52	1388 / 1212 / 44	755 / 952 / 26	906 / 1159 / 21	878 / 894 / 42	1065 / 1097 / 35	1071 / 1006 / 61	1321 / 1251 / 50	1115 / 967 / 52	1388 / 1212 / 44	755 / 952 / 26	906 / 1159 / 21	878 / 894 / 42	1065 / 1097 / 35	1071 / 1006 / 61	1321 / 1251 / 50	1115 / 967 / 52	1388 / 1212 / 44	755 / 952 / 26	906 / 1159 / 21	878 / 894 / 42	1065 / 1097 / 35	1071 / 1006 / 61	1321 / 1251 / 50	1115 / 967 / 52	1388 / 1212 / 44																								
35	1	660 / 476 / 49	728 / 595 / 40	640 / 595 / 71	726 / 726 / 57	761 / 695 / 109	910 / 845 / 88	757 / 641 / 88	938 / 805 / 74	680 / 512 / 47	769 / 633 / 38	659 / 637 / 67	762 / 766 / 54	803 / 737 / 103	948 / 883 / 82	799 / 680 / 83	980 / 844 / 69	680 / 512 / 47	769 / 633 / 38	659 / 637 / 67	762 / 766 / 54	803 / 737 / 103	948 / 883 / 82	799 / 680 / 83	980 / 844 / 69	680 / 512 / 47	769 / 633 / 38	659 / 637 / 67	762 / 766 / 54	803 / 737 / 103	948 / 883 / 82	799 / 680 / 83	980 / 844 / 69	680 / 512 / 47	769 / 633 / 38	659 / 637 / 67	762 / 766 / 54	803 / 737 / 103	948 / 883 / 82	799 / 680 / 83	980 / 844 / 69																								
35	2	728 / 595 / 40	903 / 755 / 34	726 / 739 / 57	881 / 913 / 47	910 / 856 / 88	1075 / 1023 / 70	938 / 817 / 74	1119 / 985 / 59	769 / 633 / 38	944 / 793 / 32	762 / 780 / 54	913 / 949 / 43	948 / 895 / 82	1151 / 1098 / 67	980 / 856 / 69	1201 / 1059 / 56	769 / 633 / 38	944 / 793 / 32	762 / 780 / 54	913 / 949 / 43	948 / 895 / 82	1151 / 1098 / 67	980 / 856 / 69	1201 / 1059 / 56	769 / 633 / 38	944 / 793 / 32	762 / 780 / 54	913 / 949 / 43	948 / 895 / 82	1151 / 1098 / 67	980 / 856 / 69	1201 / 1059 / 56	769 / 633 / 38	944 / 793 / 32	762 / 780 / 54	913 / 949 / 43	948 / 895 / 82	1151 / 1098 / 67	980 / 856 / 69	1201 / 1059 / 56																								
35	3	701 / 881 / 30	849 / 1082 / 24	844 / 855 / 50	995 / 1022 / 40	1041 / 975 / 76	1242 / 1173 / 61	1079 / 934 / 64	1301 / 1134 / 52	755 / 952 / 29	906 / 1159 / 23	878 / 894 / 47	1065 / 1097 / 38	1071 / 1006 / 70	1321 / 1251 / 58	1115 / 967 / 59	1388 / 1212 / 49	755 / 952 / 29	906 / 1159 / 23	878 / 894 / 47	1065 / 1097 / 38	1071 / 1006 / 70	1321 / 1251 / 58	1115 / 967 / 59	1388 / 1212 / 49	755 / 952 / 29	906 / 1159 / 23	878 / 894 / 47	1065 / 1097 / 38	1071 / 1006 / 70	1321 / 1251 / 58	1115 / 967 / 59	1388 / 1212 / 49	755 / 952 / 29	906 / 1159 / 23	878 / 894 / 47	1065 / 1097 / 38	1071 / 1006 / 70	1321 / 1251 / 58	1115 / 967 / 59	1388 / 1212 / 49																								
40	1	689 / 476 / 53	741 / 595 / 44	665 / 595 / 79	726 / 726 / 64	761 / 695 / 122	910 / 845 / 98	757 / 641 / 98	938 / 805 / 82	708 / 512 / 51	769 / 633 / 41	683 / 637 / 76	762 / 766 / 60																																																				

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		45	1	586 / 233 / 114	634 / 330 / 104	585 / 320 / 154	643 / 448 / 140	597 / 408 / 201	661 / 539 / 174	502 / 399 / 164	603 / 497 / 134	595 / 253 / 112	649 / 356 / 102	597 / 346 / 151	647 / 472 / 134	616 / 439 / 197	670 / 564 / 166	526 / 422 / 158	628 / 521 / 128	605 / 272 / 110	651 / 374 / 98	609 / 372 / 148	664 / 505 / 131	622 / 461 / 189	677 / 587 / 158	548 / 444 / 152
2	634 / 330 / 104		693 / 447 / 92	643 / 456 / 140	681 / 584 / 117	661 / 546 / 174	719 / 662 / 139	603 / 505 / 134	734 / 629 / 111	649 / 356 / 102	714 / 480 / 90	647 / 481 / 134	685 / 609 / 112	670 / 572 / 166	761 / 705 / 135	628 / 529 / 128	779 / 670 / 108	651 / 374 / 98	718 / 500 / 86	664 / 514 / 131	688 / 632 / 106	677 / 595 / 158	780 / 725 / 128	666 / 563 / 125	799 / 690 / 102	
3	620 / 576 / 88		643 / 711 / 72	679 / 544 / 126	723 / 679 / 103	698 / 628 / 151	845 / 779 / 124	690 / 579 / 116	841 / 718 / 96	621 / 602 / 84	643 / 734 / 68	685 / 570 / 120	728 / 704 / 98	718 / 652 / 143	864 / 799 / 116	733 / 618 / 113	888 / 761 / 93	621 / 625 / 80	660 / 777 / 65	688 / 593 / 115	729 / 724 / 92	759 / 692 / 139	907 / 842 / 112	754 / 638 / 108	935 / 803 / 90	
50	1		610 / 229 / 122	654 / 324 / 111	607 / 315 / 164	660 / 439 / 149	610 / 400 / 215	683 / 539 / 189	502 / 399 / 179	603 / 497 / 146	619 / 248 / 119	668 / 349 / 108	618 / 340 / 161	662 / 462 / 143	628 / 431 / 210	691 / 564 / 181	526 / 422 / 172	628 / 521 / 140	628 / 267 / 117	667 / 366 / 104	629 / 365 / 158	678 / 494 / 140	646 / 461 / 206	697 / 587 / 173	548 / 444 / 166	666 / 555 / 137
	2		654 / 324 / 111	706 / 437 / 97	660 / 447 / 149	706 / 584 / 128	683 / 546 / 189	720 / 662 / 152	603 / 505 / 146	734 / 629 / 120	668 / 349 / 108	725 / 469 / 95	662 / 471 / 143	710 / 609 / 122	691 / 572 / 181	761 / 705 / 147	628 / 529 / 140	779 / 670 / 117	667 / 366 / 104	745 / 500 / 93	678 / 503 / 140	711 / 632 / 116	697 / 595 / 173	780 / 725 / 139	666 / 563 / 137	799 / 690 / 111
	3		647 / 576 / 95	665 / 711 / 78	706 / 544 / 137	745 / 679 / 113	717 / 628 / 164	845 / 779 / 135	690 / 579 / 127	841 / 718 / 104	647 / 602 / 91	664 / 734 / 73	711 / 570 / 131	749 / 704 / 106	725 / 652 / 156	864 / 799 / 126	733 / 618 / 124	888 / 761 / 101	646 / 625 / 86	681 / 777 / 71	713 / 593 / 125	749 / 724 / 100	759 / 692 / 152	907 / 842 / 122	754 / 638 / 117	935 / 803 / 98
60	1		643 / 217 / 133	689 / 311 / 123	648 / 303 / 183	690 / 421 / 166	647 / 392 / 245	710 / 527 / 216	518 / 399 / 209	603 / 497 / 171	649 / 234 / 130	700 / 335 / 120	656 / 327 / 180	704 / 452 / 162	649 / 414 / 235	716 / 551 / 206	530 / 422 / 201	628 / 521 / 163	669 / 257 / 130	712 / 358 / 118	665 / 351 / 176	718 / 483 / 159	665 / 443 / 230	737 / 587 / 201	548 / 444 / 193	666 / 555 / 159
	2		689 / 311 / 123	744 / 427 / 110	690 / 429 / 166	757 / 584 / 148	710 / 534 / 216	755 / 662 / 177	603 / 505 / 171	734 / 629 / 140	700 / 335 / 120	762 / 458 / 107	704 / 461 / 162	758 / 609 / 141	716 / 559 / 206	781 / 705 / 172	628 / 529 / 163	779 / 670 / 137	712 / 358 / 118	779 / 488 / 105	718 / 492 / 159	757 / 632 / 134	737 / 595 / 201	783 / 725 / 162	666 / 563 / 159	799 / 690 / 129
	3		702 / 576 / 110	710 / 711 / 90	727 / 520 / 152	790 / 679 / 131	755 / 628 / 191	845 / 779 / 157	690 / 579 / 148	841 / 718 / 122	699 / 602 / 105	706 / 734 / 84	745 / 557 / 148	791 / 704 / 124	761 / 652 / 181	864 / 799 / 147	733 / 618 / 144	888 / 761 / 118	695 / 625 / 100	721 / 777 / 82	762 / 593 / 145	789 / 724 / 117	785 / 692 / 177	907 / 842 / 142	754 / 638 / 137	935 / 803 / 114
45	1	615 / 292 / 108	666 / 399 / 96	621 / 398 / 145	681 / 538 / 129	641 / 492 / 185	700 / 623 / 154	569 / 464 / 146	686 / 575 / 119	625 / 312 / 106	680 / 424 / 94	633 / 424 / 142	683 / 558 / 123	659 / 523 / 181	708 / 641 / 147	589 / 483 / 140	722 / 607 / 116	615 / 292 / 108	666 / 399 / 96	621 / 398 / 145	681 / 538 / 129	641 / 492 / 185	700 / 623 / 154	569 / 464 / 146	686 / 575 / 119	
	2	666 / 399 / 96	738 / 531 / 84	667 / 536 / 126	708 / 669 / 103	683 / 616 / 151	819 / 764 / 124	686 / 583 / 119	840 / 727 / 99	680 / 424 / 94	757 / 562 / 82	683 / 568 / 123	706 / 686 / 98	708 / 650 / 147	856 / 802 / 120	722 / 616 / 116	880 / 763 / 96	666 / 399 / 96	738 / 531 / 84	667 / 536 / 126	708 / 669 / 103	683 / 616 / 151	819 / 764 / 124	686 / 583 / 119	840 / 727 / 99	
	3	619 / 645 / 76	655 / 791 / 61	690 / 614 / 109	760 / 763 / 90	776 / 710 / 131	949 / 883 / 108	794 / 674 / 84	945 / 814 / 84	632 / 680 / 74	669 / 828 / 59	708 / 648 / 106	794 / 800 / 87	812 / 747 / 128	988 / 922 / 104	808 / 689 / 99	985 / 849 / 81	619 / 645 / 76	655 / 791 / 61	690 / 614 / 109	760 / 763 / 90	776 / 710 / 131	949 / 883 / 108	794 / 674 / 84	945 / 814 / 84	
	50	1	637 / 287 / 115	681 / 391 / 102	640 / 390 / 155	694 / 526 / 137	650 / 482 / 198	719 / 623 / 168	569 / 464 / 159	686 / 575 / 130	646 / 306 / 113	694 / 415 / 100	651 / 415 / 152	709 / 558 / 134	668 / 511 / 194	722 / 641 / 160	589 / 483 / 153	722 / 607 / 127	637 / 287 / 115	681 / 391 / 102	640 / 390 / 155	694 / 526 / 137	650 / 482 / 198	719 / 623 / 168	569 / 464 / 159	686 / 575 / 130
		2	681 / 391 / 102	764 / 531 / 91	694 / 536 / 137	730 / 669 / 113	701 / 616 / 164	819 / 764 / 135	686 / 583 / 130	840 / 727 / 108	694 / 415 / 100	763 / 548 / 86	709 / 568 / 134	727 / 686 / 106	722 / 650 / 160	856 / 802 / 131	722 / 616 / 127	880 / 763 / 104	681 / 391 / 102	764 / 531 / 91	694 / 536 / 137	730 / 669 / 113	701 / 616 / 164	819 / 764 / 135	686 / 583 / 130	840 / 727 / 108
		3	642 / 645 / 82	674 / 791 / 67	713 / 614 / 119	769 / 763 / 97	776 / 710 / 143	949 / 883 / 118	794 / 674 / 114	945 / 814 / 91	655 / 680 / 80	688 / 828 / 64	731 / 648 / 116	794 / 800 / 94	812 / 747 / 139	988 / 922 / 114	808 / 689 / 108	985 / 849 / 88	642 / 645 / 82	674 / 791 / 67	713 / 614 / 119	769 / 763 / 97	776 / 710 / 143	949 / 883 / 118	794 / 674 / 114	945 / 814 / 91
	60	1	676 / 276 / 128	723 / 382 / 115	674 / 375 / 173	731 / 515 / 155	681 / 472 / 225	758 / 623 / 196	569 / 464 / 186	686 / 575 / 152	683 / 294 / 125	735 / 406 / 112	683 / 399 / 169	745 / 545 / 152	697 / 500 / 221	759 / 641 / 186	589 / 483 / 178	722 / 607 / 148	676 / 276 / 128	723 / 382 / 115	674 / 375 / 173	731 / 515 / 155	681 / 472 / 225	758 / 623 / 196	569 / 464 / 186	686 / 575 / 152
		2	723 / 382 / 115	796 / 518 / 102	731 / 524 / 155	775 / 669 / 131	739 / 616 / 191	819 / 764 / 157	686 / 583 / 152	840 / 727 / 125	735 / 406 / 112	792 / 534 / 97	745 / 555 / 152	770 / 686 / 124	759 / 650 / 186	856 / 802 / 152	722 / 616 / 148	880 / 763 / 122	723 / 382 / 115	796 / 518 / 102	731 / 524 / 155	775 / 669 / 131	739 / 616 / 191	819 / 764 / 157	686 / 583 / 152	840 / 727 / 125
		3	689 / 645 / 95	712 / 791 / 77	760 / 614 / 138	808 / 763 / 113	786 / 710 / 167	949 / 883 / 137	794 / 674 / 133	945 / 814 / 106	701 / 680 / 92	725 / 828 / 74	777 / 648 / 134	826 / 800 / 110	812 / 747 / 162	988 / 922 / 133	808 / 689 / 125	985 / 849 / 103	689 / 645 / 95	712 / 791 / 77	760 / 614 / 138	808 / 763 / 113	786 / 710 / 167	949 / 883 / 137	794 / 674 / 133	945 / 814 / 106
45	1	635 / 332 / 104	695 / 449 / 92	645 / 450 / 140	682 / 576 / 117	663 / 541 / 174	742 / 675 / 143	606 / 500 / 134	737 / 622 / 111	625 / 312 / 106	680 / 424 / 94	633 / 424 / 142	683 / 558 / 123	659 / 523 / 181	708 / 641 / 147	589 / 483 / 140	722 / 607 / 116	635 / 332 / 104	695 / 449 / 92	645 / 450 / 140	682 / 576 / 117	663 / 541 / 174	742 / 675 / 143	606 / 500 / 134	737 / 622 / 111	
	2	695 / 449 / 92	757 / 577 / 78	682 / 586 / 117	723 / 720 / 95	722 / 665 / 139	892 / 837 / 116	737 / 631 / 111	888 / 773 / 90	680 / 424 / 94	757 / 562 / 82	683 / 568 / 123	706 / 686 / 98	708 / 650 / 147	856 / 802 / 120	722 / 616 / 116	880 / 763 / 96	695 / 449 / 92	757 / 577 / 78	682 / 586 / 117	723 / 720 / 95	722 / 665 / 139	892 / 837 / 116	737 / 631 / 111	888 / 773 / 90	
	3	645 / 714 / 72	689 / 863 / 57	706 / 664 / 101	827 / 836 / 84	848 / 782 / 124	1025 / 958 / 101	844 / 721 / 96	1021 / 883 / 78	632 / 680 / 74	669 / 828 / 59	708 / 648 / 106	794 / 800 / 87	812 / 747 / 128	988 / 922 / 104	808 / 689 / 99	985 / 849 / 81	645 / 714 / 72	689 / 863 / 57	706 / 664 / 101	827 / 836 / 84	848 / 782 / 124	1025 / 958 / 101	844 / 721 / 96	1021 / 883 / 78	
	50	1	655 / 325 / 111	707 / 439 / 97	661 / 441 / 149	708 / 576 / 128	685 / 541 / 189	742 / 675 / 156	606 / 500 / 146	737 / 622 / 120	646 / 306 / 113	694 / 415 / 100	651 / 415 / 152	709 / 558 / 134	668 / 511 / 194	722 / 641 / 160	589 / 483 / 153	722 / 607 / 127	655 / 325 / 111	707 / 439 / 97	661 / 441 / 149	708 / 576 / 128	685 / 541 / 189	742 / 675 / 156	606 / 500 / 146	737 / 622 / 120
		2	707 / 439 / 97	781 / 577 / 84	708 / 586 / 128	744 / 720 / 103	722 / 665 / 152	892 / 837 / 126	737 / 631 / 120	888 / 773 / 98	694 / 415 / 100	763 / 548 / 86	709 / 568 / 134	727 / 686 / 106	722 / 650 / 160	856 / 802 / 131	722 / 616 / 127	880 / 763 / 104	707 / 439 / 97	781 / 577 / 84	708 / 586 / 128	744 / 720 / 103	722 / 665 / 152	892 / 837 / 126	737 / 631 / 120	888 / 773 / 98
		3	667 / 714 / 78	701 / 863 / 62	727 / 664 / 109	827 / 836 / 91	848 / 782 / 135	1025 / 958 / 110	844 / 721 / 104	1021 / 883 / 85	655 / 680 / 80	688 / 828 / 64	731 / 648 / 116	794 / 800 / 94	812 / 747 / 139	988 / 922 / 114	808 / 689 / 108	985 / 849 / 88	667 / 714 / 78	701 / 863 / 62	727 / 664 / 109	827 / 836 / 91	848 / 782 / 135	1025 / 958 / 110	844 / 721 / 104	1021 / 883 / 85
	60	1	690 / 312 / 123	746 / 429 / 110	691 / 423 / 166	758 / 576 / 148	712 / 529 / 216	778 / 675 / 181	606 / 500 / 171	737 / 622 / 140	683 / 294 / 125	735 / 406 / 112	683 / 399 / 169	745 / 545 / 152	697 / 500 / 221	759 / 641 / 186	589 / 483 / 178	722 / 607 / 148	690 / 312 / 123	746 / 429 / 110	691 / 423 / 166	758 / 576 / 148	712 / 529 / 216	778 / 675 / 181	606 / 500 / 171	737 /

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge												
		45	1	645/351/102	709/474/90	643/466/134	697/606/115	680/570/170	753/687/135	635/526/131	770/652/108	665/390/98	737/522/86	665/516/129	707/647/106	697/612/158	811/746/128	676/565/122	807/687/99	684/428/94	762/568/82	687/564/123	711/680/98	715/648/147	864/799/120	710/598/113	860/736/93	709/474/90	774/606/76	680/602/112	740/752/92	753/697/135	894/841/108	770/661/108	922/804/87	737/522/86	807/660/72	707/659/106	768/787/84	811/756/128	950/898/101	807/698/99	983/860/81	762/568/82	854/710/68	711/693/98	841/867/81	864/810/120	1037/984/97
50	1	664/344/108	720/463/95	672/466/146	722/606/125	702/570/185	753/687/147	635/526/143	770/652/117	681/382/104	745/509/91	693/516/140	730/647/116	717/612/173	811/746/139	676/565/133	807/687/108	698/419/100	768/554/86	713/564/134	732/680/106	727/648/160	864/799/131	710/598/124	860/736/101	720/463/95	798/606/82	704/602/122	760/752/100	753/697/147	894/841/118	770/661/117	922/804/95	745/509/91	829/660/78	730/659/116	768/787/91	811/756/139	950/898/110	807/698/108	983/860/88	768/554/86	857/710/73	732/693/106	841/867/88	864/810/131	1037/984/105	860/747/101	1075/944/85
60	1	697/330/120	757/452/107	700/447/162	772/606/145	727/557/211	774/687/172	635/526/167	770/652/137	710/366/115	778/497/102	716/493/155	776/647/134	757/612/201	811/746/162	676/565/156	807/687/125	738/410/112	797/540/97	749/551/152	775/680/124	764/648/186	864/799/152	710/598/144	860/736/118	697/330/120	757/452/107	700/447/162	772/606/145	727/557/211	774/687/172	635/526/167	770/652/137	710/366/115	778/497/102	716/493/155	776/647/134	757/612/201	811/746/162	676/565/156	807/687/125	738/410/112	797/540/97	749/551/152	775/680/124	764/648/186	864/799/152	710/598/144	860/736/118
45	1	702/465/90	765/595/76	690/595/115	731/726/92	761/695/139	910/845/112	757/641/108	938/805/90	718/500/86	784/633/72	706/637/109	762/766/87	803/737/131	948/883/104	799/680/102	980/844/84	784/633/72	944/793/59	762/780/87	913/949/104	948/895/85	1151/1098/84	1201/1059/69	702/465/90	765/595/76	690/595/115	731/726/92	761/695/139	910/845/112	757/641/108	938/805/90	718/500/86	784/633/72	706/637/109	762/766/87	803/737/131	948/883/104	799/680/102	980/844/84	784/633/72	944/793/59	762/780/87	913/949/104	948/895/85	1151/1098/84	1201/1059/69		
50	1	713/455/95	789/595/82	714/595/125	751/726/100	761/695/152	910/845/122	757/641/117	938/805/98	745/500/93	806/633/78	730/637/119	765/766/94	803/737/143	948/883/114	799/680/111	980/844/91	745/500/93	806/633/78	730/637/119	765/766/94	803/737/143	948/883/114	799/680/111	980/844/91	713/455/95	789/595/82	714/595/125	751/726/100	761/695/152	910/845/122	757/641/117	938/805/98	745/500/93	806/633/78	730/637/119	765/766/94	803/737/143	948/883/114	799/680/111	980/844/91								
60	1	750/444/107	836/595/95	764/595/145	790/726/117	787/695/177	910/845/142	757/641/137	938/805/114	779/488/105	851/633/90	777/637/138	802/766/110	806/737/167	948/883/133	799/680/129	980/844/106	779/488/105	851/633/90	777/637/138	802/766/110	806/737/167	948/883/133	799/680/129	980/844/106	750/444/107	836/595/95	764/595/145	790/726/117	787/695/177	910/845/142	757/641/137	938/805/114	779/488/105	851/633/90	777/637/138	802/766/110	806/737/167	948/883/133	799/680/129	980/844/106								
45	1	751/546/84	829/687/70	720/675/103	819/828/84	840/774/124	1015/949/101	836/714/96	1012/874/78	764/578/80	862/718/65	732/709/98	845/857/78	870/806/116	1036/972/93	896/767/93	1076/932/75	764/578/80	862/718/65	732/709/98	845/857/78	870/806/116	1036/972/93	896/767/93	1076/932/75	751/546/84	829/687/70	720/675/103	819/828/84	840/774/124	1015/949/101	836/714/96	1012/874/78	764/578/80	862/718/65	732/709/98	845/857/78	870/806/116	1036/972/93	896/767/93	1076/932/75								
50	1	758/533/89	845/687/75	743/675/113	819/828/91	840/774/135	1015/949/110	836/714/104	1012/874/85	788/578/86	862/718/71	753/709/106	845/857/85	870/806/126	1036/972/101	896/767/101	1076/932/82	788/578/86	862/718/71	753/709/106	845/857/85	870/806/126	1036/972/101	896/767/101	1076/932/82	758/533/89	845/687/75	743/675/113	819/828/91	840/774/135	1015/949/110	836/714/104	1012/874/85	788/578/86	862/718/71	753/709/106	845/857/85	870/806/126	1036/972/101	896/767/101	1076/932/82								
60	1	788/520/100	888/687/87	787/675/131	838/828/106	840/774/157	1015/949/128	836/714/122	1012/874/99	817/563/97	897/718/82	795/709/124	845/857/99	870/806/147	1036/972/118	896/767/118	1076/932/95	817/563/97	897/718/82	795/709/124	845/857/99	870/806/147	1036/972/118	896/767/118	1076/932/95	788/520/100	888/687/87	787/675/131	838/828/106	840/774/157	1015/949/128	836/714/122	1012/874/99	817/563/97	897/718/82	795/709/124	845/857/99	870/806/147	1036/972/118	896/767/118	1076/932/95								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								74in x 41.2in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		70	1	724 / 316 / 130	791 / 441 / 119	739 / 437 / 181	801 / 591 / 161	751 / 544 / 237	808 / 687 / 197	635 / 526 / 191	770 / 652 / 156	750 / 358 / 127	808 / 485 / 113	752 / 482 / 173	822 / 647 / 153	777 / 597 / 225	838 / 746 / 186	676 / 565 / 178	807 / 687 / 143	758 / 391 / 122	823 / 525 / 107	764 / 525 / 165	817 / 680 / 141	801 / 648 / 214	864 / 799 / 175	710 / 598 / 165	860 / 736 / 134	750 / 358 / 127	808 / 485 / 113	752 / 482 / 173	822 / 647 / 153	777 / 597 / 225	838 / 746 / 186	676 / 565 / 178	807 / 687 / 143	758 / 391 / 122	823 / 525 / 107	764 / 525 / 165	817 / 680 / 141	801 / 648 / 214	864 / 799 / 175	710 / 598 / 165	860 / 736 / 134						

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95										100										105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
100	1	799 / 188 / 177	816 / 272 / 165	778 / 262 / 247	820 / 376 / 230	757 / 353 / 354	801 / 479 / 315	585 / 385 / 315	641 / 497 / 268	784 / 202 / 173	820 / 292 / 161	779 / 282 / 241	826 / 403 / 225	766 / 379 / 346	816 / 512 / 307	605 / 414 / 309	651 / 521 / 256	801 / 222 / 173	843 / 319 / 161	798 / 309 / 241	831 / 430 / 219	776 / 405 / 339	831 / 544 / 299	613 / 435 / 298	675 / 555 / 250						
	2	816 / 272 / 165	851 / 378 / 149	820 / 383 / 230	868 / 528 / 208	801 / 485 / 315	870 / 644 / 276	641 / 505 / 268	734 / 629 / 220	820 / 292 / 161	883 / 414 / 149	826 / 411 / 225	880 / 564 / 203	816 / 519 / 307	891 / 685 / 268	651 / 529 / 256	779 / 670 / 214	843 / 319 / 161	892 / 441 / 145	831 / 438 / 219	891 / 599 / 198	831 / 552 / 299	911 / 725 / 260	675 / 563 / 250	799 / 690 / 202						
	3	857 / 536 / 157	888 / 711 / 137	848 / 472 / 214	917 / 642 / 192	860 / 595 / 291	950 / 779 / 252	690 / 579 / 232	841 / 718 / 191	864 / 573 / 153	874 / 734 / 130	858 / 504 / 208	933 / 683 / 187	880 / 635 / 284	944 / 799 / 236	733 / 618 / 226	888 / 761 / 185	871 / 609 / 149	884 / 777 / 126	867 / 535 / 203	948 / 724 / 181	899 / 673 / 276	967 / 842 / 229	754 / 638 / 214	935 / 803 / 179						
Wind Speed [mph]		110										115																			
100	1	800 / 237 / 169	847 / 340 / 157	799 / 329 / 236	837 / 456 / 214	785 / 431 / 331	845 / 576 / 291	632 / 464 / 292	686 / 575 / 238	818 / 258 / 169	850 / 360 / 153	800 / 349 / 230	864 / 495 / 214	794 / 456 / 323	859 / 608 / 284	638 / 483 / 280	722 / 607 / 232	800 / 237 / 169	847 / 340 / 157	799 / 329 / 236	837 / 456 / 214	785 / 431 / 331	845 / 576 / 291	632 / 464 / 292	686 / 575 / 238						
	2	847 / 340 / 157	900 / 467 / 141	837 / 464 / 214	902 / 633 / 192	845 / 584 / 291	930 / 764 / 252	686 / 583 / 238	840 / 727 / 197	850 / 360 / 153	908 / 492 / 137	864 / 504 / 214	912 / 666 / 187	859 / 616 / 284	948 / 802 / 244	722 / 616 / 232	880 / 763 / 191	847 / 340 / 157	900 / 467 / 141	837 / 464 / 214	902 / 633 / 192	845 / 584 / 291	930 / 764 / 252	686 / 583 / 238	840 / 727 / 197						
	3	878 / 645 / 145	865 / 791 / 118	876 / 567 / 198	963 / 763 / 176	918 / 710 / 268	988 / 883 / 221	794 / 674 / 208	945 / 814 / 167	884 / 680 / 141	872 / 828 / 114	910 / 614 / 198	976 / 800 / 170	936 / 747 / 260	1008 / 922 / 213	808 / 689 / 197	985 / 849 / 161	878 / 645 / 145	865 / 791 / 118	876 / 567 / 198	963 / 763 / 176	918 / 710 / 268	988 / 883 / 221	794 / 674 / 208	945 / 814 / 167						
Wind Speed [mph]		120										130																			
100	1	817 / 273 / 165	853 / 379 / 149	821 / 378 / 230	870 / 521 / 208	803 / 481 / 315	872 / 638 / 276	643 / 500 / 268	737 / 622 / 220	818 / 258 / 169	850 / 360 / 153	800 / 349 / 230	864 / 495 / 214	794 / 456 / 323	859 / 608 / 284	638 / 483 / 280	722 / 607 / 232	817 / 273 / 165	853 / 379 / 149	821 / 378 / 230	870 / 521 / 208	803 / 481 / 315	872 / 638 / 276	643 / 500 / 268	737 / 622 / 220						
	2	853 / 379 / 149	915 / 517 / 133	870 / 531 / 208	949 / 720 / 187	872 / 647 / 276	965 / 837 / 236	737 / 631 / 220	888 / 773 / 179	850 / 360 / 153	908 / 492 / 137	864 / 504 / 214	912 / 666 / 187	859 / 616 / 284	948 / 802 / 244	722 / 616 / 232	880 / 763 / 191	853 / 379 / 149	915 / 517 / 133	870 / 531 / 208	949 / 720 / 187	872 / 647 / 276	965 / 837 / 236	737 / 631 / 220	888 / 773 / 179						
	3	890 / 714 / 137	879 / 863 / 110	919 / 645 / 192	988 / 836 / 165	952 / 782 / 252	1025 / 958 / 205	844 / 721 / 191	1021 / 883 / 155	884 / 680 / 141	872 / 828 / 114	910 / 614 / 198	976 / 800 / 170	936 / 747 / 260	1008 / 922 / 213	808 / 689 / 197	985 / 849 / 161	890 / 714 / 137	879 / 863 / 110	919 / 645 / 192	988 / 836 / 165	952 / 782 / 252	1025 / 958 / 205	844 / 721 / 191	1021 / 883 / 155						

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	816 / 288 / 161	878 / 409 / 149	822 / 398 / 225	875 / 547 / 203	811 / 505 / 307	884 / 668 / 268	661 / 526 / 262	770 / 652 / 214	834 / 325 / 157	883 / 447 / 141	845 / 448 / 219	909 / 613 / 198	849 / 568 / 299	935 / 746 / 260	679 / 565 / 244	807 / 687 / 197	853 / 363 / 153	912 / 497 / 137	846 / 487 / 208	917 / 661 / 187	864 / 614 / 284	955 / 799 / 244	710 / 598 / 226	860 / 736 / 185
	2	878 / 409 / 149	949 / 557 / 133	875 / 557 / 203	959 / 752 / 181	884 / 677 / 307	947 / 841 / 268	770 / 661 / 221	922 / 804 / 173	883 / 447 / 141	962 / 604 / 126	909 / 624 / 198	944 / 787 / 165	935 / 756 / 260	970 / 898 / 205	807 / 698 / 197	983 / 860 / 161	912 / 497 / 137	1002 / 667 / 122	917 / 673 / 187	987 / 867 / 159	955 / 810 / 244	1037 / 984 / 197	860 / 747 / 185	1075 / 944 / 155
	3	869 / 725 / 130	884 / 896 / 106	927 / 675 / 187	965 / 840 / 154	937 / 789 / 236	1058 / 992 / 197	878 / 752 / 185	1055 / 913 / 149	875 / 784 / 122	889 / 954 / 98	970 / 754 / 181	979 / 897 / 143	960 / 847 / 221	1115 / 1049 / 181	941 / 809 / 173	1161 / 1008 / 143	877 / 837 / 114	927 / 1044 / 94	982 / 808 / 170	1027 / 983 / 137	1015 / 931 / 213	1212 / 1142 / 173	994 / 858 / 161	1209 / 1052 / 131
Wind Speed [mph]		170								180															
100	1	872 / 402 / 149	941 / 547 / 133	868 / 537 / 203	950 / 726 / 181	901 / 675 / 276	969 / 845 / 229	757 / 641 / 214	938 / 805 / 179	892 / 441 / 145	970 / 597 / 130	891 / 588 / 198	952 / 766 / 170	911 / 715 / 260	978 / 883 / 213	799 / 680 / 202	980 / 844 / 167								
	2	941 / 547 / 133	1043 / 731 / 118	950 / 739 / 181	992 / 913 / 148	969 / 856 / 229	1075 / 1023 / 181	938 / 817 / 179	1119 / 985 / 143	970 / 597 / 130	1083 / 793 / 114	952 / 780 / 170	991 / 949 / 137	978 / 895 / 213	1151 / 1098 / 173	980 / 856 / 167	1201 / 1059 / 137								
	3	875 / 881 / 106	921 / 1082 / 87	989 / 855 / 159	1029 / 1022 / 126	1041 / 975 / 197	1242 / 1173 / 158	1079 / 934 / 155	1301 / 1134 / 125	902 / 952 / 102	951 / 1159 / 83	990 / 894 / 148	1069 / 1097 / 121	1071 / 1006 / 181	1321 / 1251 / 150	1115 / 967 / 143	1388 / 1212 / 119								
Wind Speed [mph]		190								200															
100	1	911 / 480 / 141	999 / 647 / 126	914 / 639 / 192	983 / 828 / 165	946 / 774 / 252	1018 / 949 / 205	836 / 714 / 191	1012 / 874 / 155	930 / 518 / 137	1027 / 696 / 122	937 / 689 / 187	977 / 857 / 154	949 / 806 / 236	1036 / 972 / 189	896 / 767 / 185	1076 / 932 / 149								
	2	999 / 647 / 126	1082 / 824 / 106	950 / 815 / 159	1025 / 1016 / 132	1018 / 962 / 205	1223 / 1169 / 166	1012 / 887 / 155	1278 / 1129 / 131	1027 / 696 / 122	1116 / 881 / 102	977 / 873 / 154	1057 / 1080 / 126	1036 / 985 / 189	1289 / 1235 / 158	1076 / 946 / 149	1286 / 1138 / 119								
	3	891 / 981 / 94	978 / 1230 / 79	1024 / 960 / 143	1131 / 1168 / 115	1140 / 1073 / 173	1393 / 1321 / 142	1189 / 1033 / 137	1468 / 1283 / 113	912 / 1043 / 90	1009 / 1296 / 75	1014 / 983 / 132	1192 / 1234 / 110	1204 / 1136 / 166	1457 / 1383 / 134	1259 / 1096 / 131	1540 / 1348 / 107								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Load: Up / Down / Side , lbs																																																																																																																																																																																																																																																																																																																																																																																					
Wind Speed [mph]		95																100																105																																																																																																																																																																																																																																																																																																																																																																					
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																																																																																																																																																																																																																																																																																																																																																									
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																																																																																																																																																																																																																																																																																																																																																							
		0	1	334 / 211 / 45	420 / 296 / 40	357 / 290 / 50	451 / 400 / 44	438 / 356 / 53	525 / 451 / 44	430 / 330 / 58	529 / 425 / 49	350 / 227 / 44	441 / 316 / 39	374 / 311 / 48	465 / 418 / 42	460 / 379 / 52	549 / 475 / 42	452 / 351 / 56	543 / 440 / 46	365 / 243 / 43	460 / 335 / 38	391 / 331 / 47	477 / 434 / 40	473 / 394 / 49	571 / 499 / 41	474 / 371 / 54	565 / 461 / 44	5	1	334 / 211 / 45	420 / 296 / 40	357 / 290 / 58	451 / 400 / 51	438 / 356 / 66	525 / 451 / 55	430 / 330 / 67	529 / 425 / 56	350 / 227 / 44	441 / 316 / 39	374 / 311 / 56	465 / 418 / 49	460 / 379 / 64	549 / 475 / 53	452 / 351 / 65	543 / 440 / 53	365 / 243 / 43	460 / 335 / 38	391 / 331 / 55	477 / 434 / 46	473 / 394 / 61	571 / 499 / 50	474 / 371 / 62	565 / 461 / 51	10	1	389 / 205 / 52	449 / 296 / 48	401 / 286 / 74	461 / 400 / 66	438 / 356 / 86	525 / 451 / 71	430 / 330 / 81	529 / 425 / 68	403 / 224 / 51	460 / 316 / 46	416 / 311 / 73	466 / 418 / 63	460 / 379 / 83	549 / 475 / 68	452 / 351 / 78	543 / 440 / 64	416 / 243 / 51	470 / 335 / 45	424 / 331 / 70	477 / 434 / 60	473 / 394 / 79	571 / 499 / 66	474 / 371 / 76	565 / 461 / 62	2	449 / 296 / 48	511 / 387 / 40	454 / 400 / 65	516 / 493 / 52	525 / 457 / 71	637 / 575 / 59	529 / 431 / 68	631 / 532 / 55	460 / 316 / 46	534 / 409 / 39	466 / 426 / 63	538 / 519 / 50	549 / 482 / 68	661 / 601 / 56	543 / 446 / 64	656 / 555 / 53	470 / 335 / 45	556 / 430 / 37	477 / 442 / 60	558 / 543 / 48	571 / 506 / 66	682 / 624 / 53	565 / 468 / 62	695 / 591 / 52	3	425 / 485 / 37	507 / 606 / 31	501 / 463 / 57	593 / 573 / 46	609 / 538 / 63	722 / 656 / 51	603 / 497 / 59	737 / 621 / 49	443 / 511 / 36	524 / 631 / 29	523 / 489 / 55	615 / 599 / 44	634 / 564 / 60	766 / 699 / 49	628 / 520 / 57	761 / 644 / 46	459 / 535 / 34	539 / 654 / 28	533 / 503 / 51	635 / 622 / 42	656 / 587 / 57	785 / 720 / 47	651 / 542 / 54	804 / 683 / 45	0	1	386 / 262 / 42	479 / 354 / 36	414 / 357 / 46	495 / 456 / 39	492 / 415 / 47	591 / 520 / 39	494 / 391 / 53	598 / 491 / 43	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38	504 / 402 / 50	617 / 509 / 42	5	1	386 / 262 / 42	479 / 354 / 36	414 / 357 / 54	495 / 456 / 45	492 / 415 / 59	591 / 520 / 48	494 / 391 / 60	598 / 491 / 50	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43	510 / 434 / 57	623 / 552 / 47	504 / 402 / 57	617 / 509 / 48	10	1	429 / 262 / 50	480 / 354 / 43	439 / 357 / 69	495 / 456 / 58	492 / 415 / 76	591 / 520 / 63	494 / 391 / 73	598 / 491 / 61	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56	510 / 434 / 74	623 / 552 / 62	504 / 402 / 69	617 / 509 / 58	2	480 / 354 / 43	576 / 450 / 36	495 / 465 / 58	576 / 565 / 46	591 / 527 / 63	719 / 661 / 52	598 / 498 / 61	715 / 610 / 49	497 / 372 / 42	594 / 468 / 34	503 / 477 / 55	606 / 598 / 45	609 / 547 / 60	735 / 678 / 49	617 / 517 / 58	751 / 644 / 48	3	473 / 557 / 33	567 / 691 / 27	551 / 525 / 49	669 / 659 / 41	676 / 608 / 55	825 / 759 / 45	671 / 561 / 52	821 / 700 / 43	486 / 576 / 32	577 / 707 / 26	580 / 557 / 48	683 / 677 / 39	711 / 643 / 53	837 / 772 / 43	706 / 593 / 50	860 / 735 / 41	0	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 44	529 / 497 / 36	527 / 453 / 44	639 / 570 / 37	531 / 427 / 49	634 / 526 / 40	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38	504 / 402 / 50	617 / 509 / 42	5	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 51	529 / 497 / 41	527 / 453 / 55	639 / 570 / 45	531 / 427 / 56	634 / 526 / 46	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43	510 / 434 / 57	623 / 552 / 47	504 / 402 / 57	617 / 509 / 48	10	1	450 / 297 / 48	513 / 388 / 40	463 / 401 / 66	529 / 497 / 54	527 / 453 / 71	639 / 570 / 59	531 / 427 / 68	634 / 526 / 55	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56	510 / 434 / 74	623 / 552 / 62	504 / 402 / 69	617 / 509 / 58	2	513 / 388 / 40	624 / 496 / 34	518 / 496 / 41	620 / 616 / 33	639 / 578 / 45	769 / 712 / 37	634 / 534 / 46	764 / 657 / 37	497 / 372 / 35	594 / 468 / 29	503 / 477 / 42	606 / 598 / 35	609 / 547 / 46	735 / 678 / 38	617 / 517 / 48	751 / 644 / 39	3	509 / 608 / 26	602 / 742 / 21	596 / 576 / 31	714 / 711 / 25	725 / 659 / 32	872 / 807 / 26	740 / 624 / 35	897 / 768 / 29	486 / 576 / 26	577 / 707 / 22	580 / 557 / 37	683 / 677 / 30	711 / 643 / 41	837 / 772 / 33	706 / 593 / 41	860 / 735 / 34	0	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 44	529 / 497 / 36	527 / 453 / 44	639 / 570 / 37	531 / 427 / 49	634 / 526 / 40	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38	504 / 402 / 50	617 / 509 / 42	5	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 51	529 / 497 / 41	527 / 453 / 55	639 / 570 / 45	531 / 427 / 56	634 / 526 / 46	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43	510 / 434 / 57	623 / 552 / 47	504 / 402 / 57	617 / 509 / 48	10	1	450 / 297 / 48	513 / 388 / 40	463 / 401 / 66	529 / 497 / 54	527 / 453 / 71	639 / 570 / 59	531 / 427 / 68	634 / 526 / 55	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56	510 / 434 / 74	623 / 552 / 62	504 / 402 / 69	617 / 509 / 58	2	513 / 388 / 40	624 / 496 / 34	518 / 496 / 41	620 / 616 / 33	639 / 578 / 45	769 / 712 / 37	634 / 534 / 46	764 / 657 / 37	497 / 372 / 35	594 / 468 / 29	503 / 477 / 42	606 / 598 / 35	609 / 547 / 46	735 / 678 / 38	617 / 517 / 48	751 / 644 / 39	3	509 / 608 / 26	602 / 742 / 21	596 / 576 / 31	714 / 711 / 25	725 / 659 / 32	872 / 807 / 26	740 / 624 / 35	897 / 768 / 29	486 / 576 / 26	577 / 707 / 22	580 / 557 / 37	683 / 677 / 30	711 / 643 / 41	837 / 772 / 33
0	1		386 / 262 / 42	479 / 354 / 36	414 / 357 / 46	495 / 456 / 39	492 / 415 / 47	591 / 520 / 39	494 / 391 / 53	598 / 491 / 43	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38	504 / 402 / 50	617 / 509 / 42	5	1	386 / 262 / 42	479 / 354 / 36	414 / 357 / 54	495 / 456 / 45	492 / 415 / 59	591 / 520 / 48	494 / 391 / 60		598 / 491 / 50	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43	510 / 434 / 57	623 / 552 / 47	504 / 402 / 57	617 / 509 / 48	10	1	429 / 262 / 50	480 / 354 / 43	439 / 357 / 69	495 / 456 / 58	492 / 415 / 76	591 / 520 / 63	494 / 391 / 73	598 / 491 / 61	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56	510 / 434 / 74	623 / 552 / 62		504 / 402 / 69	617 / 509 / 58	2	480 / 354 / 43	576 / 450 / 36	495 / 465 / 58	576 / 565 / 46	591 / 527 / 63	719 / 661 / 52	598 / 498 / 61	715 / 610 / 49	497 / 372 / 42	594 / 468 / 34	503 / 477 / 55	606 / 598 / 45	609 / 547 / 60	735 / 678 / 49	617 / 517 / 58	751 / 644 / 48	3	473 / 557 / 33	567 / 691 / 27	551 / 525 / 49	669 / 659 / 41	676 / 608 / 55	825 / 759 / 45	671 / 561 / 52	821 / 700 / 43	486 / 576 / 32	577 / 707 / 26	580 / 557 / 48	683 / 677 / 39	711 / 643 / 53	837 / 772 / 43	706 / 593 / 50	860 / 735 / 41	0	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 44	529 / 497 / 36	527 / 453 / 44	639 / 570 / 37	531 / 427 / 49	634 / 526 / 40	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38	504 / 402 / 50	617 / 509 / 42	5	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 51	529 / 497 / 41	527 / 453 / 55	639 / 570 / 45	531 / 427 / 56	634 / 526 / 46	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43	510 / 434 / 57	623 / 552 / 47	504 / 402 / 57	617 / 509 / 48	10	1	450 / 297 / 48		513 / 388 / 40	463 / 401 / 66	529 / 497 / 54	527 / 453 / 71	639 / 570 / 59	531 / 427 / 68	634 / 526 / 55	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56	510 / 434 / 74	623 / 552 / 62	504 / 402 / 69	617 / 509 / 58	2	513 / 388 / 40		624 / 496 / 34	518 / 496 / 41	620 / 616 / 33	639 / 578 / 45	769 / 712 / 37	634 / 534 / 46	764 / 657 / 37	497 / 372 / 35	594 / 468 / 29	503 / 477 / 42	606 / 598 / 35	609 / 547 / 46	735 / 678 / 38	617 / 517 / 48	751 / 644 / 39	3	509 / 608 / 26		602 / 742 / 21	596 / 576 / 31	714 / 711 / 25	725 / 659 / 32	872 / 807 / 26	740 / 624 / 35	897 / 768 / 29	486 / 576 / 26	577 / 707 / 22	580 / 557 / 37	683 / 677 / 30	711 / 643 / 41	837 / 772 / 33	706 / 593 / 41	860 / 735 / 34	0	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 44	529 / 497 / 36	527 / 453 / 44	639 / 570 / 37	531 / 427 / 49	634 / 526 / 40	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38	504 / 402 / 50	617 / 509 / 42	5	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 51	529 / 497 / 41	527 / 453 / 55	639 / 570 / 45	531 / 427 / 56	634 / 526 / 46	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43	510 / 434 / 57	623 / 552 / 47	504 / 402 / 57	617 / 509 / 48		10	1	450 / 297 / 48	513 / 388 / 40	463 / 401 / 66	529 / 497 / 54	527 / 453 / 71	639 / 570 / 59	531 / 427 / 68	634 / 526 / 55	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56	510 / 434 / 74	623 / 552 / 62	504 / 402 / 69		617 / 509 / 58	2	513 / 388 / 40	624 / 496 / 34	518 / 496 / 41	620 / 616 / 33	639 / 578 / 45	769 / 712 / 37	634 / 534 / 46	764 / 657 / 37	497 / 372 / 35	594 / 468 / 29	503 / 477 / 42	606 / 598 / 35	609 / 547 / 46	735 / 678 / 38	617 / 517 / 48		751 / 644 / 39	3	509 / 608 / 26	602 / 742 / 21	596 / 576 / 31	714 / 711 / 25	725 / 659 / 32	872 / 807 / 26	740 / 624 / 35	897 / 768 / 29	486 / 576 / 26	577 / 707 / 22	580 / 557 / 37	683 / 677 / 30	711 / 643 / 41	837 / 772 / 33	706 / 593 / 41	860 / 735 / 34																																																																																																																							
	0		1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 44	529 / 497 / 36	527 / 453 / 44	639 / 570 / 37	531 / 427 / 49	634 / 526 / 40	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38	504 / 402 / 50		617 / 509 / 42	5	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 51	529 / 497 / 41	527 / 453 / 55		639 / 570 / 45	531 / 427 / 56	634 / 526 / 46	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43	510 / 434 / 57	623 / 552 / 47		504 / 402 / 57	617 / 509 / 48	10	1	450 / 297 / 48	513 / 388 / 40	463 / 401 / 66	529 / 497 / 54	527 / 453 / 71	639 / 570 / 59	531 / 427 / 68	634 / 526 / 55	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67		513 / 477 / 56	510 / 434 / 74	623 / 552 / 62	504 / 402 / 69	617 / 509 / 58	2	513 / 388 / 40	624 / 496 / 34	518 / 496 / 41	620 / 616 / 33	639 / 578 / 45	769 / 712 / 37	634 / 534 / 46	764 / 657 / 37	497 / 372 / 35	594 / 468 / 29	503 / 477 / 42	606 / 598 / 35	609 / 547 / 46	735 / 678 / 38	617 / 517 / 48	751 / 644 / 39	3	509 / 608 / 26	602 / 742 / 21	596 / 576 / 31	714 / 711 / 25	725 / 659 / 32	872 / 807 / 26	740 / 624 / 35	897 / 768 / 29	486 / 576 / 26	577 / 707 / 22	580 / 557 / 37	683 / 677 / 30	711 / 643 / 41		837 / 772 / 33	706 / 593 / 41	860 / 735 / 34	0	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 44	529 / 497 / 36	527 / 453 / 44	639 / 570 / 37	531 / 427 / 49	634 / 526 / 40	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37		510 / 434 / 46	623 / 552 / 38	504 / 402 / 50	617 / 509 / 42	5	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 51	529 / 497 / 41	527 / 453 / 55	639 / 570 / 45	531 / 427 / 56	634 / 526 / 46	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52		513 / 477 / 43	510 / 434 / 57		623 / 552 / 47	504 / 402 / 57	617 / 509 / 48	10	1	450 / 297 / 48	513 / 388 / 40	463 / 401 / 66	529 / 497 / 54	527 / 453 / 71	639 / 570 / 59	531 / 427 / 68	634 / 526 / 55	436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56		510 / 434 / 74	623 / 552 / 62	504 / 402 / 69	617 / 509 / 58	2	513 / 388 / 40	624 / 496 / 34	518 / 496 / 41	620 / 616 / 33	639 / 578 / 45	769 / 712 / 37	634 / 534 / 46	764 / 657 / 37	497 / 372 / 35	594 / 468 / 29	503 / 477 / 42	606 / 598 / 35		609 / 547 / 46	735 / 678 / 38	617 / 517 / 48	751 / 644 / 39	3	509 / 608 / 26	602 / 742 / 21	596 / 576 / 31	714 / 711 / 25	725 / 659 / 32	872 / 807 / 26	740 / 624 / 35	897 / 768 / 29	486 / 576 / 26	577 / 707 / 22		580 / 557 / 37	683 / 677 / 30	711 / 643 / 41	837 / 772 / 33	706 / 593 / 41	860 / 735 / 34																																																																																																																																																																																																											
			0	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 44	529 / 497 / 36	527 / 453 / 44	639 / 570 / 37	531 / 427 / 49	634 / 526 / 40	401 / 278 / 41	497 / 372 / 35	430 / 376 / 45	513 / 477 / 37	510 / 434 / 46	623 / 552 / 38		504 / 402 / 50		617 / 509 / 42	5	1	422 / 297 / 40	513 / 388 / 34	453 / 401 / 51		529 / 497 / 41	527 / 453 / 55	639 / 570 / 45	531 / 427 / 56	634 / 526 / 46	401 / 278 / 41	497 / 372 / 35	430 / 376 / 52	513 / 477 / 43		510 / 434 / 57	623 / 552 / 47		504 / 402 / 57	617 / 509 / 48	10	1	450 / 297 / 48	513 / 388 / 40	463 / 401 / 66	529 / 497 / 54	527 / 453 / 71	639 / 570 / 59	531 / 427 / 68	634 / 526 / 55		436 / 278 / 49	497 / 372 / 42	448 / 376 / 67	513 / 477 / 56	510 / 434 / 74	623 / 552 / 62	504 / 402 / 69	617 / 509 / 58	2	513 / 388 / 40	624 / 496 / 34	518 / 496 / 41	620 / 616 / 33	639 / 578 / 45	769 / 712 / 37	634 / 534 / 46	764 / 657 / 37	497 / 372 / 35	594 / 468 / 29	503 / 477 / 42	606 / 598 / 35	609 / 547 / 46	735 / 678 / 38	617 / 517 / 48	751 / 644 / 39	3	509 / 608 / 26	602 / 742 / 21	596 / 576 / 31	714 / 711 / 25	725 / 659 / 32	872 / 807 / 26	740 / 624 / 35	897 / 768 / 29	486 / 576 / 26	577 / 707 / 22		580 / 557 / 37	683 / 677 / 30	711 / 643 / 41		837 / 772 / 33	706 / 593 / 41	860 / 735 / 34																																																																																																																																																																																																																																																																																																					

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft	74in x 41.2in	Load: Up / Down / Side , lbs																							
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	1	507 / 307 / 53	554 / 404 / 45	515 / 413 / 77	546 / 514 / 63	542 / 469 / 84	653 / 586 / 69	547 / 443 / 77	664 / 554 / 64	522 / 339 / 51	573 / 440 / 43	523 / 445 / 72	580 / 556 / 59	581 / 509 / 79	710 / 642 / 66	587 / 481 / 73	705 / 592 / 59	546 / 375 / 49	600 / 473 / 40	538 / 482 / 68	611 / 593 / 55	614 / 545 / 74	742 / 676 / 61	623 / 515 / 68	758 / 641 / 56		
15	2	554 / 404 / 45	639 / 511 / 38	546 / 524 / 63	631 / 630 / 50	653 / 594 / 69	778 / 723 / 56	664 / 562 / 64	797 / 688 / 52	573 / 440 / 43	678 / 548 / 35	567 / 554 / 58	682 / 688 / 47	691 / 634 / 64	836 / 782 / 52	705 / 601 / 59	859 / 745 / 49	600 / 473 / 40	729 / 595 / 33	597 / 590 / 54	708 / 719 / 43	742 / 685 / 61	887 / 834 / 49	758 / 650 / 56	914 / 795 / 46		
	3	519 / 623 / 34	626 / 775 / 28	608 / 592 / 54	722 / 722 / 43	757 / 690 / 61	905 / 840 / 49	752 / 637 / 55	932 / 801 / 46	545 / 663 / 32	670 / 836 / 26	643 / 632 / 50	775 / 780 / 41	793 / 728 / 56	964 / 899 / 46	813 / 692 / 52	997 / 859 / 43	582 / 715 / 30	709 / 889 / 25	690 / 683 / 47	822 / 832 / 38	845 / 780 / 52	1014 / 949 / 42	868 / 742 / 49	1051 / 909 / 40		
	1	537 / 292 / 58	592 / 396 / 51	549 / 399 / 88	589 / 514 / 75	542 / 469 / 104	653 / 586 / 85	547 / 443 / 90	664 / 554 / 74	557 / 327 / 56	620 / 440 / 49	562 / 437 / 84	605 / 556 / 70	581 / 509 / 98	710 / 642 / 81	587 / 481 / 85	705 / 592 / 69	577 / 362 / 54	633 / 473 / 46	585 / 482 / 81	617 / 593 / 65	614 / 545 / 91	742 / 676 / 75	623 / 515 / 80	758 / 641 / 66		
20	2	592 / 396 / 51	650 / 511 / 43	589 / 524 / 75	631 / 630 / 59	653 / 594 / 85	778 / 723 / 69	664 / 562 / 74	797 / 688 / 60	620 / 440 / 49	678 / 548 / 40	592 / 554 / 68	682 / 688 / 56	691 / 634 / 79	836 / 782 / 65	705 / 601 / 69	859 / 745 / 57	633 / 473 / 46	729 / 595 / 38	603 / 590 / 64	708 / 719 / 51	742 / 685 / 75	887 / 834 / 60	758 / 650 / 66	914 / 795 / 53		
	3	544 / 623 / 39	626 / 775 / 32	612 / 592 / 64	722 / 722 / 51	757 / 690 / 75	905 / 840 / 60	752 / 637 / 64	932 / 801 / 53	552 / 663 / 36	670 / 836 / 30	643 / 632 / 59	775 / 780 / 48	793 / 728 / 69	964 / 899 / 56	813 / 692 / 60	997 / 859 / 50	582 / 715 / 34	709 / 889 / 28	690 / 683 / 56	822 / 832 / 45	845 / 780 / 65	1014 / 949 / 52	868 / 742 / 57	1051 / 909 / 46		
	1	537 / 292 / 58	592 / 396 / 51	549 / 399 / 88	589 / 514 / 75	542 / 469 / 104	653 / 586 / 85	547 / 443 / 90	664 / 554 / 74	557 / 327 / 56	620 / 440 / 49	562 / 437 / 84	605 / 556 / 70	581 / 509 / 98	710 / 642 / 81	587 / 481 / 85	705 / 592 / 69	577 / 362 / 54	633 / 473 / 46	585 / 482 / 81	617 / 593 / 65	614 / 545 / 91	742 / 676 / 75	623 / 515 / 80	758 / 641 / 66		
25	2	592 / 396 / 51	650 / 511 / 43	589 / 524 / 75	631 / 630 / 59	653 / 594 / 85	778 / 723 / 69	664 / 562 / 74	797 / 688 / 60	620 / 440 / 49	678 / 548 / 40	592 / 554 / 68	682 / 688 / 56	691 / 634 / 79	836 / 782 / 65	705 / 601 / 69	859 / 745 / 57	633 / 473 / 46	729 / 595 / 38	603 / 590 / 64	708 / 719 / 51	742 / 685 / 75	887 / 834 / 60	758 / 650 / 66	914 / 795 / 53		
	3	544 / 623 / 39	626 / 775 / 32	612 / 592 / 64	722 / 722 / 51	757 / 690 / 75	905 / 840 / 60	752 / 637 / 64	932 / 801 / 53	552 / 663 / 36	670 / 836 / 30	643 / 632 / 59	775 / 780 / 48	793 / 728 / 69	964 / 899 / 56	813 / 692 / 60	997 / 859 / 50	582 / 715 / 34	709 / 889 / 28	690 / 683 / 56	822 / 832 / 45	845 / 780 / 65	1014 / 949 / 52	868 / 742 / 57	1051 / 909 / 46		
	1	537 / 292 / 58	592 / 396 / 51	549 / 399 / 88	589 / 514 / 75	542 / 469 / 104	653 / 586 / 85	547 / 443 / 90	664 / 554 / 74	557 / 327 / 56	620 / 440 / 49	562 / 437 / 84	605 / 556 / 70	581 / 509 / 98	710 / 642 / 81	587 / 481 / 85	705 / 592 / 69	577 / 362 / 54	633 / 473 / 46	585 / 482 / 81	617 / 593 / 65	614 / 545 / 91	742 / 676 / 75	623 / 515 / 80	758 / 641 / 66		
Wind Speed [mph]		170								180								ASCE Group Zone									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		Mono Slope									
15	1	558 / 404 / 46	629 / 502 / 38	539 / 505 / 63	637 / 624 / 51	658 / 589 / 71	788 / 722 / 57	653 / 544 / 64	784 / 666 / 52	569 / 430 / 44	668 / 539 / 36	570 / 545 / 60	674 / 666 / 49	682 / 615 / 66	829 / 764 / 54	695 / 582 / 61	851 / 726 / 50		0 - 7.5								
	2	629 / 502 / 38	776 / 638 / 32	637 / 635 / 51	748 / 765 / 41	788 / 732 / 57	930 / 877 / 46	784 / 676 / 52	961 / 839 / 43	668 / 539 / 36	818 / 678 / 30	674 / 678 / 49	809 / 831 / 40	829 / 774 / 54	1002 / 949 / 44	851 / 737 / 50	1037 / 908 / 41			2 = 2							
3	616 / 761 / 28	740 / 933 / 23	732 / 731 / 45	862 / 876 / 36	890 / 825 / 49	1096 / 1029 / 41	917 / 787 / 46	1093 / 948 / 37	644 / 802 / 26	764 / 967 / 21	769 / 773 / 42	928 / 947 / 34	961 / 895 / 47	1125 / 1059 / 37	957 / 824 / 43	1173 / 1019 / 35	3 = 3										
20	1	597 / 397 / 52	643 / 502 / 43	583 / 505 / 75	637 / 624 / 61	658 / 589 / 87	788 / 722 / 71	653 / 544 / 74	784 / 666 / 60	616 / 430 / 50	668 / 539 / 41	570 / 545 / 71	674 / 666 / 58	682 / 615 / 81	829 / 764 / 67	695 / 582 / 71			851 / 726 / 59	7.5 - 15							
	2	643 / 502 / 43	776 / 638 / 36	637 / 635 / 61	748 / 765 / 48	788 / 732 / 71	930 / 877 / 56	784 / 676 / 60	961 / 839 / 50	668 / 539 / 41	818 / 678 / 34	674 / 678 / 58	809 / 831 / 47	829 / 774 / 67	1002 / 949 / 54	851 / 737 / 59			1037 / 908 / 48		1 = 1						
	3	616 / 761 / 32	740 / 933 / 26	732 / 731 / 53	862 / 876 / 42	890 / 825 / 60	1096 / 1029 / 50	917 / 787 / 53	1093 / 948 / 43	644 / 802 / 30	764 / 967 / 24	769 / 773 / 50	928 / 947 / 41	961 / 895 / 58	1125 / 1059 / 46	957 / 824 / 50	1173 / 1019 / 41		2 = 2								
25	1	597 / 397 / 52	643 / 502 / 43	583 / 505 / 75	637 / 624 / 61	658 / 589 / 87	788 / 722 / 71	653 / 544 / 74	784 / 666 / 60	616 / 430 / 50	668 / 539 / 41	570 / 545 / 71	674 / 666 / 58	682 / 615 / 81	829 / 764 / 67	695 / 582 / 71	851 / 726 / 59			3 = 3							
	2	643 / 502 / 43	776 / 638 / 36	637 / 635 / 61	748 / 765 / 48	788 / 732 / 85	930 / 877 / 68	784 / 676 / 71	961 / 839 / 58	668 / 539 / 41	818 / 678 / 34	674 / 678 / 58	809 / 831 / 47	829 / 774 / 80	1002 / 949 / 65	851 / 737 / 69	1037 / 908 / 56				1 = 1						
	3	616 / 761 / 32	740 / 933 / 26	732 / 731 / 53	862 / 876 / 42	890 / 825 / 73	1096 / 1029 / 60	917 / 787 / 62	1093 / 948 / 50	644 / 802 / 30	764 / 967 / 24	769 / 773 / 50	928 / 947 / 41	961 / 895 / 70	1125 / 1059 / 55	957 / 824 / 58	1173 / 1019 / 48		2 = 2								
Wind Speed [mph]		190								200								Mono Slope									
15	1	578 / 453 / 41	705 / 573 / 34	590 / 570 / 56	707 / 704 / 46	718 / 652 / 62	864 / 799 / 51	733 / 618 / 58	889 / 761 / 47	610 / 483 / 39	738 / 604 / 32	620 / 604 / 54	736 / 737 / 43	750 / 685 / 59	923 / 857 / 49	767 / 650 / 55	919 / 790 / 44			3 = 3							
	2	705 / 573 / 34	855 / 712 / 28	707 / 716 / 46	838 / 866 / 37	864 / 810 / 51	1028 / 977 / 41	889 / 772 / 47	1068 / 938 / 38	738 / 604 / 32	886 / 741 / 26	736 / 750 / 43	894 / 926 / 36	891 / 839 / 47	1090 / 1038 / 39	919 / 801 / 44	1135 / 999 / 37		1 = 1								
	3	691 / 865 / 26	814 / 1034 / 20	801 / 809 / 40	952 / 976 / 32	992 / 927 / 44	1195 / 1127 / 36	1027 / 887 / 41	1249 / 1087 / 34	711 / 894 / 24	860 / 1097 / 19	856 / 867 / 38	1009 / 1037 / 30	1055 / 988 / 42	1259 / 1190 / 34	1052 / 910 / 38	1320 / 1151 / 32			2 = 2							
20	1	621 / 453 / 47	705 / 573 / 39	605 / 570 / 67	707 / 704 / 54	718 / 652 / 77	864 / 799 / 63	733 / 618 / 67	889 / 761 / 55	637 / 483 / 45	738 / 604 / 37	620 / 604 / 64	736 / 737 / 51	750 / 685 / 73	923 / 857 / 60	767 / 650 / 64	919 / 790 / 52				3 = 3						
	2	705 / 573 / 39	855 / 712 / 32	707 / 716 / 54	838 / 866 / 44	864 / 810 / 63	1028 / 977 / 50	889 / 772 / 55	1068 / 938 / 44	738 / 604 / 37	886 / 741 / 30	736 / 750 / 51	894 / 926 / 42	891 / 839 / 58	1090 / 1038 / 48	919 / 801 / 52	1135 / 999 / 43		1 = 1								
	3	691 / 865 / 29	814 / 1034 / 23	801 / 809 / 47	952 / 976 / 38	992 / 927 / 54	1195 / 1127 / 44	1027 / 887 / 48	1249 / 1087 / 39	711 / 894 / 27	860 / 1097 / 22	856 / 867 / 45	1009 / 1037 / 36	1055 / 988 / 52	1259 / 1190 / 42	1052 / 910 / 44	1320 / 1151 / 37			2 = 2							
25	1	621 / 453 / 47	705 / 573 / 39	605 / 570 / 67	707 / 704 / 54	718 / 652 / 93	864 / 799 / 75	733 / 618 / 79	889 / 761 / 64	637 / 483 / 45	738 / 604 / 37	620 / 604 / 64	736 / 737 / 51	750 / 685 / 88	923 / 857 / 73	767 / 650 / 75	919 / 790 / 60				3 = 3						
	2	705 / 573 / 39	855 / 712 / 32	707 / 716 / 54	838 / 866 / 44	864 / 810 / 75	1028 / 977 / 60	889 / 772 / 64	1068 / 938 / 52	738 / 604 / 37	886 / 741 / 30	736 / 750 / 51	894 / 926 / 42	891 / 839 / 70	1090 / 1038 / 58	919 / 801 / 60	1135 / 999 / 50		1 = 1								
	3	691 / 865 / 29	814 / 1034 / 23	801 / 809 / 47	952 / 976 / 38	992 / 927 / 54	1195 / 1127 / 44	1027 / 887 / 48	1249 / 1087 / 39	711 / 894 / 27	860 / 1097 / 22	856 / 867 / 45	1009 / 1037 / 36	1055 / 988 / 52	1259 / 1190 / 42	1052 / 910 / 44	1320 / 1151 / 37			2 = 2							

Exposure Category : B

ASCE Group Zone	Panal Angle	Mono Slope
0 - 7.5	0 - 7.5	1 = 1
		2 = 2
		3 = 3
7.5 - 15	7.5 - 15	1 = 1
		2 = 2
15 - 30	15 - 30	1 = 1
		2 = 2
30 - 45	30 - 45	1 = 1
		2 = 2
		3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof

30-60ft

74in x 41.2in

Load: Up / Down / Side , lbs

Wind Speed [mph]	95								100								105									
	0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																	
30	1	510/188/68	546/268/62	510/261/106	554/367/96	520/339/175	573/451/152	430/330/150	529/425/126	519/204/67	560/290/61	520/284/104	570/397/94	528/360/169	584/475/146	452/351/145	543/440/119	528/222/66	574/313/60	531/306/102	575/419/91	545/387/166	593/499/140	474/371/140	565/461/114	
		546/268/62	603/372/55	554/374/96	596/493/82	573/457/152	637/575/126	529/431/126	631/532/102	560/290/61	610/393/53	570/404/94	604/519/79	584/482/146	661/601/120	543/446/119	656/555/98	574/313/60	629/422/52	575/426/91	610/543/76	593/506/140	682/624/114	565/468/114	695/591/95	
		543/485/53	564/606/44	590/455/87	628/573/72	615/538/134	722/656/108	603/497/109	737/621/90	547/511/51	568/631/42	610/489/86	637/599/69	634/564/128	766/699/105	628/520/105	761/644/86	551/535/49	571/654/40	604/503/81	643/622/66	656/587/123	785/720/99	651/542/100	804/683/83	
	2	538/182/72	578/263/66	535/253/116	582/361/107	543/333/197	601/451/174	432/330/169	529/425/142	546/198/71	580/280/64	544/275/114	586/383/103	550/354/190	611/475/167	452/351/163	543/440/134	554/214/69	592/302/63	554/296/113	601/411/101	566/380/187	620/499/160	474/371/158	565/461/129	
		578/263/66	628/365/59	582/368/107	630/493/94	601/457/174	649/575/144	529/431/142	631/532/115	580/280/64	633/385/57	586/390/103	636/519/90	611/482/167	661/601/137	543/446/134	656/555/110	592/302/63	650/413/56	601/419/101	641/543/86	620/506/160	682/624/130	565/468/129	695/591/107	
		579/485/58	594/606/48	614/446/97	658/573/82	640/538/154	722/656/124	603/497/123	737/621/102	582/511/56	596/631/45	632/480/95	664/599/78	651/564/147	766/699/120	628/520/118	761/644/97	584/535/53	597/654/43	637/503/92	669/622/75	660/587/140	785/720/114	651/542/113	804/683/94	
	3	564/176/122	597/254/112	567/249/167	598/348/150	556/322/219	618/442/196	446/330/188	529/425/158	570/191/120	608/275/110	566/265/161	611/376/147	571/348/216	626/466/189	459/351/182	543/440/149	577/207/118	619/296/108	574/286/159	625/403/145	575/367/208	646/499/185	474/371/176	565/461/143	
		597/254/112	638/351/100	598/355/150	649/483/134	618/448/196	673/575/166	529/431/158	631/532/128	608/275/110	654/378/97	611/383/147	668/519/131	626/472/189	682/601/158	543/446/149	656/555/122	619/296/108	670/404/95	625/411/145	672/543/125	646/506/185	689/624/150	565/468/143	695/591/119	
		615/485/102	623/606/83	636/437/139	687/573/120	666/538/177	722/656/143	603/497/137	737/621/113	616/511/97	624/631/79	653/470/136	692/599/114	675/564/170	766/699/139	628/520/131	761/644/108	616/535/93	624/654/75	656/493/131	696/622/109	683/587/162	785/720/131	651/542/125	804/683/105	
35	1	537/239/65	577/329/57	542/329/101	591/448/89	552/407/160	602/520/134	494/391/135	598/491/112	547/256/64	591/352/56	544/346/97	595/468/86	569/434/158	623/552/131	504/402/128	617/509/107	ASCE Group Zone	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
		577/329/57	648/450/51	591/456/89	615/565/72	602/527/134	719/661/111	598/498/112	715/610/90	591/352/56	652/468/49	595/477/86	633/598/71	609/547/128	735/678/105	617/517/107	751/644/88									2 = 2
		553/557/47	587/691/38	610/525/77	669/659/64	676/608/117	825/759/96	671/561/95	821/700/79	553/576/45	585/707/36	627/557/76	683/677/61	711/643/114	837/772/91	706/593/93	860/735/76									3 = 3
	2	562/231/68	604/323/61	564/318/111	615/439/99	571/400/180	627/520/154	494/391/153	598/491/126	570/248/67	617/345/60	574/340/109	617/459/95	587/426/177	647/552/150	504/402/145	617/509/121	7.5 - 15	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
		604/323/61	668/441/55	615/448/82	644/565/99	627/527/154	719/661/127	598/498/126	715/610/102	617/345/60	670/458/52	617/467/95	662/598/80	632/547/147	735/678/120	617/517/121	751/644/99									3 = 3
		584/557/51	613/691/42	641/525/88	690/659/73	676/608/134	825/759/110	671/561/107	821/700/89	583/576/49	610/707/40	658/557/86	690/677/69	711/643/130	837/772/104	706/593/105	860/735/86									1 = 1
	3	584/223/116	630/317/106	582/307/156	625/423/139	590/393/204	652/520/177	494/391/170	598/491/140	591/239/114	629/332/102	591/328/153	638/450/136	605/418/200	671/552/173	504/402/161	617/509/134	15 - 30	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
		630/317/106	687/431/93	625/430/139	674/565/120	652/527/177	719/661/146	598/498/140	715/610/113	629/332/102	703/458/91	638/458/136	690/598/117	656/547/170	735/678/139	617/517/134	751/644/111									2 = 2
		616/557/89	638/691/73	672/525/128	715/659/106	689/608/154	825/759/127	671/561/119	821/700/99	613/576/85	634/707/69	689/557/125	715/677/100	711/643/150	837/772/120	706/593/116	860/735/96									3 = 3
40	1	547/269/62	604/374/55	555/369/96	610/497/84	575/453/152	639/570/126	531/427/126	634/526/102	547/256/64	591/352/56	544/346/97	595/468/86	569/434/158	623/552/131	504/402/128	617/509/107	30 - 45	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
		604/374/55	670/496/48	598/496/82	635/616/67	639/578/126	769/712/102	634/534/102	764/657/83	591/352/56	652/468/49	595/477/86	633/598/71	609/547/128	735/678/105	617/517/107	751/644/88									3 = 3
		566/608/44	602/742/35	630/576/72	714/711/59	725/659/108	872/807/88	740/624/90	897/768/74	553/576/45	585/707/36	627/557/76	683/677/61	711/643/114	837/772/91	706/593/93	860/735/76									1 = 1
	2	579/265/66	629/367/59	573/356/105	631/487/94	591/444/170	651/570/144	531/427/142	634/526/115	570/248/67	617/345/60	574/340/109	617/459/95	587/426/177	647/552/150	504/402/145	617/509/121	7.5 - 15	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
		629/367/59	687/485/51	631/496/94	663/616/76	651/578/144	769/712/117	634/534/115	764/657/94	617/345/60	670/458/52	617/467/95	662/598/80	632/547/147	735/678/120	617/517/121	751/644/99									3 = 3
		595/608/48	623/742/38	659/576/82	714/711/67	725/659/124	872/807/100	740/624/102	897/768/83	583/576/49	610/707/40	658/557/86	690/677/69	711/643/130	837/772/104	706/593/105	860/735/86									2 = 2
	3	598/255/112	639/352/100	600/350/150	651/477/134	619/444/196	675/570/166	531/427/158	634/526/128	591/239/114	629/332/102	591/328/153	638/450/136	605/418/200	671/552/173	504/402/161	617/509/134	15 - 30	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
		639/352/100	702/474/87	651/485/134	690/616/111	675/578/166	769/712/135	634/534/128	764/657/105	629/332/102	703/458/91	638/458/136	690/598/117	656/547/170	735/678/139	617/517/134	751/644/111									3 = 3
		625/608/83	647/742/67	689/576/120	733/711/98	725/659/143	872/807/116	740/624/113	897/768/93	613/576/85	634/707/69	689/557/125	715/677/100	711/643/150	837/772/120	706/593/116	860/735/96									3 = 3

Exposure Category : B

ASCE Group Zone

Panel Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		30	1	557 / 287 / 61	618 / 396 / 54	566 / 392 / 94	612 / 514 / 81	579 / 469 / 146	653 / 586 / 120	547 / 443 / 121	664 / 554 / 100	575 / 321 / 59	631 / 431 / 51	588 / 437 / 91	627 / 556 / 76	598 / 509 / 137	710 / 642 / 114	587 / 481 / 114	705 / 592 / 93	594 / 355 / 56	656 / 473 / 49	598 / 473 / 86	638 / 593 / 71	614 / 545 / 128	742 / 676 / 105
30	1	587 / 282 / 65	629 / 381 / 57	583 / 378 / 103	645 / 514 / 92	607 / 469 / 167	654 / 586 / 137	547 / 443 / 137	664 / 554 / 113	603 / 315 / 63	652 / 422 / 55	602 / 421 / 99	657 / 556 / 86	623 / 509 / 157	710 / 642 / 130	587 / 481 / 129	705 / 592 / 105	620 / 349 / 60	674 / 463 / 52	621 / 464 / 95	666 / 593 / 80	637 / 545 / 147	742 / 676 / 120	623 / 515 / 121	758 / 641 / 99
30	1	612 / 389 / 54	665 / 502 / 46	606 / 505 / 81	644 / 624 / 66	658 / 589 / 123	788 / 722 / 99	653 / 544 / 100	784 / 666 / 81	629 / 422 / 52	685 / 539 / 44	624 / 545 / 77	674 / 666 / 62	682 / 615 / 114	829 / 764 / 94	695 / 582 / 95	851 / 726 / 79	685 / 539 / 44	818 / 678 / 36	674 / 678 / 62	809 / 831 / 51	829 / 774 / 94	1002 / 949 / 76	851 / 737 / 79	1037 / 908 / 64
30	1	635 / 381 / 58	695 / 502 / 50	638 / 505 / 92	671 / 624 / 75	662 / 589 / 140	788 / 722 / 114	653 / 544 / 113	784 / 666 / 91	650 / 413 / 56	715 / 539 / 48	655 / 545 / 88	689 / 666 / 71	682 / 615 / 130	829 / 764 / 107	695 / 582 / 107	851 / 726 / 89	695 / 502 / 50	776 / 638 / 42	671 / 635 / 75	748 / 765 / 59	788 / 732 / 114	930 / 877 / 90	784 / 676 / 91	961 / 839 / 75
30	1	645 / 453 / 50	705 / 573 / 42	626 / 570 / 72	707 / 704 / 59	718 / 652 / 108	864 / 799 / 88	733 / 618 / 90	889 / 761 / 74	659 / 483 / 48	738 / 604 / 40	640 / 604 / 69	736 / 737 / 56	750 / 685 / 102	923 / 857 / 85	767 / 650 / 86	919 / 790 / 69	659 / 483 / 48	738 / 604 / 40	640 / 604 / 69	736 / 737 / 56	750 / 685 / 102	923 / 857 / 85	767 / 650 / 86	919 / 790 / 69
30	1	682 / 434 / 91	760 / 573 / 79	685 / 570 / 120	728 / 704 / 98	718 / 652 / 143	864 / 799 / 116	733 / 618 / 113	889 / 761 / 93	708 / 472 / 89	772 / 604 / 75	696 / 604 / 114	738 / 737 / 92	750 / 685 / 135	923 / 857 / 112	767 / 650 / 108	919 / 790 / 87	708 / 472 / 89	772 / 604 / 75	696 / 604 / 114	738 / 737 / 92	750 / 685 / 135	923 / 857 / 112	767 / 650 / 108	919 / 790 / 87
30	1	682 / 434 / 91	760 / 573 / 79	685 / 570 / 120	728 / 704 / 98	718 / 652 / 143	864 / 799 / 116	733 / 618 / 113	889 / 761 / 93	708 / 472 / 89	772 / 604 / 75	696 / 604 / 114	738 / 737 / 92	750 / 685 / 135	923 / 857 / 112	767 / 650 / 108	919 / 790 / 87	708 / 472 / 89	772 / 604 / 75	696 / 604 / 114	738 / 737 / 92	750 / 685 / 135	923 / 857 / 112	767 / 650 / 108	919 / 790 / 87

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95										100										105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
45	1	587 / 170 / 129	625 / 250 / 120	588 / 241 / 177	623 / 342 / 162	577 / 316 / 237	633 / 433 / 212	461 / 330 / 207	529 / 425 / 174	592 / 185 / 127	634 / 270 / 118	595 / 261 / 174	635 / 368 / 159	591 / 341 / 233	639 / 456 / 204	473 / 351 / 200	543 / 440 / 164	597 / 200 / 124	632 / 285 / 113	602 / 281 / 171	635 / 388 / 153	594 / 360 / 225	658 / 488 / 199	484 / 371 / 194	565 / 461 / 158						
	2	625 / 250 / 120	660 / 344 / 107	623 / 348 / 162	668 / 473 / 144	633 / 439 / 212	696 / 575 / 182	529 / 431 / 174	631 / 532 / 141	634 / 270 / 118	674 / 370 / 104	635 / 375 / 159	685 / 508 / 141	639 / 463 / 204	704 / 601 / 174	543 / 446 / 164	656 / 555 / 135	632 / 285 / 113	689 / 396 / 102	635 / 395 / 153	702 / 543 / 138	658 / 495 / 199	710 / 624 / 165	565 / 468 / 158	695 / 591 / 132						
	3	651 / 485 / 111	653 / 606 / 91	656 / 428 / 150	716 / 573 / 132	676 / 526 / 191	730 / 656 / 157	603 / 497 / 151	737 / 621 / 125	651 / 511 / 107	652 / 631 / 87	672 / 461 / 147	720 / 599 / 125	699 / 564 / 187	766 / 699 / 153	628 / 520 / 145	761 / 644 / 118	649 / 535 / 102	650 / 654 / 82	673 / 482 / 141	722 / 622 / 119	706 / 587 / 178	785 / 720 / 144	651 / 542 / 138	804 / 683 / 115						
50	1	607 / 164 / 135	639 / 240 / 125	605 / 232 / 186	647 / 335 / 173	597 / 311 / 255	647 / 425 / 227	475 / 330 / 226	529 / 425 / 190	622 / 182 / 135	647 / 260 / 123	611 / 252 / 183	645 / 354 / 167	610 / 335 / 250	665 / 456 / 222	487 / 351 / 219	543 / 440 / 180	626 / 197 / 133	655 / 279 / 121	617 / 271 / 180	655 / 380 / 163	611 / 353 / 241	669 / 478 / 213	498 / 371 / 212	565 / 461 / 172						
	2	639 / 240 / 125	679 / 337 / 113	647 / 341 / 173	685 / 463 / 153	647 / 431 / 227	720 / 575 / 199	529 / 431 / 190	631 / 532 / 154	647 / 260 / 123	693 / 362 / 111	645 / 361 / 167	701 / 497 / 150	665 / 463 / 222	727 / 601 / 190	543 / 446 / 180	656 / 555 / 147	655 / 279 / 121	706 / 387 / 109	655 / 387 / 163	716 / 531 / 147	669 / 484 / 213	731 / 624 / 181	565 / 468 / 172	695 / 591 / 144						
	3	673 / 475 / 118	682 / 606 / 99	675 / 420 / 160	728 / 560 / 140	700 / 526 / 208	750 / 656 / 171	603 / 497 / 165	737 / 621 / 137	685 / 511 / 116	680 / 631 / 94	690 / 451 / 157	748 / 599 / 137	707 / 551 / 199	777 / 699 / 167	628 / 520 / 158	761 / 644 / 129	682 / 197 / 111	677 / 654 / 89	704 / 482 / 153	749 / 622 / 130	729 / 587 / 195	785 / 720 / 158	651 / 542 / 151	804 / 683 / 126						
60	1	650 / 155 / 148	686 / 231 / 140	645 / 220 / 206	676 / 316 / 190	633 / 299 / 288	672 / 407 / 256	496 / 325 / 260	549 / 425 / 222	664 / 172 / 148	692 / 250 / 137	661 / 243 / 206	684 / 340 / 186	644 / 323 / 283	688 / 437 / 250	506 / 345 / 252	550 / 440 / 210	666 / 186 / 145	698 / 268 / 134	665 / 261 / 202	692 / 365 / 182	642 / 340 / 272	704 / 468 / 245	525 / 371 / 248	565 / 461 / 201						
	2	686 / 231 / 140	731 / 329 / 129	676 / 322 / 190	731 / 453 / 175	672 / 413 / 256	749 / 562 / 229	549 / 431 / 222	631 / 532 / 181	692 / 250 / 137	742 / 354 / 126	684 / 347 / 186	745 / 486 / 171	688 / 444 / 250	753 / 586 / 218	550 / 446 / 210	656 / 555 / 172	698 / 268 / 134	754 / 379 / 123	692 / 371 / 182	759 / 519 / 167	704 / 474 / 245	774 / 624 / 212	565 / 468 / 201	695 / 591 / 168						
	3	713 / 456 / 131	741 / 606 / 115	710 / 402 / 179	766 / 547 / 159	716 / 503 / 234	791 / 656 / 201	603 / 497 / 193	737 / 621 / 160	722 / 489 / 129	736 / 631 / 109	722 / 432 / 175	784 / 584 / 155	736 / 538 / 229	816 / 699 / 196	628 / 520 / 185	761 / 644 / 151	732 / 523 / 126	730 / 654 / 104	734 / 461 / 171	802 / 622 / 151	756 / 573 / 223	818 / 720 / 185	651 / 542 / 176	804 / 683 / 147						
Wind Speed [mph]		110										115																			
45	1	603 / 215 / 122	642 / 305 / 111	609 / 302 / 168	646 / 414 / 150	607 / 385 / 220	677 / 520 / 195	495 / 391 / 187	598 / 491 / 155	608 / 231 / 120	651 / 325 / 109	617 / 322 / 165	658 / 441 / 147	621 / 410 / 216	680 / 539 / 187	504 / 402 / 177	617 / 509 / 148														
	2	642 / 305 / 111	704 / 422 / 100	646 / 422 / 150	703 / 565 / 132	677 / 527 / 195	733 / 661 / 161	598 / 498 / 155	715 / 610 / 125	651 / 325 / 109	718 / 448 / 98	658 / 449 / 147	719 / 598 / 128	680 / 547 / 187	735 / 678 / 153	617 / 517 / 148	751 / 644 / 122														
	3	647 / 557 / 98	664 / 691 / 80	688 / 514 / 138	741 / 659 / 116	710 / 608 / 170	825 / 759 / 140	671 / 561 / 132	821 / 700 / 109	643 / 576 / 93	658 / 707 / 76	703 / 545 / 135	739 / 677 / 110	731 / 643 / 165	837 / 772 / 132	706 / 593 / 128	860 / 735 / 105														
50	1	631 / 212 / 130	664 / 299 / 118	623 / 291 / 177	666 / 406 / 160	623 / 378 / 236	687 / 509 / 208	508 / 391 / 205	598 / 491 / 169	635 / 226 / 128	672 / 319 / 116	629 / 311 / 173	676 / 431 / 157	636 / 402 / 232	704 / 539 / 204	508 / 402 / 194	617 / 509 / 162														
	2	664 / 299 / 118	720 / 413 / 106	666 / 413 / 160	732 / 565 / 143	687 / 516 / 208	753 / 661 / 176	598 / 498 / 169	715 / 610 / 137	672 / 319 / 116	733 / 438 / 104	676 / 439 / 157	748 / 598 / 140	704 / 547 / 204	754 / 678 / 167	617 / 517 / 162	751 / 644 / 133														
	3	679 / 557 / 106	690 / 691 / 87	703 / 502 / 147	767 / 659 / 127	732 / 608 / 185	825 / 759 / 153	671 / 561 / 144	821 / 700 / 119	673 / 576 / 101	683 / 707 / 82	716 / 532 / 143	764 / 677 / 120	753 / 643 / 181	837 / 772 / 144	706 / 593 / 140	860 / 735 / 115														
60	1	669 / 200 / 143	704 / 287 / 131	669 / 280 / 198	700 / 389 / 179	652 / 363 / 267	720 / 497 / 240	534 / 391 / 239	598 / 491 / 197	684 / 218 / 143	710 / 305 / 129	673 / 299 / 194	724 / 422 / 179	663 / 386 / 261	735 / 527 / 234	533 / 402 / 227	617 / 509 / 189														
	2	704 / 287 / 131	765 / 403 / 120	700 / 396 / 179	772 / 552 / 163	720 / 504 / 240	795 / 661 / 207	598 / 498 / 197	715 / 610 / 160	710 / 305 / 129	776 / 428 / 118	724 / 430 / 179	786 / 584 / 159	735 / 534 / 234	793 / 678 / 196	617 / 517 / 189	751 / 644 / 155														
	3	742 / 557 / 123	742 / 691 / 101	745 / 491 / 167	819 / 659 / 148	776 / 608 / 218	841 / 759 / 180	671 / 561 / 168	821 / 700 / 139	734 / 576 / 118	732 / 707 / 95	757 / 520 / 163	813 / 677 / 140	795 / 643 / 212	837 / 772 / 169	706 / 593 / 164	860 / 735 / 134														
Wind Speed [mph]		120										130																			
45	1	625 / 251 / 120	661 / 345 / 107	624 / 343 / 162	669 / 467 / 144	634 / 435 / 212	698 / 570 / 182	531 / 427 / 174	634 / 526 / 141	608 / 231 / 120	651 / 325 / 109	617 / 322 / 165	658 / 441 / 147	621 / 410 / 216	680 / 539 / 187	504 / 402 / 177	617 / 509 / 148														
	2	661 / 345 / 107	733 / 474 / 96	669 / 475 / 144	717 / 616 / 122	698 / 578 / 182	769 / 712 / 149	634 / 534 / 141	764 / 657 / 115	651 / 325 / 109	718 / 448 / 98	658 / 449 / 147	719 / 598 / 128	680 / 547 / 187	735 / 678 / 153	617 / 517 / 148	751 / 644 / 122														
	3	654 / 608 / 91	671 / 742 / 73	718 / 576 / 132	756 / 711 / 107	732 / 659 / 157	872 / 807 / 127	740 / 624 / 125	897 / 768 / 102	643 / 576 / 93	658 / 707 / 76	703 / 545 / 135	739 / 677 / 110	731 / 643 / 165	837 / 772 / 132	706 / 593 / 128	860 / 735 / 105														
50	1	640 / 241 / 125	681 / 338 / 113	648 / 337 / 173	686 / 457 / 153	648 / 426 / 227	722 / 570 / 199	531 / 427 / 190	634 / 526 / 154	635 / 226 / 128	672 / 319 / 116	629 / 311 / 173	676 / 431 / 157	636 / 402 / 232	704 / 539 / 204	508 / 402 / 194	617 / 509 / 162														
	2	681 / 338 / 113	746 / 463 / 101	686 / 465 / 153	744 / 616 / 133	722 / 578 / 199	774 / 712 / 162	634 / 534 / 154	764 / 657 / 126	672 / 319 / 116	733 / 438 / 104	676 / 439 / 157	748 / 598 / 140	704 / 547 / 204	754 / 678 / 167	617 / 517 / 162	751 / 644 / 133														
	3	683 / 608 / 99	694 / 742 / 80	730 / 562 / 140	780 / 711 / 117	752 / 659 / 171	872 / 807 / 139	740 / 624 / 137	897 / 768 / 111	673 / 576 / 101	683 / 707 / 82	716 / 532 / 143	764 / 677 / 120	753 / 643 / 181	837 / 772 / 144	706 / 593 / 140	860 / 735 / 115														
60	1	687 / 232 / 140	716 / 324 / 126	677 / 317 / 190	733 / 447 / 175	673 / 409 / 256	751 / 557 / 229	550 / 427 / 222	634 / 526 / 181	684 / 218 / 143	710 / 305 / 129	673 / 299 / 194	724 / 422 / 179	663 / 386 / 261	735 / 527 / 234	533 / 402 / 227	617 / 509 / 189														
	2	716 / 324 / 126	787 / 452 / 115	733 / 455 / 175	798 / 616 / 155	751 / 564 / 229	812 / 712 / 191	634 / 534 / 181	764 / 657 / 147	710 / 305 / 129	776 / 428 / 118	724 / 430 / 179	786 / 584 / 159	735 / 534 / 234	793 / 678 / 196	617 / 517 / 189	751 / 644 / 155														
	3	742 / 608 / 115	741 / 742 / 92	768 / 549 / 159	828 / 711 / 136	793 / 659 / 201	872 / 807 / 163	740 / 624 / 160	897 / 768 / 130	734 / 576 / 118	732 / 707 / 95	757 / 520 / 163	813 / 677 / 140	795 / 643 / 212	837 / 772 / 169	706 / 593 / 164	860 / 735 / 134														

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof				30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]				140								150								160									
Panal Angle				0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		45	1	631/266/118	670/365/104	632/364/159	681/493/141	635/451/204	699/586/174	547/443/168	664/554/138	643/298/113	689/404/100	647/405/153	703/544/135	660/499/195	731/642/165	587/481/158	705/592/128	654/329/109	722/452/98	661/445/147	723/593/128	685/545/187	742/676/153	623/515/148	758/641/122		
45	2	670/365/104	747/499/93	681/502/141	713/630/116	699/594/174	778/723/140	664/562/138	797/688/112	689/404/100	774/548/89	703/554/135	739/688/110	712/634/161	836/782/132	705/601/128	859/745/105	722/452/98	799/595/85	706/590/125	739/719/101	742/685/153	887/834/123	758/650/122	914/795/99				
45	3	648/623/87	682/775/71	715/592/125	750/722/101	757/690/153	905/840/123	752/637/118	932/801/99	648/663/80	702/836/67	722/632/116	777/780/95	793/728/140	964/899/115	813/692/112	997/859/92	663/715/76	717/889/62	744/683/110	822/832/89	845/780/132	1014/949/106	868/742/105	1051/909/86				
50	1	644/256/123	689/357/111	654/357/170	696/482/150	661/451/222	721/586/190	547/443/183	664/554/151	666/292/121	721/404/109	667/397/163	716/532/143	685/499/213	752/642/181	587/481/172	705/592/140	675/322/116	737/442/104	679/436/157	752/593/140	709/545/204	759/676/167	623/515/162	758/641/133				
50	2	689/357/111	758/487/99	696/491/150	739/630/127	721/594/190	778/723/153	664/562/151	797/688/122	721/404/109	782/534/94	716/541/143	763/688/120	733/634/176	836/782/144	705/601/140	859/745/115	737/442/104	804/579/89	734/590/137	762/719/110	759/685/167	887/834/134	758/650/133	914/795/108				
50	3	676/623/94	705/775/77	743/592/137	772/722/110	770/690/167	905/840/134	752/637/129	932/801/108	674/663/87	723/836/73	748/632/127	798/780/103	793/728/153	964/899/125	813/692/122	997/859/101	687/715/82	737/889/68	769/683/120	822/832/97	845/780/144	1014/949/116	868/742/115	1051/909/94				
60	1	689/246/137	738/350/126	695/343/190	741/471/171	684/432/250	766/586/223	557/443/214	664/554/176	708/280/134	750/386/120	704/381/182	756/519/163	704/477/240	795/642/212	587/481/201	705/592/164	713/308/129	761/422/115	711/417/175	770/565/155	740/533/234	799/676/196	623/515/189	758/641/155				
60	2	738/350/126	797/475/112	741/480/171	790/630/148	766/594/223	805/723/180	664/562/176	797/688/143	750/386/120	817/521/106	756/529/163	812/688/140	774/634/207	836/782/169	705/601/164	859/745/134	761/422/115	857/579/104	770/575/155	806/719/128	799/685/196	887/834/158	758/650/155	914/795/126				
60	3	732/623/109	751/775/90	779/577/155	817/722/128	810/690/196	905/840/158	752/637/151	932/801/126	725/663/101	766/836/84	799/632/148	840/780/120	817/728/180	964/899/147	813/692/143	997/859/118	736/715/95	778/889/79	818/683/140	859/832/113	845/780/169	1014/949/136	868/742/134	1051/909/109				

Wind Speed [mph]				170								180							
45	1	679/366/107	739/490/93	674/484/141	724/624/119	707/589/178	788/722/144	653/544/138	784/666/112	689/396/102	754/525/89	702/533/138	739/666/113	710/615/165	829/764/136	695/582/132	851/726/109		
45	2	739/490/93	821/638/80	724/635/119	756/765/95	788/732/144	930/877/115	784/676/112	961/839/92	754/525/89	839/678/76	739/678/113	809/831/92	829/774/136	1002/949/110	851/737/109	1037/908/89		
45	3	674/761/71	740/933/58	763/731/104	862/876/83	890/825/123	1096/1029/102	917/787/99	1093/948/79	682/802/67	764/967/54	779/773/98	928/947/80	961/895/119	1125/1059/94	957/824/92	1173/1019/76		
50	1	698/359/113	751/478/99	706/484/153	750/624/130	730/589/195	788/722/158	653/544/151	784/666/122	706/387/109	783/525/97	716/521/147	764/666/123	731/615/181	829/764/148	695/582/144	851/726/119		
50	2	751/478/99	846/638/87	750/635/130	777/765/103	788/732/158	930/877/125	784/676/122	961/839/101	783/525/97	864/678/82	764/678/123	816/831/100	829/774/148	1002/949/121	851/737/119	1037/908/97		
50	3	697/761/77	746/933/63	786/731/113	862/876/90	890/825/134	1096/1029/111	917/787/108	1093/948/86	704/802/73	764/967/58	801/773/107	928/947/87	961/895/130	1125/1059/102	957/824/101	1173/1019/83		
60	1	733/343/126	790/467/112	735/463/171	803/624/151	758/575/223	820/722/185	653/544/143	784/666/143	754/379/123	819/512/109	759/510/167	814/666/144	774/615/212	837/764/174	695/582/168	851/726/139		
60	2	790/467/112	873/620/98	803/635/151	820/765/120	820/732/185	930/877/147	784/676/143	961/839/118	819/512/109	912/678/95	814/678/144	857/831/117	837/774/174	1002/949/142	851/737/139	1037/908/114		
60	3	743/761/90	784/933/73	833/731/132	872/876/105	890/825/158	1096/1029/131	917/787/126	1093/948/101	747/802/84	784/967/67	844/773/124	928/947/101	961/895/153	1125/1059/120	957/824/118	1173/1019/97		

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
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	2 = 2
30 - 45	1 = 1
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Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
70	1	721 / 150 / 162	727 / 222 / 153	690 / 212 / 226	713 / 303 / 208	665 / 288 / 320	708 / 399 / 289	515 / 319 / 293	573 / 425 / 255	707 / 162 / 159	731 / 239 / 149	692 / 229 / 221	734 / 333 / 208	674 / 310 / 314	722 / 428 / 283	524 / 339 / 283	573 / 440 / 240	712 / 179 / 159	735 / 257 / 146	693 / 246 / 217	740 / 357 / 204	683 / 333 / 308	736 / 457 / 277	533 / 359 / 274	583 / 461 / 231	
	2	727 / 222 / 153	762 / 315 / 140	713 / 309 / 208	757 / 433 / 190	708 / 404 / 289	776 / 549 / 258	573 / 431 / 255	631 / 532 / 207	731 / 239 / 149	771 / 338 / 137	734 / 339 / 208	768 / 464 / 186	722 / 434 / 283	796 / 586 / 251	573 / 446 / 240	656 / 555 / 197	735 / 257 / 146	780 / 362 / 134	740 / 363 / 204	779 / 495 / 182	736 / 463 / 277	796 / 608 / 239	583 / 468 / 231	695 / 591 / 192	
	3	747 / 436 / 143	799 / 606 / 130	739 / 385 / 195	802 / 533 / 177	745 / 491 / 264	831 / 656 / 233	605 / 497 / 221	737 / 621 / 183	754 / 468 / 140	792 / 631 / 124	766 / 422 / 195	818 / 570 / 173	764 / 525 / 258	856 / 699 / 226	628 / 520 / 211	761 / 644 / 173	761 / 500 / 137	783 / 654 / 118	775 / 451 / 190	833 / 606 / 168	782 / 559 / 251	855 / 720 / 214	651 / 542 / 202	804 / 683 / 168	
80	1	786 / 144 / 175	763 / 213 / 164	747 / 203 / 244	760 / 297 / 229	692 / 277 / 349	742 / 390 / 321	534 / 314 / 325	586 / 417 / 281	770 / 156 / 171	764 / 229 / 160	732 / 220 / 239	764 / 319 / 224	699 / 298 / 342	754 / 418 / 314	542 / 334 / 314	596 / 440 / 271	754 / 168 / 167	766 / 246 / 157	729 / 236 / 234	768 / 341 / 219	706 / 319 / 335	767 / 447 / 306	549 / 352 / 303	605 / 461 / 260	
	2	763 / 213 / 164	788 / 301 / 150	760 / 302 / 229	797 / 423 / 209	742 / 395 / 321	801 / 535 / 285	586 / 423 / 281	636 / 532 / 233	764 / 229 / 160	813 / 330 / 150	764 / 325 / 224	806 / 453 / 204	754 / 424 / 314	819 / 572 / 278	596 / 446 / 271	656 / 555 / 222	766 / 246 / 157	820 / 353 / 146	768 / 348 / 219	814 / 483 / 199	767 / 453 / 306	837 / 608 / 271	605 / 468 / 260	695 / 591 / 217	
	3	775 / 417 / 153	837 / 591 / 143	781 / 376 / 214	835 / 520 / 194	772 / 479 / 292	848 / 638 / 257	626 / 497 / 249	737 / 621 / 206	798 / 458 / 153	848 / 631 / 139	788 / 403 / 209	848 / 555 / 189	789 / 512 / 285	870 / 679 / 250	638 / 520 / 238	761 / 644 / 195	803 / 488 / 150	836 / 654 / 132	795 / 430 / 204	861 / 590 / 184	805 / 545 / 278	892 / 720 / 242	651 / 542 / 227	804 / 683 / 190	
90	1	826 / 135 / 181	793 / 203 / 174	802 / 195 / 260	787 / 284 / 243	715 / 265 / 374	756 / 373 / 343	543 / 304 / 349	598 / 409 / 307	826 / 149 / 181	810 / 224 / 174	785 / 211 / 254	788 / 305 / 238	736 / 292 / 374	766 / 399 / 335	559 / 328 / 343	619 / 440 / 301	826 / 165 / 181	810 / 240 / 170	785 / 231 / 254	809 / 334 / 238	741 / 313 / 366	795 / 436 / 335	564 / 346 / 331	627 / 461 / 289	
	2	793 / 203 / 174	828 / 294 / 162	787 / 289 / 243	833 / 413 / 227	756 / 378 / 343	823 / 522 / 311	598 / 415 / 307	656 / 532 / 259	810 / 224 / 174	832 / 315 / 158	788 / 310 / 238	840 / 442 / 221	766 / 405 / 335	840 / 557 / 303	619 / 446 / 301	666 / 555 / 247	810 / 240 / 170	857 / 344 / 158	809 / 340 / 238	847 / 471 / 216	795 / 442 / 335	856 / 592 / 295	627 / 468 / 289	695 / 591 / 241	
	3	817 / 407 / 166	872 / 576 / 154	819 / 367 / 232	865 / 507 / 210	797 / 468 / 319	887 / 638 / 287	647 / 497 / 277	737 / 621 / 229	820 / 436 / 162	880 / 615 / 150	825 / 393 / 227	876 / 541 / 205	812 / 500 / 311	909 / 679 / 279	658 / 520 / 265	761 / 644 / 217	843 / 477 / 162	889 / 654 / 146	830 / 420 / 221	887 / 574 / 199	826 / 531 / 303	929 / 720 / 271	666 / 542 / 253	804 / 683 / 211	
70	1	713 / 192 / 156	739 / 275 / 143	710 / 269 / 217	746 / 380 / 199	692 / 356 / 302	750 / 486 / 270	550 / 384 / 269	605 / 491 / 226	713 / 205 / 153	759 / 299 / 143	712 / 287 / 213	752 / 404 / 195	701 / 378 / 295	764 / 515 / 264	557 / 402 / 259	617 / 509 / 216									
	2	739 / 275 / 143	788 / 384 / 130	746 / 387 / 199	790 / 525 / 177	750 / 493 / 270	814 / 643 / 233	605 / 498 / 226	715 / 610 / 183	759 / 299 / 143	796 / 407 / 127	752 / 411 / 195	800 / 555 / 173	764 / 522 / 264	833 / 678 / 226	617 / 517 / 216	751 / 644 / 178									
	3	768 / 531 / 134	793 / 691 / 115	785 / 479 / 186	847 / 642 / 164	799 / 593 / 245	877 / 759 / 208	671 / 561 / 192	821 / 700 / 159	794 / 576 / 134	780 / 707 / 108	795 / 508 / 182	862 / 677 / 160	816 / 626 / 239	870 / 772 / 195	706 / 593 / 187	860 / 735 / 154									
80	1	754 / 184 / 167	785 / 269 / 157	744 / 258 / 234	772 / 363 / 214	713 / 341 / 328	779 / 475 / 299	565 / 377 / 298	626 / 491 / 254	749 / 197 / 164	787 / 285 / 153	744 / 275 / 229	794 / 395 / 214	720 / 362 / 321	791 / 503 / 292	571 / 394 / 287	633 / 509 / 244									
	2	785 / 269 / 157	826 / 375 / 143	772 / 370 / 214	823 / 512 / 194	779 / 481 / 299	855 / 643 / 264	626 / 498 / 206	715 / 610 / 206	787 / 285 / 153	832 / 397 / 139	794 / 402 / 214	831 / 541 / 189	791 / 510 / 292	872 / 678 / 257	633 / 517 / 244	751 / 644 / 200									
	3	808 / 519 / 146	845 / 691 / 128	802 / 457 / 199	873 / 624 / 179	820 / 578 / 271	913 / 759 / 235	671 / 561 / 217	821 / 700 / 179	813 / 549 / 143	829 / 707 / 121	830 / 495 / 199	885 / 658 / 174	835 / 610 / 264	904 / 772 / 221	706 / 593 / 211	860 / 735 / 173									
90	1	808 / 176 / 178	810 / 256 / 166	774 / 247 / 249	811 / 355 / 232	747 / 333 / 359	805 / 464 / 327	580 / 370 / 325	647 / 491 / 283	808 / 192 / 178	829 / 279 / 166	789 / 269 / 249	813 / 376 / 227	752 / 354 / 351	815 / 490 / 319	595 / 394 / 319	653 / 509 / 271									
	2	810 / 256 / 166	861 / 366 / 154	811 / 362 / 232	854 / 499 / 210	805 / 470 / 327	871 / 626 / 287	647 / 498 / 283	715 / 610 / 229	829 / 279 / 166	865 / 387 / 150	813 / 383 / 227	860 / 527 / 205	815 / 497 / 319	886 / 659 / 279	653 / 517 / 271	751 / 644 / 223									
	3	846 / 506 / 158	896 / 691 / 142	835 / 445 / 216	897 / 607 / 194	839 / 563 / 295	949 / 759 / 263	673 / 561 / 241	821 / 700 / 199	849 / 535 / 154	878 / 707 / 134	862 / 483 / 216	933 / 658 / 194	852 / 593 / 287	938 / 772 / 247	706 / 593 / 235	860 / 735 / 193									

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft(m).
 h = Mean roof height, in ft(m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																																													
Wind Speed [mph]		140										150										160																													
Panal Angle		0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45																
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																		
70	1	728 / 236 / 149	767 / 334 / 137	731 / 329 / 208	764 / 450 / 186	718 / 423 / 283	791 / 571 / 251	580 / 443 / 245	664 / 554 / 202	745 / 269 / 146	793 / 377 / 134	735 / 364 / 199	794 / 507 / 182	735 / 466 / 270	816 / 625 / 239	600 / 481 / 231	705 / 592 / 187	762 / 302 / 143	800 / 411 / 127	755 / 408 / 195	804 / 551 / 173	750 / 508 / 258	838 / 676 / 226	623 / 515 / 216	758 / 641 / 178	90	1	762 / 226 / 160	810 / 326 / 150	761 / 315 / 224	802 / 439 / 204	750 / 413 / 314	814 / 557 / 278	603 / 443 / 276	664 / 554 / 227	775 / 257 / 157	813 / 359 / 143	778 / 356 / 219	829 / 495 / 199	763 / 455 / 264	622 / 481 / 260	705 / 592 / 211	790 / 288 / 153	836 / 401 / 139	778 / 390 / 209	835 / 537 / 189	795 / 508 / 292	877 / 676 / 257	637 / 515 / 244	758 / 641 / 200	
	2	767 / 334 / 137	833 / 463 / 124	764 / 458 / 186	842 / 630 / 168	791 / 579 / 251	841 / 723 / 208	664 / 562 / 202	797 / 688 / 164	793 / 377 / 134	848 / 507 / 118	794 / 516 / 182	861 / 688 / 160	816 / 634 / 239	869 / 782 / 195	705 / 601 / 187	859 / 745 / 154	800 / 411 / 127	886 / 563 / 115	804 / 561 / 173	851 / 719 / 146	838 / 685 / 226	892 / 834 / 182	758 / 650 / 178	914 / 795 / 144		2	810 / 326 / 150	866 / 451 / 135	802 / 447 / 204	870 / 614 / 184	814 / 565 / 278	877 / 723 / 235	664 / 562 / 227	797 / 688 / 184	813 / 359 / 143	877 / 493 / 128	829 / 504 / 199	885 / 669 / 174	835 / 617 / 221	705 / 601 / 211	859 / 745 / 173	836 / 401 / 139	911 / 548 / 125	835 / 547 / 189	896 / 719 / 164	877 / 685 / 257	924 / 834 / 207	758 / 650 / 200	914 / 795 / 163	
	3	787 / 623 / 124	796 / 775 / 102	813 / 563 / 173	862 / 722 / 146	849 / 690 / 226	905 / 840 / 182	752 / 637 / 173	932 / 801 / 144	777 / 663 / 115	809 / 836 / 96	829 / 615 / 164	882 / 780 / 137	853 / 728 / 208	964 / 899 / 170	813 / 692 / 164	997 / 859 / 135	784 / 715 / 108	818 / 889 / 89	867 / 683 / 160	898 / 832 / 129	876 / 780 / 195	1014 / 949 / 157	868 / 742 / 154	1051 / 909 / 125		3	843 / 623 / 139	842 / 775 / 114	843 / 619 / 189	907 / 722 / 164	864 / 671 / 250	937 / 840 / 207	752 / 637 / 195	932 / 801 / 163	828 / 663 / 128	852 / 836 / 107	879 / 615 / 184	925 / 780 / 154	889 / 728 / 235	964 / 899 / 193	813 / 692 / 184	997 / 859 / 152	833 / 715 / 121	858 / 889 / 100	890 / 664 / 174	938 / 832 / 145	910 / 780 / 221	1014 / 949 / 178	868 / 742 / 173	1051 / 909 / 141
	1	808 / 221 / 174	828 / 311 / 158	786 / 301 / 238	837 / 429 / 221	780 / 404 / 343	834 / 543 / 303	614 / 434 / 301	676 / 554 / 253	819 / 251 / 170	848 / 350 / 154	800 / 340 / 232	861 / 482 / 216	790 / 444 / 327	851 / 592 / 287	644 / 481 / 289	705 / 592 / 235	831 / 282 / 166	869 / 391 / 150	815 / 380 / 227	864 / 523 / 205	819 / 495 / 319	891 / 657 / 279	658 / 515 / 271	758 / 641 / 223		2	828 / 311 / 158	896 / 440 / 146	837 / 436 / 221	896 / 597 / 199	834 / 550 / 303	913 / 723 / 263	676 / 562 / 253	797 / 688 / 205	848 / 350 / 154	903 / 480 / 138	861 / 491 / 216	932 / 669 / 194	851 / 600 / 247	937 / 782 / 235	705 / 601 / 193	859 / 745 / 150	869 / 391 / 134	934 / 532 / 100	864 / 532 / 205	941 / 719 / 183	891 / 666 / 279	955 / 834 / 231	758 / 650 / 223	914 / 795 / 181
	3	876 / 607 / 150	888 / 775 / 126	872 / 534 / 205	952 / 722 / 183	902 / 671 / 279	969 / 840 / 231	752 / 637 / 217	932 / 801 / 181	880 / 663 / 142	895 / 836 / 119	904 / 599 / 199	967 / 780 / 171	925 / 728 / 263	993 / 899 / 215	813 / 692 / 205	997 / 859 / 169	882 / 715 / 134	898 / 889 / 111	911 / 646 / 188	977 / 832 / 160	944 / 780 / 247	1014 / 949 / 199	868 / 742 / 193	1051 / 909 / 157		3	808 / 221 / 174	828 / 311 / 158	786 / 301 / 238	837 / 429 / 221	780 / 404 / 343	834 / 543 / 303	614 / 434 / 301	676 / 554 / 253	819 / 251 / 170	848 / 350 / 154	800 / 340 / 232	861 / 482 / 216	790 / 444 / 327	851 / 592 / 287	644 / 481 / 289	705 / 592 / 235	831 / 282 / 166	869 / 391 / 150	815 / 380 / 227	864 / 523 / 205	819 / 495 / 319	891 / 657 / 279	658 / 515 / 271	758 / 641 / 223

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

$x \geq 72"$	$64" \text{ to } 71"$	$48" \text{ to } 63"$	$x \leq 47"$
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	874 / 129 / 190	854 / 199 / 186	850 / 187 / 273	827 / 277 / 261	750 / 260 / 405	784 / 364 / 370	560 / 298 / 378	621 / 409 / 338	874 / 143 / 190	835 / 214 / 182	850 / 206 / 273	827 / 298 / 255	754 / 279 / 396	792 / 390 / 361	574 / 322 / 371	629 / 431 / 325	874 / 157 / 190	851 / 235 / 182	831 / 221 / 267	827 / 318 / 249	757 / 299 / 388	821 / 426 / 361	578 / 340 / 358	649 / 461 / 318
	2	854 / 199 / 186	865 / 286 / 173	827 / 282 / 261	867 / 403 / 243	784 / 369 / 370	844 / 508 / 335	621 / 415 / 338	675 / 532 / 285	835 / 214 / 182	867 / 307 / 169	827 / 303 / 255	872 / 431 / 237	792 / 395 / 361	858 / 542 / 326	629 / 437 / 325	684 / 555 / 272	851 / 235 / 182	869 / 327 / 165	827 / 324 / 249	877 / 459 / 231	821 / 432 / 361	872 / 576 / 317	649 / 468 / 318	709 / 591 / 265
	3	857 / 398 / 178	904 / 561 / 165	835 / 350 / 243	893 / 493 / 225	820 / 456 / 344	901 / 620 / 308	668 / 497 / 305	737 / 621 / 252	857 / 426 / 173	910 / 599 / 160	859 / 384 / 243	902 / 526 / 219	832 / 487 / 335	920 / 660 / 300	678 / 520 / 292	761 / 644 / 239	858 / 453 / 169	916 / 636 / 156	862 / 409 / 237	910 / 558 / 213	844 / 517 / 326	938 / 699 / 291	685 / 542 / 278	804 / 683 / 232
Wind Speed [mph]		110								115															
100	1	874 / 172 / 190	849 / 250 / 178	831 / 242 / 267	847 / 347 / 249	778 / 326 / 388	829 / 452 / 352	593 / 363 / 351	655 / 480 / 305	854 / 184 / 186	847 / 266 / 173	813 / 257 / 261	847 / 367 / 243	782 / 346 / 379	837 / 478 / 344	608 / 387 / 344	674 / 509 / 298	854 / 184 / 186	847 / 266 / 173	813 / 257 / 261	847 / 367 / 243	782 / 346 / 379	837 / 478 / 344	608 / 387 / 344	674 / 509 / 298
	2	849 / 250 / 178	894 / 356 / 165	847 / 353 / 249	881 / 486 / 225	829 / 459 / 352	885 / 609 / 308	655 / 488 / 305	715 / 610 / 252	847 / 266 / 173	896 / 377 / 160	847 / 374 / 243	910 / 527 / 225	837 / 485 / 344	898 / 641 / 300	674 / 517 / 298	751 / 644 / 245	847 / 266 / 173	896 / 377 / 160	847 / 374 / 243	910 / 527 / 225	837 / 485 / 344	898 / 641 / 300	674 / 517 / 298	751 / 644 / 245
	3	881 / 493 / 169	921 / 672 / 152	865 / 434 / 231	944 / 607 / 213	880 / 563 / 326	955 / 736 / 282	691 / 561 / 265	821 / 700 / 219	881 / 521 / 165	926 / 707 / 147	891 / 471 / 231	952 / 639 / 207	891 / 593 / 317	972 / 772 / 273	712 / 593 / 258	860 / 735 / 212	881 / 521 / 165	926 / 707 / 147	891 / 471 / 231	952 / 639 / 207	891 / 593 / 317	972 / 772 / 273	712 / 593 / 258	860 / 735 / 212
Wind Speed [mph]		120								130															
100	1	854 / 200 / 186	866 / 288 / 173	828 / 278 / 261	847 / 387 / 237	785 / 366 / 370	845 / 504 / 335	622 / 411 / 338	677 / 526 / 285	854 / 184 / 186	847 / 266 / 173	813 / 257 / 261	847 / 367 / 243	782 / 346 / 379	837 / 478 / 344	608 / 387 / 344	674 / 509 / 298	854 / 184 / 186	847 / 266 / 173	813 / 257 / 261	847 / 367 / 243	782 / 346 / 379	837 / 478 / 344	608 / 387 / 344	674 / 509 / 298
	2	866 / 288 / 173	897 / 397 / 156	847 / 395 / 237	914 / 554 / 219	845 / 511 / 335	937 / 692 / 300	677 / 534 / 285	764 / 657 / 232	847 / 266 / 173	896 / 377 / 160	847 / 374 / 243	910 / 527 / 225	837 / 485 / 344	898 / 641 / 300	674 / 517 / 298	751 / 644 / 245	847 / 266 / 173	896 / 377 / 160	847 / 374 / 243	910 / 527 / 225	837 / 485 / 344	898 / 641 / 300	674 / 517 / 298	751 / 644 / 245
	3	882 / 549 / 160	930 / 742 / 143	894 / 495 / 225	960 / 670 / 201	903 / 623 / 308	987 / 807 / 264	740 / 624 / 252	897 / 768 / 206	881 / 521 / 165	926 / 707 / 147	891 / 471 / 231	952 / 639 / 207	891 / 593 / 317	972 / 772 / 273	712 / 593 / 258	860 / 735 / 212	881 / 521 / 165	926 / 707 / 147	891 / 471 / 231	952 / 639 / 207	891 / 593 / 317	972 / 772 / 273	712 / 593 / 258	860 / 735 / 212

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	835 / 211 / 182	863 / 303 / 169	824 / 294 / 255	869 / 418 / 237	808 / 394 / 370	853 / 528 / 326	624 / 425 / 325	695 / 554 / 278	840 / 239 / 178	881 / 341 / 165	837 / 332 / 249	891 / 470 / 231	815 / 434 / 352	891 / 592 / 317	652 / 471 / 311	712 / 592 / 258	849 / 268 / 173	899 / 381 / 160	850 / 371 / 243	889 / 509 / 219	841 / 483 / 344	903 / 638 / 300	678 / 515 / 298	758 / 641 / 245		
	2	863 / 303 / 169	924 / 428 / 156	869 / 426 / 237	918 / 580 / 213	853 / 536 / 326	950 / 723 / 291	695 / 562 / 278	797 / 688 / 225	881 / 341 / 165	953 / 480 / 152	891 / 478 / 231	952 / 650 / 207	891 / 600 / 317	971 / 782 / 273	712 / 601 / 258	859 / 745 / 212	899 / 381 / 160	954 / 517 / 143	889 / 518 / 219	986 / 719 / 201	903 / 647 / 300	987 / 834 / 256	758 / 650 / 245	914 / 795 / 199		
	3	906 / 591 / 160	934 / 775 / 139	897 / 520 / 219	966 / 700 / 195	913 / 652 / 300	1000 / 840 / 256	752 / 637 / 239	932 / 801 / 199	932 / 663 / 156	938 / 836 / 130	927 / 582 / 213	1009 / 780 / 188	961 / 728 / 291	1023 / 899 / 238	813 / 692 / 225	997 / 859 / 186	930 / 715 / 147	938 / 889 / 121	957 / 646 / 207	1016 / 832 / 176	978 / 780 / 273	1038 / 949 / 220	868 / 742 / 212	1051 / 909 / 172		
Wind Speed [mph]		170								180																	
100	1	859 / 298 / 169	917 / 420 / 156	863 / 411 / 237	911 / 560 / 213	846 / 519 / 326	940 / 701 / 291	687 / 544 / 278	784 / 666 / 225	869 / 327 / 165	936 / 460 / 152	877 / 450 / 231	933 / 612 / 207	872 / 568 / 317	977 / 764 / 282	709 / 582 / 265	851 / 726 / 219										
	2	917 / 420 / 156	982 / 567 / 139	911 / 570 / 213	988 / 765 / 188	940 / 711 / 291	997 / 877 / 238	784 / 676 / 225	961 / 839 / 186	936 / 460 / 152	1009 / 618 / 134	933 / 623 / 207	1020 / 831 / 182	977 / 774 / 282	1040 / 949 / 229	851 / 737 / 219	1037 / 908 / 179										
	3	926 / 761 / 139	933 / 933 / 113	988 / 709 / 201	1018 / 876 / 164	989 / 825 / 256	1096 / 1029 / 212	917 / 787 / 199	1093 / 948 / 159	919 / 802 / 130	921 / 967 / 104	986 / 748 / 188	1054 / 947 / 158	1031 / 895 / 247	1125 / 1059 / 194	957 / 824 / 186	1173 / 1019 / 153										
Wind Speed [mph]		190								200																	
100	1	902 / 366 / 165	954 / 499 / 147	891 / 491 / 225	955 / 663 / 201	898 / 617 / 308	981 / 799 / 264	733 / 618 / 252	889 / 761 / 206	913 / 397 / 160	973 / 539 / 143	905 / 531 / 219	977 / 714 / 195	924 / 666 / 300	1014 / 857 / 256	767 / 650 / 239	919 / 790 / 192										
	2	954 / 499 / 147	1037 / 668 / 130	955 / 675 / 201	1015 / 866 / 170	981 / 810 / 264	1038 / 977 / 212	889 / 772 / 206	1068 / 938 / 166	973 / 539 / 143	1063 / 717 / 126	977 / 727 / 195	1042 / 926 / 164	979 / 839 / 247	1090 / 1038 / 203	919 / 801 / 192	1135 / 999 / 159										
	3	939 / 865 / 126	944 / 1034 / 100	1014 / 809 / 182	1045 / 976 / 146	1033 / 927 / 229	1195 / 1127 / 185	1027 / 887 / 179	1249 / 1087 / 146	925 / 894 / 117	965 / 1097 / 95	1041 / 867 / 176	1074 / 1037 / 140	1069 / 988 / 220	1259 / 1190 / 176	1052 / 910 / 166	1320 / 1151 / 139										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	393 / 270 / 41	487 / 362 / 36	421 / 366 / 46	503 / 466 / 38	500 / 424 / 47	612 / 541 / 39	503 / 399 / 52	607 / 500 / 43	412 / 288 / 40	510 / 384 / 35	442 / 390 / 44	526 / 492 / 36	524 / 448 / 45	637 / 567 / 37	517 / 415 / 49	632 / 524 / 41	437 / 312 / 39	531 / 405 / 33	462 / 413 / 43	536 / 506 / 34	546 / 472 / 43	660 / 591 / 36
Wind Speed [mph]		110								115															
Wind Speed [mph]		120								130															

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs																							
Wind Speed [mph]		140								150								160															
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge									
		0	1	504 / 379 / 35	602 / 476 / 28	520 / 486 / 36	612 / 595 / 29	630 / 560 / 37	761 / 694 / 31	625 / 517 / 41	757 / 640 / 33	541 / 415 / 33	655 / 525 / 27	545 / 517 / 34	647 / 636 / 27	670 / 601 / 35	798 / 733 / 28	665 / 555 / 38	818 / 696 / 32	575 / 448 / 31	689 / 558 / 25	576 / 554 / 31	693 / 688 / 26	703 / 636 / 32	850 / 785 / 26	717 / 602 / 36	873 / 747 / 30						
Wind Speed [mph]		170								180								190								200							
0	1	605 / 478 / 29	735 / 600 / 24	602 / 585 / 29	736 / 735 / 24	749 / 682 / 31	895 / 830 / 25	744 / 629 / 33	922 / 791 / 28	630 / 503 / 27	777 / 640 / 23	638 / 626 / 28	774 / 777 / 23	790 / 724 / 29	932 / 868 / 23	786 / 668 / 32	963 / 829 / 26	605 / 478 / 29	735 / 600 / 24	602 / 585 / 29	736 / 735 / 24	749 / 682 / 31	895 / 830 / 25	744 / 629 / 33	922 / 791 / 28	630 / 503 / 27	777 / 640 / 23	638 / 626 / 28	774 / 777 / 23	790 / 724 / 29	932 / 868 / 23	786 / 668 / 32	963 / 829 / 26
0	2	735 / 600 / 24	888 / 742 / 20	714 / 726 / 24	867 / 897 / 20	895 / 841 / 25	1057 / 1006 / 20	922 / 803 / 28	1100 / 967 / 22	777 / 640 / 23	928 / 780 / 18	750 / 766 / 22	897 / 933 / 18	932 / 880 / 23	1131 / 1079 / 19	963 / 841 / 26	1180 / 1040 / 22	735 / 600 / 24	888 / 742 / 20	714 / 726 / 24	867 / 897 / 20	895 / 841 / 25	1057 / 1006 / 20	922 / 803 / 28	1100 / 967 / 22	777 / 640 / 23	928 / 780 / 18	750 / 766 / 22	897 / 933 / 18	932 / 880 / 23	1131 / 1079 / 19	963 / 841 / 26	1180 / 1040 / 22
0	3	715 / 897 / 18	834 / 1063 / 14	830 / 840 / 21	979 / 1004 / 17	1023 / 958 / 21	1221 / 1153 / 17	1061 / 917 / 24	1279 / 1115 / 20	742 / 936 / 17	891 / 1138 / 13	864 / 878 / 20	1047 / 1078 / 16	1099 / 1032 / 21	1299 / 1229 / 16	1096 / 950 / 22	1364 / 1191 / 19	715 / 897 / 18	834 / 1063 / 14	830 / 840 / 21	979 / 1004 / 17	1023 / 958 / 21	1221 / 1153 / 17	1061 / 917 / 24	1279 / 1115 / 20	742 / 936 / 17	891 / 1138 / 13	864 / 878 / 20	1047 / 1078 / 16	1099 / 1032 / 21	1299 / 1229 / 16	1096 / 950 / 22	1364 / 1191 / 19
0	1	666 / 536 / 26	815 / 675 / 22	672 / 663 / 27	806 / 813 / 22	826 / 761 / 27	998 / 932 / 22	848 / 723 / 31	1033 / 892 / 25	698 / 567 / 25	847 / 705 / 20	701 / 697 / 25	831 / 842 / 20	856 / 792 / 26	1061 / 994 / 21	880 / 754 / 29	1058 / 916 / 23	666 / 536 / 26	815 / 675 / 22	672 / 663 / 27	806 / 813 / 22	826 / 761 / 27	998 / 932 / 22	848 / 723 / 31	1033 / 892 / 25	698 / 567 / 25	847 / 705 / 20	701 / 697 / 25	831 / 842 / 20	856 / 792 / 26	1061 / 994 / 21	880 / 754 / 29	1058 / 916 / 23

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	480 / 261 / 56	538 / 362 / 50	493 / 360 / 82	531 / 466 / 69	500 / 424 / 92	612 / 541 / 77	503 / 399 / 85	607 / 500 / 70	495 / 284 / 55	549 / 384 / 48	502 / 384 / 80	542 / 492 / 67	524 / 448 / 89	637 / 567 / 74	517 / 415 / 80	632 / 524 / 67	503 / 302 / 53	559 / 405 / 46	511 / 406 / 77	540 / 506 / 63	546 / 472 / 86	660 / 591 / 71	539 / 436 / 77	655 / 545 / 64
	2	538 / 362 / 50	584 / 459 / 41	531 / 475 / 69	583 / 574 / 55	599 / 536 / 76	726 / 669 / 62	607 / 507 / 70	741 / 634 / 58	549 / 384 / 48	608 / 482 / 39	531 / 492 / 66	619 / 614 / 54	623 / 562 / 72	749 / 693 / 59	632 / 531 / 67	766 / 658 / 55	559 / 405 / 46	630 / 503 / 38	540 / 516 / 63	638 / 637 / 51	660 / 599 / 71	790 / 734 / 57	655 / 553 / 64	786 / 677 / 52
	3	490 / 566 / 38	571 / 699 / 31	571 / 546 / 60	675 / 667 / 49	683 / 617 / 66	830 / 765 / 54	696 / 583 / 61	852 / 727 / 50	497 / 591 / 36	587 / 721 / 29	581 / 560 / 56	696 / 691 / 46	725 / 658 / 64	877 / 811 / 52	721 / 607 / 58	873 / 748 / 47	511 / 614 / 34	617 / 763 / 28	615 / 597 / 55	734 / 732 / 45	746 / 680 / 61	892 / 827 / 49	742 / 627 / 55	919 / 789 / 46
20	1	524 / 253 / 62	572 / 349 / 55	523 / 343 / 93	578 / 466 / 82	505 / 424 / 114	612 / 541 / 96	503 / 399 / 99	607 / 500 / 81	529 / 270 / 60	580 / 370 / 53	539 / 371 / 91	587 / 492 / 79	524 / 448 / 110	637 / 567 / 91	517 / 415 / 94	632 / 524 / 78	542 / 292 / 59	598 / 398 / 52	545 / 393 / 88	584 / 506 / 75	546 / 472 / 106	660 / 591 / 87	539 / 436 / 90	655 / 545 / 74
	2	572 / 349 / 55	626 / 459 / 47	578 / 475 / 82	596 / 574 / 65	599 / 536 / 94	726 / 669 / 77	607 / 507 / 81	741 / 634 / 67	580 / 370 / 53	636 / 482 / 45	576 / 492 / 78	619 / 614 / 64	623 / 562 / 89	749 / 693 / 73	632 / 531 / 78	766 / 658 / 64	598 / 398 / 52	644 / 503 / 43	584 / 516 / 75	638 / 637 / 61	660 / 599 / 87	790 / 734 / 71	655 / 553 / 74	786 / 677 / 60
	3	531 / 566 / 43	571 / 699 / 35	602 / 546 / 71	675 / 667 / 58	683 / 617 / 81	830 / 765 / 67	696 / 583 / 71	852 / 727 / 59	536 / 591 / 41	587 / 721 / 33	598 / 560 / 67	696 / 691 / 54	725 / 658 / 79	877 / 811 / 65	721 / 607 / 67	873 / 748 / 55	539 / 614 / 39	617 / 763 / 32	620 / 597 / 65	734 / 732 / 53	746 / 680 / 75	892 / 827 / 60	742 / 627 / 64	919 / 789 / 53
25	1	524 / 253 / 62	572 / 349 / 55	523 / 343 / 93	578 / 466 / 82	535 / 424 / 137	612 / 541 / 115	503 / 399 / 116	607 / 500 / 95	529 / 270 / 60	580 / 370 / 53	539 / 371 / 91	587 / 492 / 79	547 / 448 / 132	637 / 567 / 110	517 / 415 / 110	632 / 524 / 91	542 / 292 / 59	598 / 398 / 52	545 / 393 / 88	584 / 506 / 75	557 / 472 / 127	660 / 591 / 105	539 / 436 / 106	655 / 545 / 87
	2	572 / 349 / 55	626 / 459 / 47	578 / 475 / 82	596 / 574 / 65	599 / 536 / 112	726 / 669 / 93	607 / 507 / 95	741 / 634 / 79	580 / 370 / 53	636 / 482 / 45	576 / 492 / 78	619 / 614 / 64	623 / 562 / 107	749 / 693 / 88	632 / 531 / 91	766 / 658 / 75	598 / 398 / 52	644 / 503 / 43	584 / 516 / 75	638 / 637 / 61	660 / 599 / 105	790 / 734 / 85	655 / 553 / 87	786 / 677 / 71
	3	531 / 566 / 43	571 / 699 / 35	602 / 546 / 71	675 / 667 / 58	683 / 617 / 98	830 / 765 / 80	696 / 583 / 83	852 / 727 / 69	536 / 591 / 41	587 / 721 / 33	598 / 560 / 67	696 / 691 / 54	725 / 658 / 95	877 / 811 / 78	721 / 607 / 79	873 / 748 / 64	539 / 614 / 39	617 / 763 / 32	620 / 597 / 65	734 / 732 / 53	746 / 680 / 90	892 / 827 / 73	742 / 627 / 75	919 / 789 / 62
15	1	518 / 324 / 52	568 / 425 / 45	519 / 428 / 75	554 / 528 / 60	566 / 493 / 82	680 / 612 / 67	560 / 456 / 74	675 / 565 / 61	525 / 341 / 51	576 / 444 / 43	526 / 449 / 72	571 / 548 / 58	585 / 513 / 79	696 / 630 / 64	579 / 474 / 71	710 / 596 / 59	518 / 324 / 52	568 / 425 / 45	519 / 428 / 75	554 / 528 / 60	566 / 493 / 82	680 / 612 / 67	560 / 456 / 74	675 / 565 / 61
	2	568 / 425 / 45	665 / 535 / 37	554 / 538 / 60	655 / 657 / 49	680 / 620 / 67	805 / 751 / 54	675 / 573 / 61	826 / 714 / 50	576 / 444 / 43	683 / 552 / 35	571 / 558 / 58	687 / 693 / 47	696 / 639 / 64	842 / 788 / 52	710 / 605 / 59	865 / 750 / 49	568 / 425 / 45	665 / 535 / 37	554 / 538 / 60	655 / 657 / 49	680 / 620 / 67	805 / 751 / 54	675 / 573 / 61	826 / 714 / 50
	3	538 / 651 / 33	647 / 803 / 27	633 / 618 / 53	747 / 749 / 42	785 / 718 / 59	933 / 868 / 47	781 / 662 / 53	962 / 828 / 44	549 / 668 / 32	652 / 814 / 26	648 / 637 / 50	781 / 786 / 41	799 / 734 / 56	971 / 906 / 46	819 / 697 / 52	1004 / 865 / 43	538 / 651 / 33	647 / 803 / 27	633 / 618 / 53	747 / 749 / 42	785 / 718 / 59	933 / 868 / 47	781 / 662 / 53	962 / 828 / 44
20	1	546 / 308 / 57	605 / 417 / 50	560 / 421 / 87	590 / 528 / 71	566 / 493 / 102	680 / 612 / 83	560 / 456 / 87	675 / 565 / 71	559 / 330 / 56	623 / 444 / 49	565 / 441 / 84	595 / 548 / 68	585 / 513 / 98	696 / 630 / 79	579 / 474 / 83	710 / 596 / 69	546 / 308 / 57	605 / 417 / 50	560 / 421 / 87	590 / 528 / 71	566 / 493 / 102	680 / 612 / 83	560 / 456 / 87	675 / 565 / 71
	2	605 / 417 / 50	666 / 535 / 42	590 / 538 / 71	655 / 657 / 58	680 / 620 / 83	805 / 751 / 67	675 / 573 / 71	826 / 714 / 59	623 / 444 / 49	683 / 552 / 40	595 / 558 / 68	687 / 693 / 56	696 / 639 / 79	842 / 788 / 65	710 / 605 / 60	865 / 750 / 57	605 / 417 / 50	666 / 535 / 42	590 / 538 / 71	655 / 657 / 58	680 / 620 / 83	805 / 751 / 67	675 / 573 / 71	826 / 714 / 59
	3	555 / 651 / 38	647 / 803 / 31	633 / 618 / 62	747 / 749 / 50	785 / 718 / 73	933 / 868 / 58	781 / 662 / 62	962 / 828 / 52	555 / 668 / 36	652 / 814 / 29	648 / 637 / 59	781 / 786 / 48	799 / 734 / 69	971 / 906 / 56	819 / 697 / 60	1004 / 865 / 50	555 / 651 / 38	647 / 803 / 31	633 / 618 / 62	747 / 749 / 50	785 / 718 / 73	933 / 868 / 58	781 / 662 / 62	962 / 828 / 52
25	1	546 / 308 / 57	605 / 417 / 50	560 / 421 / 87	590 / 528 / 71	567 / 493 / 122	680 / 612 / 100	560 / 456 / 102	675 / 565 / 83	559 / 330 / 56	623 / 444 / 49	565 / 441 / 84	595 / 548 / 68	585 / 513 / 117	696 / 630 / 95	579 / 474 / 97	710 / 596 / 81	546 / 308 / 57	605 / 417 / 50	560 / 421 / 87	590 / 528 / 71	567 / 493 / 122	680 / 612 / 100	560 / 456 / 102	675 / 565 / 83
	2	605 / 417 / 50	666 / 535 / 42	590 / 538 / 71	655 / 657 / 58	680 / 620 / 100	805 / 751 / 80	675 / 573 / 83	826 / 714 / 69	623 / 444 / 49	683 / 552 / 40	595 / 558 / 68	687 / 693 / 56	696 / 639 / 95	842 / 788 / 78	710 / 605 / 81	865 / 750 / 67	605 / 417 / 50	666 / 535 / 42	590 / 538 / 71	655 / 657 / 58	680 / 620 / 100	805 / 751 / 80	675 / 573 / 83	826 / 714 / 69
	3	555 / 651 / 38	647 / 803 / 31	633 / 618 / 62	747 / 749 / 50	785 / 718 / 88	933 / 868 / 70	781 / 662 / 73	962 / 828 / 60	555 / 668 / 36	652 / 814 / 29	648 / 637 / 59	781 / 786 / 48	799 / 734 / 83	971 / 906 / 68	819 / 697 / 71	1004 / 865 / 58	555 / 651 / 38	647 / 803 / 31	633 / 618 / 62	747 / 749 / 50	785 / 718 / 88	933 / 868 / 70	781 / 662 / 73	962 / 828 / 60
15	1	540 / 364 / 50	587 / 460 / 41	532 / 468 / 69	599 / 579 / 56	601 / 531 / 76	729 / 663 / 62	609 / 502 / 70	725 / 611 / 56	525 / 341 / 51	576 / 444 / 43	526 / 449 / 72	571 / 548 / 58	585 / 513 / 79	696 / 630 / 64	579 / 474 / 71	710 / 596 / 59	540 / 364 / 50	587 / 460 / 41	532 / 468 / 69	599 / 579 / 56	601 / 531 / 76	729 / 663 / 62	609 / 502 / 70	725 / 611 / 56
	2	587 / 460 / 41	715 / 582 / 34	585 / 576 / 55	698 / 707 / 45	729 / 672 / 62	877 / 823 / 51	725 / 620 / 56	902 / 784 / 47	576 / 444 / 43	683 / 552 / 35	571 / 558 / 58	687 / 693 / 47	696 / 639 / 64	842 / 788 / 52	710 / 605 / 59	865 / 750 / 49	587 / 460 / 41	715 / 582 / 34	585 / 576 / 55	698 / 707 / 45	729 / 672 / 62	877 / 823 / 51	725 / 620 / 56	902 / 784 / 47
	3	574 / 702 / 31	678 / 848 / 25	678 / 670 / 49	813 / 821 / 40	834 / 768 / 54	1007 / 941 / 44	830 / 708 / 49	1043 / 901 / 41	549 / 668 / 32	652 / 814 / 26	648 / 637 / 50	781 / 786 / 41	799 / 734 / 56	971 / 906 / 46	819 / 697 / 52	1004 / 865 / 43	574 / 702 / 31	678 / 848 / 25	678 / 670 / 49	813 / 821 / 40	834 / 768 / 54	1007 / 941 / 44	830 / 708 / 49	1043 / 901 / 41
20	1	573 / 351 / 55	627 / 460 / 47	580 / 468 / 82	612 / 579 / 67	601 / 531 / 94	729 / 663 / 77	609 / 502 / 81	725 / 611 / 66	559 / 330 / 56	623 / 444 / 49	565 / 441 / 84	595 / 548 / 68	585 / 513 / 98	696 / 630 / 79	579 / 474 / 83	710 / 596 / 69	573 / 351 / 55	627 / 460 / 47	580 / 468 / 82	612 / 579 / 67	601 / 531 / 94	729 / 663 / 77	609 / 502 / 81	725 / 611 / 66
	2	627 / 460 / 47	715 / 582 / 39	598 / 576 / 65	698 / 707 / 53	729 / 672 / 77	877 / 823 / 63	725 / 620 / 66	902 / 784 / 55	623 / 444 / 49	683 / 552 / 40	595 / 558 / 68	687 / 693 / 56	696 / 639 / 79	842 / 788 / 65	710 / 605 / 69	865 / 750 / 57	627 / 460 / 47	715 / 582 / 39	598 / 576 / 65	698 / 707 / 53	729 / 672 / 77	877 / 823 / 63	725 / 620 / 66	902 / 784 / 55
	3	574 / 702 / 35	678 / 848 / 28	678 / 670 / 58	813 / 821 / 47	834 / 768 / 67	1007 / 941 / 54	830 / 708 / 57	1043 / 901 / 48	555 / 668 / 36	652 / 814 / 29	648 / 637 / 59	781 / 786 / 48	799 / 734 / 69	971 / 906 / 56	819 / 697 / 60	1004 / 865 / 50	574 / 702 / 35	678 / 848 / 28	678 / 670 / 58	813 / 821 / 47	834 / 768 / 67	1007 / 941 / 54	830 / 708 / 57	1043 / 901 / 48
25	1	573 / 351 / 55	627 / 460 / 47	580 / 468 / 82	612 / 579 / 67	601 / 531 / 112	729 / 663 / 93	609 / 502 / 95	725 / 611 / 77	559 / 330 / 56	623 / 444 / 49	565 / 441 / 84	595 / 548 / 68	585 / 513 / 117	696 / 630 / 95	579 / 474 / 97	710 / 596 / 81	573 / 351 / 55	627 / 460 / 47	580 / 468 / 82	612 / 579 / 67	601 / 531 / 112	729 / 663 / 93	609 / 502 / 95	725 / 611 / 77
	2	627 / 460 / 47	715 / 582 / 39	598 / 576 / 65	698 / 707 / 53	729 / 672 / 93	877 / 823 / 75	725 / 620 / 77	902 / 784 / 64	623 / 444 / 49	683 / 552 / 40	595 / 558 / 68	687 / 693 / 56	696 / 639 / 95	842 / 788 / 78	710 / 605 / 81	865 / 750 / 67	627 / 460 / 47	715 / 582 / 39	598 / 576 / 65	698 / 707 / 53	729 / 672 / 93	877 / 823 / 75	725 / 620 / 77	902 / 784 / 64

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		15	1	545 / 379 / 48	602 / 476 / 39	537 / 486 / 67	612 / 595 / 54	630 / 560 / 74	761 / 694 / 61	625 / 517 / 67	757 / 640 / 55	564 / 415 / 45	655 / 525 / 38	545 / 517 / 62	647 / 636 / 50	670 / 601 / 69	798 / 733 / 56	665 / 555 / 62	818 / 696 / 52	580 / 448 / 43	689 / 558 / 35	576 / 554 / 58	693 / 688 / 47	703 / 636 / 64	850 / 785 / 52	717 / 602 / 59	873 / 747 / 49	602 / 476 / 39	728 / 595 / 32	612 / 606 / 54	726 / 739 / 43	740 / 684 / 59	910 / 856 / 49	757 / 650 / 55	938 / 817 / 46	655 / 525 / 38	786 / 649 / 31	647 / 647 / 50	780 / 799 / 41	798 / 743 / 56	970 / 917 / 46	818 / 706 / 52	1002 / 877 / 43	689 / 558 / 35	840 / 698 / 29	674 / 680 / 46	827 / 852 / 38	850 / 795 / 52	1019 / 967 / 42
20	1	576 / 366 / 53	630 / 476 / 45	583 / 486 / 79	614 / 595 / 64	630 / 560 / 91	761 / 694 / 75	625 / 517 / 78	757 / 640 / 64	601 / 407 / 51	662 / 525 / 43	587 / 517 / 73	647 / 636 / 59	670 / 601 / 85	798 / 733 / 69	665 / 555 / 73	818 / 696 / 60	627 / 448 / 49	689 / 558 / 40	599 / 554 / 68	693 / 688 / 56	703 / 636 / 79	850 / 785 / 65	717 / 602 / 69	873 / 747 / 57	630 / 476 / 45	728 / 595 / 37	614 / 606 / 64	726 / 739 / 51	740 / 684 / 73	910 / 856 / 60	757 / 650 / 64	938 / 817 / 53	662 / 525 / 43	786 / 649 / 35	647 / 647 / 59	780 / 799 / 48	798 / 743 / 69	970 / 917 / 56	818 / 706 / 60	1002 / 877 / 50	689 / 558 / 40	840 / 698 / 33	674 / 680 / 54	827 / 852 / 45	850 / 795 / 65	1019 / 967 / 52	873 / 758 / 57	1057 / 927 / 46
25	1	576 / 366 / 53	630 / 476 / 45	583 / 486 / 79	614 / 595 / 64	630 / 560 / 110	761 / 694 / 90	625 / 517 / 91	757 / 640 / 75	601 / 407 / 51	662 / 525 / 43	587 / 517 / 73	647 / 636 / 59	670 / 601 / 103	798 / 733 / 83	665 / 555 / 85	818 / 696 / 71	627 / 448 / 49	689 / 558 / 40	599 / 554 / 68	693 / 688 / 56	703 / 636 / 95	850 / 785 / 78	717 / 602 / 81	873 / 747 / 67	630 / 476 / 45	728 / 595 / 37	614 / 606 / 64	726 / 739 / 51	740 / 684 / 88	910 / 856 / 73	757 / 650 / 75	938 / 817 / 62	662 / 525 / 43	786 / 649 / 35	647 / 647 / 59	780 / 799 / 48	798 / 743 / 83	970 / 917 / 68	818 / 706 / 71	1002 / 877 / 58	689 / 558 / 40	840 / 698 / 33	674 / 680 / 54	827 / 852 / 45	850 / 795 / 78	1019 / 967 / 63	873 / 758 / 67	1057 / 927 / 54
15	2	597 / 734 / 30	701 / 881 / 24	688 / 683 / 46	844 / 855 / 38	867 / 801 / 52	1040 / 974 / 42	863 / 739 / 47	1079 / 933 / 40	622 / 771 / 27	742 / 938 / 22	741 / 741 / 43	899 / 915 / 36	928 / 862 / 49	1096 / 1030 / 39	925 / 795 / 44	1141 / 990 / 37	659 / 822 / 26	808 / 1026 / 21	788 / 794 / 41	944 / 966 / 33	981 / 915 / 46	1191 / 1122 / 37	977 / 843 / 41	1188 / 1034 / 34	597 / 734 / 30	701 / 881 / 24	688 / 683 / 46	844 / 855 / 38	867 / 801 / 52	1040 / 974 / 42	863 / 739 / 47	1079 / 933 / 40	622 / 771 / 27	742 / 938 / 22	741 / 741 / 43	899 / 915 / 36	928 / 862 / 49	1096 / 1030 / 39	925 / 795 / 44	1141 / 990 / 37	659 / 822 / 26	808 / 1026 / 21	788 / 794 / 41	944 / 966 / 33	981 / 915 / 46	1191 / 1122 / 37	977 / 843 / 41	1188 / 1034 / 34
20	2	597 / 734 / 30	701 / 881 / 24	688 / 683 / 46	844 / 855 / 38	867 / 801 / 52	1040 / 974 / 42	863 / 739 / 47	1079 / 933 / 40	622 / 771 / 27	742 / 938 / 22	741 / 741 / 43	899 / 915 / 36	928 / 862 / 49	1096 / 1030 / 39	925 / 795 / 44	1141 / 990 / 37	659 / 822 / 26	808 / 1026 / 21	788 / 794 / 41	944 / 966 / 33	981 / 915 / 46	1191 / 1122 / 37	977 / 843 / 41	1188 / 1034 / 34	597 / 734 / 30	701 / 881 / 24	688 / 683 / 46	844 / 855 / 38	867 / 801 / 52	1040 / 974 / 42	863 / 739 / 47	1079 / 933 / 40	622 / 771 / 27	742 / 938 / 22	741 / 741 / 43	899 / 915 / 36	928 / 862 / 49	1096 / 1030 / 39	925 / 795 / 44	1141 / 990 / 37	659 / 822 / 26	808 / 1026 / 21	788 / 794 / 41	944 / 966 / 33	981 / 915 / 46	1191 / 1122 / 37	977 / 843 / 41	1188 / 1034 / 34
25	2	597 / 734 / 30	701 / 881 / 24	688 / 683 / 46	844 / 855 / 38	867 / 801 / 52	1040 / 974 / 42	863 / 739 / 47	1079 / 933 / 40	622 / 771 / 27	742 / 938 / 22	741 / 741 / 43	899 / 915 / 36	928 / 862 / 49	1096 / 1030 / 39	925 / 795 / 44	1141 / 990 / 37	659 / 822 / 26	808 / 1026 / 21	788 / 794 / 41	944 / 966 / 33	981 / 915 / 46	1191 / 1122 / 37	977 / 843 / 41	1188 / 1034 / 34	597 / 734 / 30	701 / 881 / 24	688 / 683 / 46	844 / 855 / 38	867 / 801 / 52	1040 / 974 / 42	863 / 739 / 47	1079 / 933 / 40	622 / 771 / 27	742 / 938 / 22	741 / 741 / 43	899 / 915 / 36	928 / 862 / 49	1096 / 1030 / 39	925 / 795 / 44	1141 / 990 / 37	659 / 822 / 26	808 / 1026 / 21	788 / 794 / 41	944 / 966 / 33	981 / 915 / 46	1191 / 1122 / 37	977 / 843 / 41	1188 / 1034 / 34
15	3	605 / 478 / 40	735 / 600 / 33	602 / 585 / 54	736 / 735 / 45	749 / 682 / 61	895 / 830 / 49	744 / 629 / 55	922 / 791 / 46	630 / 503 / 38	777 / 640 / 32	638 / 626 / 51	774 / 777 / 42	790 / 724 / 57	932 / 868 / 46	786 / 668 / 52	963 / 829 / 43	605 / 478 / 40	735 / 600 / 33	602 / 585 / 54	736 / 735 / 45	749 / 682 / 61	895 / 830 / 49	744 / 629 / 55	922 / 791 / 46	630 / 503 / 38	777 / 640 / 32	638 / 626 / 51	774 / 777 / 42	790 / 724 / 57	932 / 868 / 46	786 / 668 / 52	963 / 829 / 43	605 / 478 / 40	735 / 600 / 33	602 / 585 / 54	736 / 735 / 45	749 / 682 / 61	895 / 830 / 49	744 / 629 / 55	922 / 791 / 46	630 / 503 / 38	777 / 640 / 32	638 / 626 / 51	774 / 777 / 42	790 / 724 / 57	932 / 868 / 46	786 / 668 / 52	963 / 829 / 43
20	3	715 / 897 / 25	834 / 1063 / 19	830 / 840 / 38	979 / 1004 / 30	1023 / 958 / 42	1221 / 1153 / 34	1061 / 917 / 40	1279 / 1115 / 32	742 / 936 / 23	891 / 1138 / 19	864 / 878 / 36	1047 / 1078 / 29	1099 / 1032 / 41	1299 / 1229 / 32	1096 / 950 / 37	1364 / 1191 / 31	715 / 897 / 25	834 / 1063 / 19	830 / 840 / 38	979 / 1004 / 30	1023 / 958 / 42	1221 / 1153 / 34	1061 / 917 / 40	1279 / 1115 / 32	742 / 936 / 23	891 / 1138 / 19	864 / 878 / 36	1047 / 1078 / 29	1099 / 1032 / 41	1299 / 1229 / 32	1096 / 950 / 37	1364 / 1191 / 31	715 / 897 / 25	834 / 1063 / 19	830 / 840 / 38	979 / 1004 / 30	1023 / 958 / 42	1221 / 1153 / 34	1061 / 917 / 40	1279 / 1115 / 32	742 / 936 / 23	891 / 1138 / 19	864 / 878 / 36	1047 / 1078 / 29	1099 / 1032 / 41	1299 / 1229 / 32	1096 / 950 / 37	1364 / 1191 / 31
25	3	715 / 897 / 25	834 / 1063 / 19	830 / 840 / 38	979 / 1004 / 30	1023 / 958 / 42	1221 / 1153 / 34	1061 / 917 / 40	1279 / 1115 / 32	742 / 936 / 23	891 / 1138 / 19	864 / 878 / 36	1047 / 1078 / 29	1099 / 1032 / 41	1299 / 1229 / 32	1096 / 950 / 37	1364 / 1191 / 31	715 / 897 / 25	834 / 1063 / 19	830 / 840 / 38	979 / 1004 / 30	1023 / 958 / 42	1221 / 1153 / 34	1061 / 917 / 40	1279 / 1115 / 32	742 / 936 / 23	891 / 1138 / 19	864 / 878 / 36	1047 / 1078 / 29	1099 / 1032 / 41	1299 / 1229 / 32	1096 / 950 / 37	1364 / 1191 / 31	715 / 897 / 25	834 / 1063 / 19	830 / 840 / 38	979 / 1004 / 30	1023 / 958 / 42	1221 / 1153 / 34	1061 / 917 / 40	1279 / 1115 / 32	742 / 936 / 23	891 / 1138 / 19	864 / 878 / 36	1047 / 1078 / 29	1099 / 1032 / 41	1299 / 1229 / 32	1096 / 950 / 37	1364 / 1191 / 31
15	1	666 / 536 / 36	815 / 675 / 30	672 / 663 / 49	806 / 813 / 40	826 / 761 / 54	998 / 932 / 44	848 / 723 / 50	1033 / 892 / 41	698 / 567 / 34	847 / 705 / 28	701 / 697 / 46	831 / 842 / 37	856 / 792 / 51	1061 / 994 / 42	880 / 754 / 47	1058 / 916 / 38	666 / 536 / 36	815 / 675 / 30	672 / 663 / 49	806 / 813 / 40	826 / 761 / 54	998 / 932 / 44	848 / 723 / 50	1033 / 892 / 41	698 / 567 / 34	847 / 705 / 28	701 / 697 / 46	831 / 842 / 37	856 / 792 / 51	1061 / 994 / 42	880 / 754 / 47	1058 / 916 / 38	666 / 536 / 36	815 / 675 / 30	672 / 663 / 49	806 / 813 / 40	826 / 761 / 54	998 / 932 / 44	848 / 723 / 50	1033 / 892 / 41	698 / 567 / 34	847 / 705 / 28	701 / 697 / 46	831 / 842 / 37	856 / 792 / 51	1061 / 994 / 42	880 / 754 / 47	1058 / 916 / 38
20	1	666 / 536 / 41	815 / 675 / 34	672 / 663 / 58	806 / 813 / 47	826 / 761 / 67	998 / 932 / 54	848 / 723 / 59	1033 / 892 / 48	698 / 567 / 39	847 / 705 / 32	701 / 697 / 54	831 / 842 / 44	856 / 792 / 63	1061 / 994 / 52	880 / 754 / 55	1058 / 916 / 44	666 / 536 / 41	815 / 675 / 34	672 / 663 / 58	806 / 813 / 47	826 / 761 / 67	998 / 932 / 54	848 / 723 / 59	1033 / 892 / 48	698 / 567 / 39	847 / 705 / 32	701 / 697 / 54	831 / 842 / 44	856 / 792 / 63	1061 / 994 / 52	880 / 754 / 55	1058 / 916 / 44	666 / 536 / 41	815 / 675 / 34	672 / 663 / 58	806 / 813 / 47	826 / 761 / 67	998 / 932 / 54	848 / 723 / 59	1033 / 892 / 48	698 / 567 / 39	847 / 705 / 32	701 / 697 / 54	831 / 842 / 44	856 / 792 / 63	1061 / 994 / 52	880 / 754 / 55	1058 / 916 / 44
25	1	666 / 536 / 41	815 / 675 / 34	672 / 663 / 58	806 / 813 / 47	826 / 761 / 67	998 / 932 / 54	848 / 723 / 59	1033 / 892 / 48	698 / 567 / 39	847 / 705 / 32	701 / 697 / 54	831 / 842 / 44	856 / 792 / 63	1061 / 994 / 52	880 / 754 / 55	1058 / 916 / 44	666 / 536 / 41	815 / 675 / 34	672 / 663 / 58	806 / 813 / 47	826 / 761 / 67	998 / 932 / 54	848 / 723 / 59	1033 / 892 / 48	698 / 567 / 39	847 / 705 / 32	701 / 697 / 54	831 / 842 / 44	856 / 792 / 63	1061 / 994 / 52	880 / 754 / 55	1058 / 916 / 44	666 / 536 / 41	815 / 675 / 34	672 / 663 / 58	806 / 813 / 47	826 / 761 / 67	998 / 932 / 54	848 / 723 / 59	1033 / 892 / 48	698 / 567 / 39	847 / 705 / 32	701 / 697 / 54	831 / 842 / 44	856 / 792 / 63	1061 / 994 / 52	880 / 754 / 55	1058 / 916 / 44
15	2	815 / 675 / 30	996 / 840 / 25	806 / 828 / 40	958 / 999 / 32	998 / 945 / 44	1202 / 1149 / 36	1033 / 905 / 41	1256 / 1110 / 34	847 / 705 / 28	1023 / 866 / 23	831 / 857 / 37	1015 / 1062 / 30	1019 / 967 / 41	1267 / 1213 / 34	1058 / 929 / 38	1327 / 1174 / 32	815 / 675 / 30	996 / 840 / 25	806 / 828 / 40	958 / 999 / 32	998 / 945 / 44	1202 / 1149 / 36	1033 / 905 / 41	1256 / 1110 / 34	847 / 705 / 28	1023 / 866 / 23	831 / 857 / 37	1015 / 1062 / 30	1019 / 967 / 41	1267 / 1213 / 34	1058 / 929 / 38	1327 / 1174 / 32	815 / 675 / 30	996 / 840 / 25	806 / 828 / 40	958 / 999 / 32	998 / 945 / 44	1202 / 1149 / 36	1033 / 905 / 41	1256 / 1110 / 34	847 / 705 / 28	1023 / 866 / 23	831 / 857 / 37	1015 / 1062 / 30</				

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	537 / 245 / 64	589 / 343 / 57	543 / 337 / 99	592 / 457 / 87	565 / 424 / 160	618 / 541 / 134	503 / 399 / 133	607 / 500 / 109	550 / 266 / 63	595 / 363 / 55	548 / 358 / 96	612 / 492 / 86	576 / 448 / 155	637 / 567 / 128	517 / 415 / 126	632 / 524 / 105	553 / 282 / 61	612 / 390 / 54	562 / 386 / 94	607 / 506 / 81	585 / 472 / 149	660 / 591 / 123	539 / 436 / 121	655 / 545 / 100
	2	589 / 343 / 57	649 / 459 / 50	592 / 466 / 87	616 / 574 / 71	604 / 536 / 131	726 / 669 / 108	607 / 507 / 109	741 / 634 / 90	595 / 363 / 55	658 / 482 / 48	600 / 492 / 84	639 / 614 / 69	623 / 562 / 126	749 / 693 / 102	632 / 531 / 105	766 / 658 / 86	612 / 390 / 54	666 / 503 / 46	607 / 516 / 81	645 / 637 / 66	660 / 599 / 123	790 / 734 / 99	655 / 553 / 100	786 / 677 / 81
	3	552 / 566 / 46	586 / 699 / 37	625 / 546 / 77	675 / 667 / 62	683 / 617 / 114	830 / 765 / 94	696 / 583 / 95	852 / 727 / 79	556 / 591 / 44	588 / 721 / 35	619 / 560 / 72	696 / 691 / 59	725 / 658 / 111	877 / 811 / 91	721 / 607 / 90	873 / 748 / 74	559 / 614 / 42	617 / 763 / 34	640 / 597 / 71	734 / 732 / 57	746 / 680 / 105	892 / 827 / 85	742 / 627 / 86	919 / 789 / 71
	1	561 / 237 / 67	604 / 330 / 60	563 / 326 / 109	616 / 449 / 97	584 / 416 / 180	643 / 541 / 154	503 / 399 / 150	607 / 500 / 123	572 / 257 / 66	620 / 356 / 59	576 / 352 / 107	634 / 483 / 95	593 / 440 / 174	654 / 567 / 147	517 / 415 / 142	632 / 524 / 118	583 / 277 / 65	636 / 382 / 58	589 / 379 / 105	639 / 506 / 92	601 / 462 / 167	663 / 591 / 140	539 / 436 / 137	655 / 545 / 113
	2	604 / 330 / 60	669 / 449 / 53	616 / 457 / 97	645 / 574 / 80	629 / 536 / 150	726 / 669 / 124	607 / 507 / 123	741 / 634 / 102	620 / 356 / 59	691 / 482 / 52	634 / 492 / 95	667 / 614 / 78	639 / 562 / 144	749 / 693 / 117	632 / 531 / 118	766 / 658 / 97	636 / 382 / 58	696 / 503 / 50	639 / 516 / 92	672 / 637 / 75	663 / 599 / 140	790 / 734 / 114	655 / 553 / 113	786 / 677 / 91
	3	583 / 566 / 50	611 / 699 / 41	656 / 546 / 88	689 / 667 / 71	683 / 617 / 130	830 / 765 / 107	696 / 583 / 107	852 / 727 / 89	586 / 591 / 48	612 / 721 / 38	648 / 560 / 82	696 / 691 / 67	725 / 658 / 127	877 / 811 / 104	721 / 607 / 102	873 / 748 / 83	587 / 614 / 45	629 / 763 / 37	669 / 597 / 80	734 / 732 / 65	746 / 680 / 120	892 / 827 / 97	742 / 627 / 97	919 / 789 / 81
	1	592 / 233 / 116	629 / 324 / 104	592 / 320 / 156	638 / 440 / 139	591 / 401 / 200	668 / 541 / 177	503 / 399 / 167	607 / 500 / 137	591 / 248 / 112	644 / 349 / 102	592 / 340 / 150	655 / 473 / 136	610 / 431 / 196	678 / 567 / 170	517 / 415 / 158	632 / 524 / 131	601 / 267 / 110	659 / 375 / 100	604 / 365 / 147	658 / 496 / 131	628 / 462 / 193	686 / 591 / 162	539 / 436 / 152	655 / 545 / 125
	2	629 / 324 / 104	686 / 439 / 91	638 / 448 / 139	673 / 574 / 117	654 / 536 / 173	726 / 669 / 143	607 / 507 / 137	741 / 634 / 113	644 / 349 / 102	707 / 471 / 89	655 / 482 / 136	695 / 614 / 114	662 / 562 / 166	749 / 693 / 135	632 / 531 / 131	766 / 658 / 108	659 / 375 / 100	727 / 503 / 87	658 / 505 / 131	698 / 637 / 109	686 / 599 / 162	790 / 734 / 131	655 / 553 / 125	786 / 677 / 102
	3	614 / 566 / 87	636 / 699 / 71	687 / 546 / 128	715 / 667 / 103	690 / 617 / 150	830 / 765 / 123	696 / 583 / 119	852 / 727 / 99	615 / 591 / 83	635 / 721 / 67	677 / 560 / 120	719 / 691 / 98	725 / 658 / 146	877 / 811 / 120	721 / 607 / 113	873 / 748 / 93	615 / 614 / 79	652 / 763 / 65	697 / 597 / 117	741 / 732 / 95	746 / 680 / 139	892 / 827 / 112	742 / 627 / 108	919 / 789 / 90
30	1	565 / 303 / 60	617 / 408 / 52	576 / 413 / 92	612 / 528 / 77	594 / 493 / 143	680 / 612 / 117	560 / 456 / 116	675 / 565 / 95	577 / 324 / 59	634 / 435 / 51	580 / 432 / 89	616 / 548 / 74	601 / 513 / 137	696 / 630 / 111	579 / 474 / 112	710 / 596 / 93								
	2	617 / 408 / 52	687 / 535 / 45	612 / 538 / 77	655 / 657 / 62	680 / 620 / 117	805 / 751 / 94	675 / 573 / 95	826 / 714 / 79	634 / 435 / 51	692 / 552 / 43	616 / 558 / 74	687 / 693 / 61	696 / 639 / 111	842 / 788 / 91	710 / 605 / 93	865 / 750 / 76								
	3	574 / 651 / 41	647 / 803 / 33	645 / 618 / 67	747 / 749 / 54	785 / 718 / 102	933 / 868 / 82	781 / 662 / 83	962 / 828 / 69	574 / 668 / 38	652 / 814 / 31	648 / 637 / 64	781 / 786 / 52	799 / 734 / 96	971 / 906 / 79	819 / 697 / 81	1004 / 865 / 67								
	1	594 / 297 / 64	639 / 400 / 56	591 / 398 / 101	643 / 528 / 88	620 / 493 / 164	680 / 612 / 134	560 / 456 / 131	675 / 565 / 107	594 / 312 / 61	655 / 425 / 55	604 / 424 / 99	646 / 548 / 84	626 / 513 / 157	696 / 630 / 127	579 / 474 / 126	710 / 596 / 105								
	2	639 / 400 / 56	717 / 535 / 49	643 / 538 / 88	674 / 657 / 71	680 / 620 / 134	805 / 751 / 107	675 / 573 / 88	826 / 714 / 79	655 / 425 / 55	720 / 552 / 46	646 / 558 / 84	693 / 693 / 69	696 / 639 / 127	842 / 788 / 104	710 / 605 / 105	865 / 750 / 86								
	3	601 / 651 / 44	647 / 803 / 36	672 / 618 / 76	747 / 749 / 61	785 / 718 / 117	933 / 868 / 94	781 / 662 / 94	962 / 828 / 78	599 / 668 / 42	652 / 814 / 34	674 / 637 / 73	781 / 786 / 59	799 / 734 / 110	971 / 906 / 90	819 / 697 / 91	1004 / 865 / 75								
	1	611 / 287 / 108	660 / 392 / 95	616 / 391 / 145	674 / 528 / 128	634 / 483 / 185	691 / 612 / 154	560 / 456 / 146	675 / 565 / 119	620 / 306 / 106	674 / 416 / 93	627 / 416 / 142	676 / 548 / 122	652 / 513 / 181	696 / 630 / 146	579 / 474 / 140	710 / 596 / 116								
	2	660 / 392 / 95	730 / 522 / 83	674 / 538 / 128	699 / 657 / 103	691 / 620 / 154	805 / 751 / 123	675 / 573 / 119	826 / 714 / 99	674 / 416 / 93	749 / 552 / 81	676 / 558 / 122	718 / 693 / 100	696 / 639 / 146	842 / 788 / 120	710 / 605 / 116	865 / 750 / 96								
	3	629 / 651 / 77	669 / 803 / 63	700 / 618 / 111	747 / 749 / 89	785 / 718 / 135	933 / 868 / 108	781 / 662 / 105	962 / 828 / 87	625 / 668 / 73	661 / 814 / 59	700 / 637 / 106	781 / 786 / 86	799 / 734 / 127	971 / 906 / 104	819 / 697 / 102	1004 / 865 / 84								
30	1	590 / 345 / 57	651 / 460 / 50	594 / 459 / 87	633 / 579 / 72	606 / 531 / 131	729 / 663 / 108	609 / 502 / 109	725 / 611 / 88	577 / 324 / 59	634 / 435 / 51	580 / 432 / 89	616 / 548 / 74	601 / 513 / 137	696 / 630 / 111	579 / 474 / 112	710 / 596 / 93								
	2	651 / 460 / 50	715 / 582 / 42	618 / 576 / 71	698 / 707 / 57	729 / 672 / 108	877 / 823 / 88	725 / 620 / 88	902 / 784 / 74	634 / 435 / 51	692 / 552 / 43	616 / 558 / 74	687 / 693 / 61	696 / 639 / 111	842 / 788 / 91	710 / 605 / 93	865 / 750 / 76								
	3	587 / 702 / 37	678 / 848 / 30	678 / 670 / 62	813 / 821 / 51	834 / 768 / 94	1007 / 941 / 76	830 / 708 / 76	1043 / 901 / 64	574 / 668 / 38	652 / 814 / 31	648 / 637 / 64	781 / 786 / 52	799 / 734 / 96	971 / 906 / 79	819 / 697 / 81	1004 / 865 / 67								
	1	605 / 332 / 60	670 / 451 / 53	617 / 450 / 97	662 / 579 / 82	631 / 531 / 150	729 / 663 / 124	609 / 502 / 123	725 / 611 / 99	594 / 312 / 61	655 / 425 / 55	604 / 424 / 99	646 / 548 / 84	626 / 513 / 157	696 / 630 / 127	579 / 474 / 126	710 / 596 / 105								
	2	670 / 451 / 53	740 / 582 / 45	647 / 576 / 80	698 / 707 / 65	729 / 672 / 124	877 / 823 / 100	725 / 620 / 99	902 / 784 / 83	655 / 425 / 55	720 / 552 / 46	646 / 558 / 84	693 / 693 / 69	696 / 639 / 127	842 / 788 / 104	710 / 605 / 105	865 / 750 / 86								
	3	613 / 702 / 41	678 / 848 / 33	691 / 670 / 71	813 / 821 / 57	834 / 768 / 107	1007 / 941 / 87	830 / 708 / 86	1043 / 901 / 73	599 / 668 / 42	652 / 814 / 34	674 / 637 / 73	781 / 786 / 59	799 / 734 / 110	971 / 906 / 90	819 / 697 / 91	1004 / 865 / 75								
	1	630 / 325 / 104	688 / 441 / 91	639 / 442 / 139	691 / 579 / 120	655 / 531 / 173	729 / 663 / 143	609 / 502 / 137	725 / 611 / 111	620 / 306 / 106	674 / 416 / 93	627 / 416 / 142	676 / 548 / 122	652 / 513 / 181	696 / 630 / 146	579 / 474 / 140	710 / 596 / 116								
	2	688 / 441 / 91	767 / 582 / 79	675 / 576 / 117	715 / 707 / 95	729 / 672 / 143	877 / 823 / 116	725 / 620 / 111	902 / 784 / 93	674 / 416 / 93	749 / 552 / 81	676 / 558 / 122	718 / 693 / 100	696 / 639 / 146	842 / 788 / 120	710 / 605 / 116	865 / 750 / 96								
	3	638 / 702 / 71	678 / 848 / 57	717 / 670 / 103	813 / 821 / 84	834 / 768 / 123	1007 / 941 / 100	830 / 708 / 96	1043 / 901 / 81	625 / 668 / 73	661 / 814 / 59	700 / 637 / 106	781 / 786 / 86	799 / 734 / 127	971 / 906 / 104	819 / 697 / 102	1004 / 865 / 84								
30	1	590 / 345 / 57	651 / 460 / 50	594 / 459 / 87	633 / 579 / 72	606 / 531 / 131	729 / 663 / 108	609 / 502 / 109	725 / 611 / 88	577 / 324 / 59	634 / 435 / 51	580 / 432 / 89	616 / 548 / 74	601 / 513 / 137	696 / 630 / 111	579 / 474 / 112	710 / 596 / 93								
	2	651 / 460 / 50	715 / 582 / 42	618 / 576 / 71	698 / 707 / 57	729 / 672 / 108	877 / 823 / 88	725 / 620 / 88	902 / 784 / 74	634 / 435 / 51	692 / 552 / 43	616 / 558 / 74	687 / 693 / 61	696 / 639 / 111	842 / 788 / 91	710 / 605 / 93	865 / 750 / 76								
	3	587 / 702 / 37	678 / 848 / 30	678 / 670 / 62	813 / 821 / 51	834 / 768 / 94	1007 / 941 / 76	830 / 708 / 76	1043 / 901 / 64	574 / 668 / 38	652 / 814 / 31	648 / 637 / 64	781 / 786 / 52	799 / 734 / 96	971 / 906 / 79	819 / 697 / 81	1004 / 865 / 67								
	1	605 / 332 / 60	670 / 451 / 53	617 / 450 / 97	662 / 579 / 82	631 / 531 / 150	729 / 663 / 124	609 / 502 / 123	725 / 611 / 99	594 / 312 / 61	655 / 425 / 55	604 / 424 / 99	646 / 548 / 84	626 / 513 / 157	696 / 630 / 127	579 / 474 / 126	710 / 596 / 105								
	2	670 / 451 / 53	740 / 582 / 45	647 / 576 / 80	698 / 707 / 65	729 / 672 / 124	877 / 823 / 100	725 / 620 / 99	902 / 784 / 83	655 / 425 / 55	720 / 552 / 46	646 / 558 / 84	693 / 693 / 69	696 / 639 / 127	842 / 788 / 104	710 / 605 / 105	865 / 750 / 86								
	3	613 / 702 / 41	678 / 848 / 33	691 / 670 / 71	813 / 821 / 57	834 / 768 / 107	1007 / 941 / 87	830 / 708 / 86	1043 / 901 / 73	599 / 668 / 42	652 / 814 / 34	674 / 637 / 73	781 / 786 / 59	799 / 734 / 110	971										

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof				30-60ft	74in x 41.2in	Load: Up / Down / Side , lbs				100												105					
Wind Speed [mph]				95								100								105							
Ground Snow	Group	0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
		Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
45	1	611/225/122	652/318/111	607/309/165	658/431/150	607/393/216	678/529/191	503/399/184	607/500/151	619/243/120	666/342/109	617/333/162	674/463/147	625/423/212	702/567/187	517/415/174	632/524/145	628/262/118	680/367/107	628/358/159	675/485/141	642/453/208	709/591/178	539/436/168	655/545/138		
	2	652/318/111	702/429/98	658/439/150	702/574/128	678/536/191	733/669/157	607/507/151	741/634/125	666/342/109	722/460/96	674/472/147	723/614/125	686/562/182	749/693/149	632/531/145	766/658/118	680/367/107	740/491/93	675/494/141	725/637/119	709/599/178	790/734/144	655/553/138	786/677/112		
	3	645/566/96	661/699/78	703/534/138	740/667/113	711/617/165	830/765/136	696/583/132	852/727/109	644/591/91	659/721/73	707/560/132	742/691/107	737/658/161	877/811/132	721/607/125	873/748/102	642/614/87	675/763/71	726/597/128	765/732/104	746/680/153	892/827/123	742/627/118	919/789/99		
50	1	627/217/128	674/311/118	632/303/177	677/422/160	635/393/236	687/517/204	512/399/201	607/500/165	646/239/128	687/335/116	641/327/173	692/454/157	639/415/227	709/554/199	517/415/190	632/524/158	653/257/125	699/359/113	651/351/170	706/485/153	656/444/222	732/591/195	539/436/183	655/545/151		
	2	674/311/118	734/429/106	677/430/160	730/574/140	687/524/204	753/669/171	607/507/165	741/634/137	687/335/116	735/450/101	692/462/157	751/614/137	709/562/199	759/693/162	632/531/158	766/658/129	699/359/113	752/480/99	706/494/153	751/637/130	732/599/195	790/734/158	655/553/151	786/677/122		
	3	676/566/104	686/699/85	717/522/147	765/667/123	732/617/181	830/765/148	696/583/144	852/727/119	674/591/99	683/721/80	736/560/143	766/691/117	758/658/176	877/811/144	721/607/137	873/748/111	670/614/94	698/763/77	754/597/140	788/732/113	762/680/167	892/827/134	742/627/129	919/789/108		
60	1	676/208/143	714/299/131	677/292/198	712/405/179	664/378/267	719/506/234	538/399/235	607/500/193	681/225/140	724/321/129	684/314/194	724/434/175	679/406/261	739/541/229	540/415/222	632/524/185	686/242/137	734/344/126	692/338/190	736/464/171	679/425/250	759/577/223	551/436/214	655/545/176		
	2	714/299/131	761/410/118	712/412/179	769/560/159	719/513/234	794/669/201	607/507/193	741/634/160	724/321/129	776/439/115	724/442/175	787/599/155	739/549/229	797/693/191	632/531/185	766/658/151	734/344/126	791/468/112	736/473/171	804/637/151	759/585/223	821/734/185	655/553/176	786/677/143		
	3	737/566/120	736/699/98	759/511/167	815/667/144	775/617/212	838/765/174	696/583/168	852/727/139	732/591/115	730/721/92	757/534/159	814/691/136	800/658/207	877/811/169	721/607/160	873/748/130	726/614/109	744/763/90	773/569/155	834/732/132	802/680/196	892/827/158	742/627/151	919/789/126		
Wind Speed [mph]				110								115															
45	1	636/281/116	678/383/102	638/383/156	690/517/138	646/473/199	713/612/170	560/456/161	675/565/132	645/300/113	691/407/100	649/408/153	706/548/135	663/502/195	716/630/161	579/474/155	710/596/128										
	2	678/383/102	759/522/91	690/526/138	724/657/113	713/620/170	805/751/136	675/573/132	826/714/109	691/407/100	777/552/89	706/558/135	742/693/110	716/639/161	842/788/132	710/605/128	865/750/105										
	3	656/651/85	691/803/69	727/618/122	762/749/98	785/718/149	933/868/119	781/662/115	962/828/96	651/668/80	682/814/65	725/637/116	781/786/95	799/734/140	971/906/115	819/697/112	1004/865/92										
50	1	661/276/123	711/383/111	660/376/167	705/505/147	672/473/218	735/612/185	560/456/176	675/565/144	668/294/121	707/398/106	669/400/163	719/536/143	688/502/213	736/630/176	579/474/169	710/596/140										
	2	711/383/111	769/509/97	705/515/147	750/657/123	735/620/185	805/751/148	675/573/144	826/714/115	707/398/106	786/538/94	719/545/144	767/693/120	736/639/176	842/788/144	710/605/140	865/750/115										
	3	683/651/92	713/803/75	754/618/133	784/749/107	786/718/162	933/868/130	781/662/126	962/828/104	677/668/87	703/814/70	751/637/127	802/786/103	799/734/153	971/906/125	819/697/122	1004/865/101										
60	1	691/260/134	743/367/123	699/361/186	747/494/167	693/453/245	779/612/218	561/456/206	675/565/168	710/283/134	753/389/120	706/384/182	759/523/163	707/481/240	778/630/207	579/474/197	710/596/164										
	2	743/367/123	806/496/109	747/503/167	800/657/144	779/620/218	819/751/174	675/573/168	826/714/139	753/389/120	820/525/106	759/533/163	816/693/140	778/639/207	842/788/164	710/605/164	865/750/134										
	3	738/651/106	757/803/87	788/603/151	827/749/124	824/718/191	933/868/153	781/662/147	962/828/122	728/668/101	744/814/81	803/637/148	844/786/120	821/734/180	971/906/147	819/697/143	1004/865/118										
Wind Speed [mph]				120								130															
45	1	654/319/111	704/431/98	659/433/150	720/579/132	680/531/191	735/663/157	609/502/151	725/611/122	645/300/113	691/407/100	649/408/153	706/548/135	663/502/195	716/630/161	579/474/155	710/596/128										
	2	704/431/98	795/582/87	704/576/128	738/707/104	735/672/157	877/823/127	725/620/122	902/784/102	691/407/100	777/552/89	706/558/135	742/693/110	716/639/161	842/788/132	710/605/128	865/750/105										
	3	663/702/78	694/848/62	742/670/113	813/821/92	834/768/136	1007/941/110	830/708/105	1043/901/89	651/668/80	682/814/65	725/637/116	781/786/95	799/734/140	971/906/115	819/697/112	1004/865/92										
50	1	676/313/118	719/421/104	679/424/160	732/566/140	689/520/204	755/663/171	609/502/165	725/611/133	668/294/121	707/398/106	669/400/163	719/536/143	688/502/213	736/630/176	579/474/169	710/596/140										
	2	719/421/104	802/567/92	732/576/140	761/707/113	755/672/171	877/823/139	725/620/133	902/784/111	707/398/106	786/538/94	719/545/143	767/693/120	736/639/176	842/788/144	710/605/140	865/750/115										
	3	688/702/85	714/848/68	767/670/123	820/821/100	834/768/148	1007/941/121	830/708/115	1043/901/97	677/668/87	703/814/70	751/637/127	802/786/103	799/734/153	971/906/125	819/697/122	1004/865/101										
60	1	715/300/131	762/412/118	713/406/179	770/552/159	720/508/234	796/663/201	609/502/193	725/611/155	710/283/134	753/389/120	706/384/182	759/523/163	707/481/240	778/630/207	579/474/197	710/596/164										
	2	762/412/118	834/552/104	770/562/159	807/707/132	796/672/201	877/823/163	725/620/155	902/784/130	753/389/120	820/525/106	759/533/163	816/693/140	778/639/207	842/788/164	710/605/164	865/750/134										
	3	738/702/98	754/848/79	817/670/144	860/821/117	841/768/174	1007/941/142	830/708/134	1043/901/114	728/668/101	744/814/81	803/637/148	844/786/120	821/734/180	971/906/147	819/697/143	1004/865/118										

Panal Angle	ASCE Group Zone	
	Mono Slope	
0 - 7.5	1 = 1	
	2 = 2	
	3 = 3	
7.5 - 15	1 = 1	
	2 = 2	
15 - 30	1 = 1	
	2 = 2	
30 - 45	1 = 1	
	2 = 2	
	3 = 3	

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less than 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edge shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			30-60ft			74in x 41.2in			Load: Up / Down / Side , lbs																																
Wind Speed [mph]			140									150									160																				
Panal Angle			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45					
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		45	1	662 / 338 / 109	717 / 455 / 96	670 / 458 / 147	717 / 595 / 125	696 / 560 / 187	761 / 694 / 153	625 / 517 / 145	757 / 640 / 118	679 / 375 / 104	741 / 500 / 91	690 / 506 / 141	725 / 636 / 116	711 / 601 / 174	798 / 733 / 140	665 / 555 / 135	818 / 696 / 112	695 / 412 / 100	763 / 544 / 87	709 / 554 / 135	747 / 688 / 110	721 / 636 / 161	850 / 785 / 132	717 / 602 / 128	873 / 747 / 105	679 / 375 / 104	741 / 500 / 91	690 / 506 / 141	725 / 636 / 116	711 / 601 / 174	798 / 733 / 140	665 / 555 / 135	818 / 696 / 112	695 / 412 / 100	763 / 544 / 87	709 / 554 / 135	747 / 688 / 110	721 / 636 / 161	850 / 785 / 132

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft (m).
h=Mean roof height, in ft (m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs				150				160																																			
Wind Speed [mph]		140								150								160																																			
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																													
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																												
		70	1	752/304/ 140	810/423/ 127	764/419/ 195	815/566/ 173	761/522/ 258	852/694/ 226	625/517/ 211	757/640/ 173	775/343/ 137	822/464/ 121	773/462/ 186	831/619/ 164	783/572/ 245	856/733/ 208	665/555/ 197	818/696/ 164	780/375/ 130	856/516/ 118	800/516/ 182	869/688/ 160	824/636/ 239	880/785/ 195	717/602/ 187	873/747/ 154																										
70	2	810/423/ 127	874/563/ 111	815/577/ 173	865/739/ 146	829/684/ 220	910/856/ 182	757/650/ 173	938/817/ 144	822/464/ 121	920/630/ 108	831/630/ 164	886/799/ 137	856/743/ 208	970/917/ 170	818/706/ 164	1002/877/ 135	856/516/ 118	938/677/ 102	845/680/ 155	902/852/ 129	880/795/ 195	1019/967/ 157	873/758/ 154	1057/927/ 125																												
70	3	795/734/ 108	802/881/ 86	855/683/ 155	914/855/ 129	893/801/ 195	1040/974/ 157	863/739/ 149	1079/933/ 125	783/771/ 99	812/938/ 80	876/741/ 146	936/915/ 120	928/862/ 182	1096/1030/ 145	925/795/ 140	1141/990/ 116	790/822/ 92	852/1026/ 77	892/794/ 137	951/966/ 111	981/915/ 170	1191/1122/ 139	977/843/ 130	1188/1034/ 106																												
80	1	797/297/ 153	845/412/ 139	786/400/ 209	846/552/ 189	786/509/ 285	867/675/ 250	635/517/ 238	757/640/ 195	798/327/ 146	854/452/ 132	810/451/ 204	882/619/ 184	804/557/ 271	892/733/ 235	665/555/ 222	818/696/ 184	818/366/ 143	885/502/ 128	835/503/ 199	893/668/ 174	843/620/ 264	914/785/ 221	717/602/ 211	873/747/ 173																												
80	2	845/412/ 139	924/563/ 125	846/562/ 189	910/739/ 164	867/684/ 250	941/856/ 207	757/650/ 195	938/817/ 163	854/452/ 132	940/611/ 118	882/630/ 184	928/799/ 154	892/743/ 235	970/917/ 193	818/706/ 184	1002/877/ 152	885/502/ 128	984/677/ 114	893/680/ 174	941/852/ 145	914/795/ 221	1019/967/ 178	873/758/ 173	1057/927/ 141																												
80	3	844/734/ 121	840/881/ 96	903/683/ 174	954/855/ 145	927/801/ 221	1040/974/ 178	863/739/ 168	1079/933/ 141	827/771/ 111	848/938/ 89	921/741/ 164	973/915/ 135	955/862/ 207	1096/1030/ 164	925/795/ 157	1141/990/ 130	832/822/ 103	886/1026/ 86	934/794/ 154	985/966/ 125	981/915/ 193	1191/1122/ 157	977/843/ 146	1188/1034/ 119																												
90	1	818/283/ 162	878/402/ 150	823/391/ 227	874/537/ 205	809/496/ 311	905/675/ 279	655/517/ 265	757/640/ 217	836/319/ 158	882/439/ 142	845/440/ 221	907/602/ 199	846/557/ 303	928/733/ 263	672/555/ 247	818/696/ 205	854/357/ 154	910/488/ 138	845/478/ 210	914/649/ 188	860/603/ 287	947/785/ 247	717/602/ 235	873/747/ 193																												
90	2	878/402/ 150	946/547/ 134	874/547/ 205	955/739/ 183	905/684/ 279	973/856/ 231	757/650/ 217	938/817/ 181	882/439/ 142	958/593/ 126	907/613/ 199	970/799/ 171	928/743/ 263	998/917/ 215	818/706/ 205	1002/877/ 169	910/488/ 138	997/655/ 122	914/661/ 188	981/852/ 160	947/795/ 247	1019/967/ 199	873/758/ 193	1057/927/ 157																												
90	3	893/734/ 134	879/881/ 107	923/663/ 188	993/855/ 160	960/801/ 247	1040/974/ 199	863/739/ 187	1079/933/ 157	872/771/ 122	884/938/ 99	965/741/ 183	1010/915/ 149	986/862/ 231	1096/1030/ 183	925/795/ 175	1141/990/ 145	873/822/ 115	920/1026/ 95	976/794/ 171	1019/966/ 138	1006/915/ 215	1191/1122/ 176	977/843/ 163	1188/1034/ 133																												
Wind Speed [mph]		170								180																																											
70	1	803/415/ 127	890/569/ 115	808/556/ 173	882/735/ 151	843/682/ 226	898/830/ 182	744/629/ 173	922/791/ 144	827/456/ 124	898/604/ 108	835/610/ 168	891/777/ 142	858/724/ 214	932/868/ 170	786/668/ 164	963/829/ 135	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th><th>Mono Slope</th></tr> </thead> <tbody> <tr> <td>0 - 7.5</td><td>1 = 1</td></tr> <tr> <td></td><td>2 = 2</td></tr> <tr> <td></td><td>3 = 3</td></tr> <tr> <td>7.5 - 15</td><td>1 = 1</td></tr> <tr> <td></td><td>2 = 2</td></tr> <tr> <td></td><td>3 = 3</td></tr> <tr> <td>15 - 30</td><td>1 = 1</td></tr> <tr> <td></td><td>2 = 2</td></tr> <tr> <td></td><td>3 = 3</td></tr> <tr> <td>30 - 45</td><td>1 = 1</td></tr> <tr> <td></td><td>2 = 2</td></tr> <tr> <td></td><td>3 = 3</td></tr> </tbody> </table>								ASCE Group Zone		Panal Angle	Mono Slope	0 - 7.5	1 = 1		2 = 2		3 = 3	7.5 - 15	1 = 1		2 = 2		3 = 3	15 - 30	1 = 1		2 = 2		3 = 3	30 - 45	1 = 1		2 = 2		3 = 3
ASCE Group Zone																																																					
Panal Angle	Mono Slope																																																				
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	3 = 3																																																				
70	2	890/569/ 115	983/742/ 99	856/726/ 146	912/897/ 120	898/841/ 182	1057/1006/ 145	922/803/ 144	1100/967/ 116	898/604/ 108	993/780/ 92	863/766/ 137	916/933/ 111	932/880/ 170	1131/1079/ 139	963/841/ 135	1180/1040/ 111																																				
70	3	822/897/ 89	851/1063/ 70	904/840/ 129	979/1004/ 102	1023/958/ 157	1221/1153/ 126	1061/917/ 125	1279/1115/ 101	822/936/ 83	891/1138/ 67	910/878/ 120	1047/1078/ 98	1099/1032/ 151	1299/1229/ 120	1096/950/ 116	1364/1191/ 96																																				
80	1	839/405/ 139	916/553/ 125	839/542/ 189	928/735/ 169	858/663/ 250	930/830/ 207	744/629/ 195	922/791/ 163	860/445/ 135	919/586/ 118	864/594/ 184	934/777/ 159	895/724/ 242	940/868/ 193	786/668/ 184	963/829/ 152																																				
80	2	916/553/ 125	994/718/ 107	901/726/ 164	949/897/ 135	930/841/ 207	1057/1006/ 164	922/803/ 163	1100/967/ 130	919/586/ 118	1034/780/ 103	905/766/ 154	950/933/ 125	940/880/ 193	1131/1079/ 157	963/841/ 152	1180/1040/ 125																																				
80	3	863/897/ 100	882/1063/ 79	943/840/ 145	988/1004/ 115	1023/958/ 178	1221/1153/ 143	1061/917/ 141	1279/1115/ 114	859/936/ 93	913/1138/ 75	947/878/ 135	1047/1078/ 110	1099/1032/ 171	1299/1229/ 136	1096/950/ 130	1364/1191/ 109																																				
90	1	872/395/ 150	938/537/ 134	867/528/ 205	946/713/ 183	896/663/ 279	961/830/ 231	744/629/ 219	922/791/ 181	891/433/ 146	966/586/ 130	889/578/ 199	978/777/ 177	905/703/ 263	969/868/ 215	786/668/ 205	963/829/ 169																																				
90	2	938/537/ 134	1037/718/ 119	946/726/ 183	985/897/ 149	961/841/ 231	1057/1006/ 183	922/803/ 181	1100/967/ 145	966/586/ 130	1076/780/ 115	947/766/ 171	984/933/ 138	969/880/ 215	1131/1079/ 176	963/841/ 169	1180/1040/ 139																																				
90	3	903/897/ 111	914/1063/ 87	983/840/ 160	1020/1004/ 127	1023/958/ 199	1221/1153/ 160	1061/917/ 157	1279/1115/ 127	897/936/ 103	943/1138/ 83	983/878/ 149	1059/1078/ 122	1099/1032/ 191	1299/1229/ 152	1096/950/ 145	1364/1191/ 121																																				
Wind Speed [mph]		190								200																																											
70	1	851/497/ 121	931/655/ 105	863/663/ 164	895/813/ 133	870/761/ 201	998/932/ 164	848/723/ 159	1033/892/ 130	851/524/ 115	963/705/ 102	866/697/ 155	895/842/ 124	876/792/ 189	1061/994/ 157	880/754/ 149	1058/916/ 120																																				
70	2	931/655/ 105	1033/840/ 89	895/828/ 133	958/999/ 107	998/945/ 164	1202/1149/ 132	1033/905/ 130	1256/1110/ 106	963/705/ 102	1033/866/ 83	895/857/ 124	1015/1062/ 102	1019/967/ 151	1267/1213/ 126	1058/929/ 120	1327/1174/ 101																																				
70	3	850/1004/ 80	944/1209/ 64	946/944/ 115	1112/1148/ 93	1121/1055/ 139	1369/1298/ 113	1169/1015/ 111	1443/1261/ 92	840/1024/ 73	992/1274/ 61	944/966/ 107	1172/1212/ 89	1184/1116/ 132	1432/1359/ 107	1237/1077/ 106	1514/1325/ 87																																				
80	1	882/484/ 132	948/635/ 114	888/645/ 179	936/813/ 150	905/761/ 228	998/932/ 185	848/723/ 179	1033/892/ 146	903/524/ 128	977/683/ 111	913/697/ 174	933/842/ 140	909/792/ 214	1061/994/ 178	880/754/ 168	1058/916/ 136																																				
80	2	948/635/ 114	1073/840/ 100	936/828/ 150	984/999/ 120	998/945/ 185	1202/1149/ 150	1033/905/ 146	1256/1110/ 119	977/683/ 111	1070/866/ 93	933/857/ 140	1016/1062/ 115	1019/967/ 171	1267/1213/ 143	1058/929/ 136	1327/1174/ 114																																				
80	3	886/1004/ 89	944/1209/ 72	981/944/ 130	1112/1148/ 105	1121/1055/ 157	1369/1298/ 129	1169/1015/ 125	1443/1261/ 103	873/1024/ 82	992/1274/ 68	973/966/ 120	1172/1212/ 100	1184/1116/ 150	1432/1359/ 121	1237/1077/ 119	1514/1325/ 98																																				
90	1	909/471/ 142	994/635/ 126	911/628/ 194	977/813/ 166	940/761/ 255	1008/932/ 207	848/723/ 199	1033/892/ 163	928/509/ 138	1021/683/ 122	933/677/ 188	971/842/ 155	942/792/ 239	1061/994/ 199	880/754/ 187	1058/916/ 151																																				
90	2	994/635/ 126	1113/840/ 111	977/828/ 166	1016/999/ 133	1008/945/ 207	1202/1149/ 168	1033/905/ 163	1256/1110/ 133	1021/683/ 122	1107/866/ 103	971/857/ 155	1047/1062/ 127	1019/967/ 191	1267/1213/ 160	1058/929/ 151	1327/1174/ 127																																				
90	3	922/1004/ 99	969/1209/ 79	1016/944/ 144	1112/1148/ 116	1121/1055/ 176	1369/1298/ 144	1169/1015/ 139	1443/1261/ 115	906/1024/ 91	992/1274/ 75	1006/966/ 133	1172/1212/ 111	1184/1116/ 168	1432/1359/ 136	1237/1077/ 133	1514/1325/ 109																																				

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																													
Wind Speed [mph]		95								100								105																	
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45											
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge												
100	1	854 / 176 / 186	858 / 261 / 178	812 / 246 / 261	836 / 352 / 243	771 / 331 / 379	822 / 459 / 344	594 / 371 / 344	671 / 500 / 305	854 / 194 / 186	859 / 280 / 173	823 / 271 / 261	861 / 386 / 243	796 / 364 / 379	835 / 490 / 335	613 / 399 / 338	680 / 524 / 292	835 / 208 / 182	859 / 298 / 169	821 / 289 / 255	864 / 412 / 237	803 / 388 / 370	847 / 521 / 326	631 / 427 / 331	688 / 545 / 278										
	2	858 / 261 / 178	882 / 361 / 160	836 / 358 / 243	895 / 505 / 225	822 / 465 / 344	904 / 633 / 308	671 / 507 / 305	741 / 634 / 252	859 / 280 / 173	912 / 396 / 160	861 / 393 / 243	904 / 539 / 219	835 / 497 / 335	923 / 673 / 300	680 / 531 / 292	766 / 658 / 239	859 / 298 / 169	918 / 421 / 156	864 / 419 / 237	912 / 572 / 213	847 / 528 / 326	941 / 712 / 291	688 / 553 / 278	786 / 677 / 225										
	3	869 / 500 / 165	937 / 699 / 152	878 / 451 / 231	934 / 613 / 207	873 / 569 / 317	978 / 765 / 282	710 / 583 / 265	852 / 727 / 219	897 / 548 / 165	919 / 721 / 143	885 / 482 / 225	947 / 652 / 201	890 / 606 / 308	1002 / 811 / 273	721 / 607 / 252	873 / 748 / 206	901 / 583 / 160	927 / 763 / 139	891 / 512 / 219	989 / 711 / 201	906 / 642 / 300	991 / 827 / 256	742 / 627 / 239	919 / 789 / 199										
Wind Speed [mph]		110								115																									
100	1	845 / 227 / 182	882 / 325 / 169	840 / 316 / 255	867 / 437 / 231	810 / 413 / 361	882 / 566 / 326	637 / 447 / 318	694 / 565 / 265	842 / 241 / 178	883 / 344 / 165	839 / 335 / 249	893 / 473 / 231	817 / 437 / 352	894 / 597 / 317	655 / 474 / 311	715 / 596 / 258	882 / 325 / 169	924 / 446 / 152	867 / 444 / 231	947 / 622 / 213	882 / 574 / 326	959 / 751 / 282	694 / 573 / 265	826 / 714 / 219	883 / 344 / 165	929 / 469 / 147	893 / 482 / 231	955 / 654 / 207	894 / 605 / 317	975 / 788 / 273	715 / 605 / 258	865 / 750 / 212		
	2	845 / 227 / 182	882 / 325 / 169	840 / 316 / 255	867 / 437 / 231	810 / 413 / 361	882 / 566 / 326	637 / 447 / 318	694 / 565 / 265	842 / 241 / 178	883 / 344 / 165	839 / 335 / 249	893 / 473 / 231	817 / 437 / 352	894 / 597 / 317	655 / 474 / 311	715 / 596 / 258	882 / 325 / 169	924 / 446 / 152	867 / 444 / 231	947 / 622 / 213	882 / 574 / 326	959 / 751 / 282	694 / 573 / 265	826 / 714 / 219	883 / 344 / 165	929 / 469 / 147	893 / 482 / 231	955 / 654 / 207	894 / 605 / 317	975 / 788 / 273	715 / 605 / 258	865 / 750 / 212		
	3	905 / 616 / 156	935 / 803 / 134	923 / 557 / 219	1001 / 749 / 195	921 / 677 / 291	1010 / 868 / 247	781 / 662 / 232	962 / 828 / 192	934 / 668 / 156	910 / 814 / 126	930 / 587 / 213	1013 / 786 / 188	936 / 712 / 282	1028 / 906 / 238	819 / 697 / 225	1004 / 865 / 186																		
Wind Speed [mph]		120								130																									
100	1	859 / 262 / 178	884 / 363 / 160	837 / 353 / 243	897 / 498 / 225	824 / 461 / 344	906 / 627 / 308	673 / 502 / 305	725 / 611 / 245	842 / 241 / 178	883 / 344 / 165	839 / 335 / 249	893 / 473 / 231	817 / 437 / 352	894 / 597 / 317	655 / 474 / 311	715 / 596 / 258	884 / 363 / 160	961 / 507 / 147	897 / 507 / 225	963 / 686 / 201	906 / 635 / 308	991 / 823 / 264	725 / 620 / 245	902 / 784 / 206	883 / 344 / 165	929 / 469 / 147	893 / 482 / 231	955 / 654 / 207	894 / 605 / 317	975 / 788 / 273	715 / 605 / 258	865 / 750 / 212		
	2	859 / 262 / 178	884 / 363 / 160	837 / 353 / 243	897 / 498 / 225	824 / 461 / 344	906 / 627 / 308	673 / 502 / 305	725 / 611 / 245	842 / 241 / 178	883 / 344 / 165	839 / 335 / 249	893 / 473 / 231	817 / 437 / 352	894 / 597 / 317	655 / 474 / 311	715 / 596 / 258	884 / 363 / 160	961 / 507 / 147	897 / 507 / 225	963 / 686 / 201	906 / 635 / 308	991 / 823 / 264	725 / 620 / 245	902 / 784 / 206	883 / 344 / 165	929 / 469 / 147	893 / 482 / 231	955 / 654 / 207	894 / 605 / 317	975 / 788 / 273	715 / 605 / 258	865 / 750 / 212		
	3	938 / 702 / 152	915 / 848 / 121	936 / 616 / 207	1023 / 821 / 182	980 / 768 / 282	1044 / 941 / 229	830 / 708 / 212	1043 / 901 / 179	934 / 668 / 156	910 / 814 / 126	930 / 587 / 213	1013 / 786 / 188	936 / 712 / 282	1028 / 906 / 238	819 / 697 / 225	1004 / 865 / 186																		

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45		0 - 7.5		7.5- 15		15- 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	856 / 276 / 173	908 / 391 / 160	857 / 381 / 243	899 / 523 / 219	830 / 484 / 335	917 / 656 / 300	675 / 517 / 292	757 / 640 / 239	871 / 311 / 169	934 / 439 / 156	877 / 429 / 237	929 / 586 / 213	864 / 543 / 326	935 / 710 / 282	691 / 555 / 272	818 / 696 / 225	886 / 348 / 165	933 / 474 / 147	897 / 478 / 231	960 / 649 / 207	899 / 603 / 317	981 / 785 / 273	720 / 602 / 258	873 / 747 / 212
	2	908 / 391 / 160	966 / 531 / 143	899 / 532 / 219	969 / 717 / 195	917 / 665 / 300	1004 / 856 / 256	757 / 650 / 239	938 / 817 / 199	934 / 439 / 156	1004 / 593 / 139	929 / 596 / 213	1012 / 799 / 188	935 / 720 / 282	1027 / 917 / 238	818 / 706 / 225	1002 / 877 / 186	933 / 474 / 147	1042 / 655 / 134	960 / 661 / 207	1020 / 852 / 176	981 / 795 / 273	1042 / 967 / 220	873 / 758 / 212	1057 / 927 / 172
	3	942 / 734 / 147	918 / 881 / 117	941 / 644 / 201	1033 / 855 / 176	994 / 801 / 273	1058 / 974 / 220	863 / 739 / 206	1079 / 933 / 172	916 / 771 / 134	920 / 938 / 108	980 / 719 / 195	1046 / 915 / 164	1018 / 862 / 256	1096 / 1030 / 203	925 / 795 / 192	1141 / 990 / 159	915 / 822 / 126	955 / 1026 / 104	1019 / 794 / 188	1053 / 966 / 152	1035 / 915 / 238	1191 / 1122 / 194	977 / 843 / 179	1188 / 1034 / 146

Wind Speed [mph]		170								180																											
100	1	902 / 384 / 160	958 / 522 / 143	893 / 514 / 219	961 / 692 / 195	908 / 644 / 300	993 / 830 / 256	744 / 629 / 239	922 / 791 / 199	918 / 421 / 156	983 / 569 / 139	912 / 562 / 213	989 / 753 / 188	941 / 703 / 291	999 / 868 / 238	786 / 668 / 225	963 / 829 / 186	958 / 522 / 143	1044 / 694 / 126	961 / 704 / 195	1022 / 897 / 164	993 / 841 / 256	1057 / 1006 / 203	922 / 803 / 199	1100 / 967 / 159	983 / 569 / 139	1079 / 753 / 121	989 / 766 / 188	1018 / 933 / 152	999 / 880 / 238	1131 / 1079 / 194	963 / 841 / 186	1180 / 1040 / 153				
	2	943 / 897 / 121	945 / 1063 / 95	1022 / 840 / 176	1051 / 1004 / 140	1045 / 958 / 220	1221 / 1153 / 176	1061 / 917 / 172	1279 / 1115 / 139	934 / 936 / 113	973 / 1138 / 91	1020 / 878 / 164	1089 / 1078 / 134	1099 / 1032 / 212	1299 / 1229 / 168	1096 / 950 / 159	1364 / 1191 / 133																				
	3																																				

Wind Speed [mph]		190								200																											
100	1	934 / 458 / 152	1007 / 615 / 134	932 / 610 / 207	1018 / 813 / 182	975 / 761 / 282	1037 / 932 / 229	848 / 723 / 219	1033 / 892 / 179	950 / 495 / 147	1031 / 661 / 130	951 / 657 / 201	1009 / 842 / 170	975 / 792 / 264	1073 / 994 / 220	880 / 754 / 206	1058 / 916 / 166	1007 / 615 / 134	1112 / 810 / 117	1018 / 828 / 182	1049 / 999 / 146	1037 / 945 / 229	1202 / 1149 / 185	1033 / 905 / 179	1256 / 1110 / 146	1031 / 661 / 130	1144 / 866 / 113	1009 / 857 / 170	1078 / 1062 / 140	1030 / 967 / 212	1267 / 1213 / 176	1058 / 929 / 166	1327 / 1174 / 139				
	2	957 / 1004 / 108	998 / 1209 / 87	1052 / 944 / 158	1124 / 1148 / 128	1121 / 1055 / 194	1369 / 1298 / 159	1169 / 1015 / 153	1443 / 1261 / 126	939 / 1024 / 100	1020 / 1274 / 83	1038 / 966 / 146	1172 / 1212 / 122	1184 / 1116 / 185	1432 / 1359 / 150	1237 / 1077 / 146	1514 / 1325 / 120																				
	3																																				

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
		0	1	424 / 300 / 39	514 / 390 / 33	455 / 405 / 43	529 / 498 / 35	538 / 464 / 44	653 / 583 / 37	532 / 429 / 48	648 / 539 / 40	451 / 325 / 39	537 / 413 / 32	468 / 423 / 41	552 / 524 / 34	563 / 489 / 42	678 / 610 / 35	557 / 452 / 46	673 / 563 / 38	464 / 339 / 37	559 / 434 / 31	489 / 447 / 40	572 / 549 / 32	585 / 513 / 41	700 / 633 / 33	579 / 474 / 44
Exposure Category : D	0	2	514 / 390 / 33	624 / 496 / 28	529 / 508 / 35	617 / 615 / 28	638 / 578 / 36	764 / 708 / 29	648 / 547 / 40	782 / 673 / 33	537 / 413 / 32	648 / 519 / 26	552 / 534 / 34	655 / 656 / 27	662 / 603 / 34	808 / 753 / 28	673 / 571 / 38	828 / 716 / 32	559 / 434 / 31	686 / 554 / 26	572 / 558 / 32	673 / 678 / 26	700 / 641 / 33	825 / 771 / 26	696 / 592 / 36	847 / 734 / 30
	0	3	508 / 607 / 25	615 / 759 / 21	595 / 576 / 30	709 / 707 / 24	741 / 674 / 32	892 / 826 / 26	737 / 622 / 34	888 / 761 / 28	524 / 632 / 24	630 / 781 / 20	616 / 601 / 29	750 / 751 / 24	764 / 698 / 30	908 / 844 / 24	782 / 662 / 33	937 / 805 / 27	553 / 672 / 23	661 / 824 / 19	651 / 640 / 28	765 / 769 / 22	783 / 718 / 28	951 / 887 / 23	802 / 682 / 32	983 / 847 / 26
	5	1	424 / 300 / 39	514 / 390 / 33	455 / 405 / 50	529 / 498 / 41	538 / 464 / 53	653 / 583 / 44	532 / 429 / 54	648 / 539 / 45	451 / 325 / 39	537 / 413 / 32	468 / 423 / 48	552 / 524 / 39	563 / 489 / 51	678 / 610 / 42	557 / 452 / 52	673 / 563 / 43	464 / 339 / 37	559 / 434 / 31	489 / 447 / 46	572 / 549 / 37	585 / 513 / 49	700 / 633 / 40	579 / 474 / 50	696 / 584 / 40
	5	2	514 / 390 / 33	624 / 496 / 28	529 / 508 / 41	617 / 615 / 32	638 / 578 / 43	764 / 708 / 35	648 / 547 / 45	782 / 673 / 36	537 / 413 / 32	648 / 519 / 26	552 / 534 / 39	655 / 656 / 32	662 / 603 / 41	808 / 753 / 34	673 / 571 / 43	828 / 716 / 35	559 / 434 / 31	686 / 554 / 26	572 / 558 / 37	673 / 678 / 30	700 / 641 / 40	825 / 771 / 32	696 / 592 / 40	847 / 734 / 33
	10	1	449 / 300 / 47	514 / 390 / 40	462 / 405 / 65	529 / 498 / 52	538 / 464 / 67	653 / 583 / 56	532 / 429 / 64	648 / 539 / 53	468 / 325 / 46	537 / 413 / 38	468 / 423 / 62	552 / 524 / 50	563 / 489 / 65	678 / 610 / 53	557 / 452 / 62	673 / 563 / 51	471 / 339 / 44	559 / 434 / 37	489 / 447 / 60	572 / 549 / 48	585 / 513 / 62	700 / 633 / 51	579 / 474 / 59	696 / 584 / 48
	10	2	514 / 390 / 40	624 / 496 / 33	529 / 508 / 52	617 / 615 / 42	638 / 578 / 55	764 / 708 / 44	648 / 547 / 53	782 / 673 / 43	537 / 413 / 38	648 / 519 / 32	552 / 534 / 50	655 / 656 / 41	662 / 603 / 52	808 / 753 / 43	673 / 571 / 51	828 / 716 / 42	559 / 434 / 37	686 / 554 / 31	572 / 558 / 48	673 / 678 / 39	700 / 641 / 51	825 / 771 / 40	696 / 592 / 48	847 / 734 / 40
	10	3	508 / 607 / 30	615 / 759 / 25	595 / 576 / 45	709 / 707 / 37	741 / 674 / 48	892 / 826 / 39	737 / 622 / 46	888 / 761 / 37	524 / 632 / 29	630 / 781 / 23	616 / 601 / 43	750 / 751 / 35	764 / 698 / 46	908 / 844 / 37	782 / 662 / 45	937 / 805 / 36	553 / 672 / 28	661 / 824 / 23	651 / 640 / 42	765 / 769 / 33	783 / 718 / 43	951 / 887 / 35	802 / 682 / 42	983 / 847 / 35

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								74in x 41.2in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		0	1	542 / 416 / 33	656 / 525 / 27	546 / 518 / 34	647 / 637 / 27	671 / 602 / 35	799 / 733 / 28	666 / 556 / 38	819 / 697 / 32	569 / 444 / 30	696 / 564 / 25	581 / 559 / 31	700 / 695 / 26	710 / 643 / 32	858 / 793 / 26	705 / 593 / 35	854 / 731 / 29	602 / 476 / 28	728 / 595 / 23	612 / 596 / 29	727 / 726 / 24	762 / 695 / 31	911 / 845 / 25	757 / 641 / 33	938 / 806 / 28	602 / 476 / 28	728 / 595 / 23	612 / 596 / 29	727 / 726 / 24	762 / 695 / 31	911 / 845 / 25	757 / 641 / 33	938 / 806 / 28	602 / 476 / 28	728 / 595 / 23	612 / 596 / 29	727 / 726 / 24	762 / 695 / 31	911 / 845 / 25	757 / 641 / 33	938 / 806 / 28						

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs																															
Wind Speed [mph]		95								100								105																							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																	
		15	1	501 / 295 / 54	295 / 547 / 46	508 / 398 / 79	398 / 538 / 64	538 / 464 / 82	464 / 653 / 68	653 / 583 / 75	583 / 532 / 62	532 / 429 / 68	429 / 648 / 62	648 / 539 / 52	539 / 510 / 45	510 / 315 / 45	315 / 558 / 76	558 / 413 / 62	413 / 519 / 50	519 / 423 / 62	423 / 552 / 50	552 / 524 / 63	524 / 563 / 52	563 / 489 / 65	489 / 678 / 59	678 / 610 / 72	610 / 557 / 59	557 / 452 / 59	452 / 673 / 42	673 / 563 / 51	563 / 434 / 43	434 / 528 / 73	528 / 447 / 59	447 / 572 / 47	572 / 549 / 76	549 / 585 / 62	585 / 513 / 62	513 / 700 / 49	700 / 633 / 69	633 / 579 / 49	579 / 474 / 69
110	1	535 / 358 / 50	358 / 579 / 41	527 / 461 / 69	461 / 591 / 56	591 / 570 / 73	570 / 606 / 58	606 / 535 / 66	535 / 719 / 88	719 / 653 / 88	653 / 600 / 66	600 / 494 / 55	494 / 734 / 55	734 / 618 / 48	618 / 542 / 40	542 / 376 / 40	376 / 610 / 40	610 / 482 / 67	482 / 534 / 67	534 / 481 / 60	481 / 607 / 54	607 / 590 / 69	590 / 625 / 57	625 / 555 / 69	555 / 754 / 57	754 / 688 / 61	688 / 619 / 63	619 / 512 / 63	512 / 750 / 52	750 / 634 / 52											
115	1	548 / 392 / 46	392 / 626 / 38	540 / 501 / 64	501 / 636 / 53	636 / 622 / 66	622 / 641 / 66	641 / 572 / 54	572 / 767 / 62	767 / 702 / 62	702 / 651 / 62	651 / 541 / 51	541 / 785 / 51	785 / 666 / 48	666 / 542 / 48	542 / 376 / 48	376 / 610 / 40	610 / 482 / 67	482 / 534 / 67	534 / 481 / 60	481 / 607 / 54	607 / 590 / 69	590 / 625 / 57	625 / 555 / 69	555 / 754 / 57	754 / 688 / 61	688 / 619 / 63	619 / 512 / 63	512 / 750 / 52	750 / 634 / 52											

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																																																																																																																																																																																																			
Wind Speed [mph]		140										150										160																																																																																																																																																																																			
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																																																																																																																																																																																	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																																																																																																																																																																																
15	1	564 / 416 / 45	656 / 525 / 38	546 / 518 / 62	647 / 637 / 50	671 / 602 / 65	799 / 733 / 52	666 / 556 / 59	819 / 697 / 49	572 / 444 / 42	696 / 564 / 35	581 / 559 / 58	700 / 695 / 47	710 / 643 / 60	858 / 793 / 49	705 / 593 / 55	854 / 731 / 45	602 / 476 / 39	728 / 595 / 32	612 / 596 / 54	727 / 726 / 43	762 / 695 / 57	911 / 845 / 46	757 / 641 / 52	938 / 806 / 43																																																																																																																																																																																
	2	656 / 525 / 38	787 / 649 / 31	647 / 648 / 50	781 / 800 / 41	799 / 743 / 52	971 / 918 / 43	819 / 707 / 49	1003 / 878 / 41	696 / 564 / 35	848 / 705 / 29	681 / 687 / 46	835 / 861 / 38	858 / 803 / 49	1029 / 977 / 40	854 / 741 / 45	1067 / 937 / 38	728 / 595 / 32	903 / 755 / 27	727 / 739 / 43	882 / 913 / 36	911 / 857 / 46	1075 / 1024 / 37	938 / 818 / 43	1119 / 985 / 35																																																																																																																																																																																
	3	622 / 771 / 27	743 / 939 / 22	741 / 742 / 43	900 / 916 / 36	929 / 863 / 46	1098 / 1031 / 37	926 / 795 / 42	1142 / 991 / 35	665 / 830 / 26	816 / 1036 / 21	796 / 802 / 41	954 / 976 / 33	990 / 924 / 43	1203 / 1134 / 35	987 / 851 / 39	1200 / 1044 / 32	702 / 881 / 24	849 / 1082 / 19	844 / 855 / 38	996 / 1023 / 30	1041 / 975 / 40	1242 / 1174 / 32	1079 / 934 / 38	1302 / 1135 / 31																																																																																																																																																																																
	20	1	602 / 408 / 51	663 / 525 / 43	587 / 518 / 73	647 / 637 / 59	671 / 602 / 78	799 / 733 / 63	666 / 556 / 67	819 / 697 / 56	618 / 444 / 48	696 / 564 / 40	603 / 559 / 68	700 / 695 / 56	710 / 643 / 72	858 / 793 / 59	705 / 593 / 63	854 / 731 / 51	631 / 476 / 45	728 / 595 / 37	614 / 596 / 64	727 / 726 / 51	762 / 695 / 68	911 / 845 / 55	757 / 641 / 59	938 / 806 / 49																																																																																																																																																																															
		2	663 / 525 / 43	787 / 649 / 35	647 / 648 / 59	781 / 800 / 48	799 / 743 / 63	971 / 918 / 51	819 / 707 / 56	1003 / 878 / 46	696 / 564 / 40	848 / 705 / 33	681 / 687 / 54	835 / 861 / 45	858 / 803 / 59	1029 / 977 / 48	854 / 741 / 51	1067 / 937 / 43	728 / 595 / 37	903 / 755 / 31	727 / 739 / 51	882 / 913 / 42	911 / 857 / 55	1075 / 1024 / 44	938 / 818 / 49	1119 / 985 / 40																																																																																																																																																																															
		3	622 / 771 / 31	743 / 939 / 25	741 / 742 / 51	900 / 916 / 42	929 / 863 / 55	1098 / 1031 / 44	926 / 795 / 48	1142 / 991 / 40	665 / 830 / 29	816 / 1036 / 24	796 / 802 / 48	954 / 976 / 39	990 / 924 / 51	1203 / 1134 / 42	987 / 851 / 45	1200 / 1044 / 36	702 / 881 / 27	849 / 1082 / 22	844 / 855 / 45	996 / 1023 / 36	1041 / 975 / 48	1242 / 1174 / 38	1079 / 934 / 43	1302 / 1135 / 35																																																																																																																																																																															
	25	1	602 / 408 / 51	663 / 525 / 43	587 / 518 / 73	647 / 637 / 59	671 / 602 / 93	799 / 733 / 75	666 / 556 / 78	819 / 697 / 65	618 / 444 / 48	696 / 564 / 40	603 / 559 / 68	700 / 695 / 56	710 / 643 / 86	858 / 793 / 70	705 / 593 / 72	854 / 731 / 59	631 / 476 / 45	728 / 595 / 37	614 / 596 / 64	727 / 726 / 51	762 / 695 / 82	911 / 845 / 66	757 / 641 / 69	938 / 806 / 57																																																																																																																																																																															
		2	663 / 525 / 43	787 / 649 / 35	647 / 648 / 59	781 / 800 / 48	799 / 743 / 75	971 / 918 / 61	819 / 707 / 65	1003 / 878 / 54	696 / 564 / 40	848 / 705 / 33	681 / 687 / 54	835 / 861 / 45	858 / 803 / 70	1029 / 977 / 57	854 / 741 / 59	1067 / 937 / 50	728 / 595 / 37	903 / 755 / 31	727 / 739 / 51	882 / 913 / 42	911 / 857 / 66	1075 / 1024 / 52	938 / 818 / 57	1119 / 985 / 46																																																																																																																																																																															
		3	622 / 771 / 31	743 / 939 / 25	741 / 742 / 51	900 / 916 / 42	929 / 863 / 66	1098 / 1031 / 52	926 / 795 / 55	1142 / 991 / 46	665 / 830 / 29	816 / 1036 / 24	796 / 802 / 48	954 / 976 / 39	990 / 924 / 61	1203 / 1134 / 50	987 / 851 / 52	1200 / 1044 / 42	702 / 881 / 27	849 / 1082 / 22	844 / 855 / 45	996 / 1023 / 36	1041 / 975 / 57	1242 / 1174 / 46	1079 / 934 / 50	1302 / 1135 / 40																																																																																																																																																																															
15	1	645 / 516 / 38	774 / 638 / 31	654 / 642 / 51	768 / 772 / 41	785 / 721 / 52	955 / 890 / 43	805 / 685 / 49	987 / 850 / 41	686 / 554 / 36	815 / 676 / 29	673 / 666 / 47	803 / 811 / 38	851 / 785 / 51	1029 / 962 / 41	847 / 724 / 46	1025 / 886 / 38	815 / 676 / 29	990 / 836 / 38	803 / 826 / 32	987 / 1030 / 40	989 / 937 / 33	1239 / 1185 / 38	1025 / 899 / 31	1236 / 1092 / 31																																																																																																																																																																																
	2	774 / 638 / 31	951 / 799 / 26	768 / 786 / 41	919 / 956 / 33	955 / 902 / 43	1159 / 1107 / 35	987 / 863 / 41	1209 / 1066 / 33	815 / 676 / 29	990 / 836 / 38	803 / 826 / 32	987 / 1030 / 40	989 / 937 / 33	1239 / 1185 / 38	1025 / 899 / 31	1236 / 1092 / 31	784 / 994 / 21	973 / 1247 / 18	916 / 936 / 30	1146 / 1184 / 28	1155 / 1088 / 35	1412 / 1339 / 29	1205 / 1047 / 33	1410 / 1233 / 26																																																																																																																																																																																
	3	760 / 959 / 23	913 / 1167 / 19	885 / 901 / 36	1073 / 1106 / 29	1079 / 1014 / 37	1331 / 1260 / 30	1123 / 974 / 35	1398 / 1221 / 29	784 / 994 / 21	973 / 1247 / 18	916 / 936 / 30	1146 / 1184 / 28	1155 / 1088 / 35	1412 / 1339 / 29	1205 / 1047 / 33	1410 / 1233 / 26	686 / 554 / 41	815 / 676 / 33	673 / 666 / 56	803 / 811 / 45	851 / 785 / 61	1029 / 962 / 49	847 / 724 / 53	1025 / 886 / 43																																																																																																																																																																																
20	1	655 / 516 / 43	774 / 638 / 35	654 / 642 / 61	768 / 772 / 48	785 / 721 / 63	955 / 890 / 51	805 / 685 / 56	987 / 850 / 46	686 / 554 / 41	815 / 676 / 33	673 / 666 / 56	803 / 811 / 45	851 / 785 / 61	1029 / 962 / 49	847 / 724 / 53	1025 / 886 / 43	815 / 676 / 33	990 / 836 / 38	803 / 826 / 45	987 / 1030 / 48	989 / 937 / 48	1239 / 1185 / 40	1025 / 899 / 43	1236 / 1092 / 35																																																																																																																																																																																
	2	774 / 638 / 35	951 / 799 / 29	768 / 786 / 48	919 / 956 / 39	955 / 902 / 51	1159 / 1107 / 42	987 / 863 / 46	1209 / 1066 / 38	815 / 676 / 33	990 / 836 / 27	803 / 826 / 45	987 / 1030 / 48	989 / 937 / 48	1239 / 1185 / 40	1025 / 899 / 43	1236 / 1092 / 35	784 / 994 / 24	973 / 1247 / 20	916 / 936 / 39	1146 / 1184 / 33	1155 / 1088 / 42	1412 / 1339 / 34	1205 / 1047 / 38	1410 / 1233 / 30																																																																																																																																																																																
	3	760 / 959 / 26	913 / 1167 / 21	885 / 901 / 42	1073 / 1106 / 34	1079 / 1014 / 44	1331 / 1260 / 36	1123 / 974 / 40	1398 / 1221 / 33	784 / 994 / 24	973 / 1247 / 20	916 / 936 / 39	1146 / 1184 / 33	1155 / 1088 / 42	1412 / 1339 / 34	1205 / 1047 / 38	1410 / 1233 / 30	686 / 554 / 41	815 / 676 / 33	673 / 666 / 56	803 / 811 / 45	851 / 785 / 73	1029 / 962 / 59	847 / 724 / 61	1025 / 886 / 50																																																																																																																																																																																
25	1	655 / 516 / 43	774 / 638 / 35	654 / 642 / 61	768 / 772 / 48	785 / 721 / 75	955 / 890 / 61	805 / 685 / 65	987 / 850 / 54	815 / 676 / 33	990 / 836 / 27	803 / 826 / 45	987 / 1030 / 48	989 / 937 / 57	1239 / 1185 / 48	1025 / 899 / 50	1236 / 1092 / 40	815 / 676 / 33	990 / 836 / 27	803 / 826 / 45	987 / 1030 / 48	989 / 937 / 57	1239 / 1185 / 48	1025 / 899 / 50	1236 / 1092 / 40																																																																																																																																																																																
	2	774 / 638 / 35	951 / 799 / 29	768 / 786 / 48	919 / 956 / 39	955 / 902 / 61	1159 / 1107 / 50	987 / 863 / 54	1209 / 1066 / 44	815 / 676 / 33	990 / 836 / 27	803 / 826 / 45	987 / 1030 / 48	989 / 937 / 57	1239 / 1185 / 48	1025 / 899 / 50	1236 / 1092 / 40	784 / 994 / 27	973 / 1247 / 20	916 / 936 / 45	1146 / 1184 / 38	1155 / 1088 / 57	1412 / 1339 / 48	1205 / 1047 / 50	1410 / 1233 / 35																																																																																																																																																																																
	3	760 / 959 / 26	913 / 1167 / 21	885 / 901 / 42	1073 / 1106 / 34	1079 / 1014 / 52	1331 / 1260 / 43	1123 / 974 / 46	1398 / 1221 / 38	784 / 994 / 24	973 / 1247 / 20	916 / 936 / 39	1146 / 1184 / 33	1155 / 1088 / 41	1412 / 1339 / 50	1205 / 1047 / 44	1410 / 1233 / 35	15	1	705 / 574 / 33	878 / 732 / 28	705 / 703 / 45	861 / 874 / 37	887 / 821 / 47	1056 / 990 / 38	883 / 757 / 43	1097 / 950 / 36	757 / 621 / 32	909 / 762 / 26	756 / 757 / 43	884 / 901 / 34	915 / 851 / 44	1120 / 1053 / 37	944 / 812 / 42	1165 / 1011 / 35	909 / 762 / 26	1127 / 958 / 34	884 / 917 / 28	1063 / 1115 / 28	1120 / 1067 / 37	1308 / 1256 / 29	1165 / 1026 / 35	1379 / 1222 / 28	2	878 / 732 / 28	1060 / 898 / 23	861 / 890 / 37	1006 / 1053 / 29	1056 / 1004 / 38	1248 / 1196 / 30	1097 / 964 / 36	1311 / 1160 / 29	909 / 762 / 26	1127 / 958 / 34	884 / 917 / 28	1063 / 1115 / 28	1120 / 1067 / 37	1308 / 1256 / 29	1165 / 1026 / 35	1379 / 1222 / 28	884 / 1127 / 19	1077 / 1388 / 16	1036 / 1066 / 30	1210 / 1255 / 24	1294 / 1223 / 32	1547 / 1471 / 26	1291 / 1126 / 29	1641 / 1438 / 25	3	835 / 1063 / 20	1028 / 1321 / 17	978 / 1003 / 32	1154 / 1195 / 25	1227 / 1158 / 33	1484 / 1410 / 27	1225 / 1066 / 31	1482 / 1298 / 25	884 / 1127 / 19	1077 / 1388 / 16	1036 / 1066 / 30	1210 / 1255 / 24	1294 / 1223 / 32	1547 / 1471 / 26	1291 / 1126 / 29	1641 / 1438 / 25	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 53	1120 / 1053 / 44	944 / 812 / 48	1165 / 1011 / 40	20	1	705 / 574 / 38	878 / 732 / 32	705 / 703 / 53	861 / 874 / 44	887 / 821 / 57	1056 / 990 / 46	883 / 757 / 49	1097 / 950 / 41	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 53	1120 / 1053 / 44	944 / 812 / 48	1165 / 1011 / 40	909 / 762 / 30	1127 / 958 / 25	884 / 917 / 41	1063 / 1115 / 33	1120 / 1067 / 44	1308 / 1256 / 34	1165 / 1026 / 40	1379 / 1222 / 32	2	878 / 732 / 32	1060 / 898 / 26	861 / 890 / 44	1006 / 1053 / 34	1056 / 1004 / 46	1248 / 1196 / 36	1097 / 964 / 41	1311 / 1160 / 33	909 / 762 / 30	1127 / 958 / 25	884 / 917 / 41	1063 / 1115 / 33	1120 / 1067 / 44	1308 / 1256 / 34	1165 / 1026 / 40	1379 / 1222 / 32	884 / 1127 / 22	1077 / 1388 / 18	1036 / 1066 / 36	1210 / 1255 / 28	1294 / 1223 / 31	1547 / 1471 / 33	1291 / 1126 / 33	1641 / 1438 / 28	3	835 / 1063 / 23	1028 / 1321 / 19	978 / 1003 / 38	1154 / 1195 / 30	1227 / 1158 / 40	1484 / 1410 / 32	1225 / 1066 / 35	1482 / 1298 / 28	884 / 1127 / 22	1077 / 1388 / 18	1036 / 1066 / 36	1210 / 1255 / 28	1294 / 1223 / 31	1547 / 1471 / 33	1291 / 1126 / 33	1641 / 1438 / 28	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 53	1120 / 1053 / 44	944 / 812 / 48	1165 / 1011 / 40	25	1	705 / 574 / 38	878 / 732 / 32	705 / 703 / 53	861 / 874 / 44	887 / 821 / 68	1056 / 990 / 55	883 / 757 / 57	1097 / 950 / 48	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 64	1120 / 1053 / 52	944 / 812 / 55	1165 / 1011 / 46	909 / 762 / 30	1127 / 958 / 25	884 / 917 / 41	1063 / 1115 / 33	1120 / 1067 / 52	1308 / 1256 / 41	1165 / 1026 / 46	1379 / 1222 / 36	2	878 / 732 / 32	1060 / 898 / 26	861 / 890 / 44	1006 / 1053 / 34	1056 / 1004 / 55
15	1	705 / 574 / 33	878 / 732 / 28	705 / 703 / 45	861 / 874 / 37	887 / 821 / 47	1056 / 990 / 38	883 / 757 / 43	1097 / 950 / 36	757 / 621 / 32	909 / 762 / 26	756 / 757 / 43	884 / 901 / 34	915 / 851 / 44	1120 / 1053 / 37	944 / 812 / 42	1165 / 1011 / 35		909 / 762 / 26	1127 / 958 / 34	884 / 917 / 28	1063 / 1115 / 28	1120 / 1067 / 37	1308 / 1256 / 29	1165 / 1026 / 35	1379 / 1222 / 28																																																																																																																																																																															
	2	878 / 732 / 28	1060 / 898 / 23	861 / 890 / 37	1006 / 1053 / 29	1056 / 1004 / 38	1248 / 1196 / 30	1097 / 964 / 36	1311 / 1160 / 29	909 / 762 / 26	1127 / 958 / 34	884 / 917 / 28	1063 / 1115 / 28	1120 / 1067 / 37	1308 / 1256 / 29	1165 / 1026 / 35	1379 / 1222 / 28		884 / 1127 / 19	1077 / 1388 / 16	1036 / 1066 / 30	1210 / 1255 / 24	1294 / 1223 / 32	1547 / 1471 / 26	1291 / 1126 / 29	1641 / 1438 / 25																																																																																																																																																																															
	3	835 / 1063 / 20	1028 / 1321 / 17	978 / 1003 / 32	1154 / 1195 / 25	1227 / 1158 / 33	1484 / 1410 / 27	1225 / 1066 / 31	1482 / 1298 / 25	884 / 1127 / 19	1077 / 1388 / 16	1036 / 1066 / 30	1210 / 1255 / 24	1294 / 1223 / 32	1547 / 1471 / 26	1291 / 1126 / 29	1641 / 1438 / 25	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 53	1120 / 1053 / 44	944 / 812 / 48	1165 / 1011 / 40																																																																																																																																																																																
20	1	705 / 574 / 38	878 / 732 / 32	705 / 703 / 53	861 / 874 / 44	887 / 821 / 57	1056 / 990 / 46	883 / 757 / 49	1097 / 950 / 41	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 53	1120 / 1053 / 44	944 / 812 / 48	1165 / 1011 / 40	909 / 762 / 30	1127 / 958 / 25	884 / 917 / 41	1063 / 1115 / 33	1120 / 1067 / 44	1308 / 1256 / 34	1165 / 1026 / 40	1379 / 1222 / 32																																																																																																																																																																																
	2	878 / 732 / 32	1060 / 898 / 26	861 / 890 / 44	1006 / 1053 / 34	1056 / 1004 / 46	1248 / 1196 / 36	1097 / 964 / 41	1311 / 1160 / 33	909 / 762 / 30	1127 / 958 / 25	884 / 917 / 41	1063 / 1115 / 33	1120 / 1067 / 44	1308 / 1256 / 34	1165 / 1026 / 40	1379 / 1222 / 32	884 / 1127 / 22	1077 / 1388 / 18	1036 / 1066 / 36	1210 / 1255 / 28	1294 / 1223 / 31	1547 / 1471 / 33	1291 / 1126 / 33	1641 / 1438 / 28																																																																																																																																																																																
	3	835 / 1063 / 23	1028 / 1321 / 19	978 / 1003 / 38	1154 / 1195 / 30	1227 / 1158 / 40	1484 / 1410 / 32	1225 / 1066 / 35	1482 / 1298 / 28	884 / 1127 / 22	1077 / 1388 / 18	1036 / 1066 / 36	1210 / 1255 / 28	1294 / 1223 / 31	1547 / 1471 / 33	1291 / 1126 / 33	1641 / 1438 / 28	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 53	1120 / 1053 / 44	944 / 812 / 48	1165 / 1011 / 40																																																																																																																																																																																
25	1	705 / 574 / 38	878 / 732 / 32	705 / 703 / 53	861 / 874 / 44	887 / 821 / 68	1056 / 990 / 55	883 / 757 / 57	1097 / 950 / 48	757 / 621 / 37	909 / 762 / 30	756 / 757 / 51	884 / 901 / 41	915 / 851 / 64	1120 / 1053 / 52	944 / 812 / 55	1165 / 1011 / 46	909 / 762 / 30	1127 / 958 / 25	884 / 917 / 41	1063 / 1115 / 33	1120 / 1067 / 52	1308 / 1256 / 41	1165 / 1026 / 46	1379 / 1222 / 36																																																																																																																																																																																
	2	878 / 732 / 32	1060 / 898 / 26	861 / 890 / 44	1006 / 1053 / 34	1056 / 1004 / 55	1248 / 1196 / 43																																																																																																																																																																																																		

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		30	1	534 / 281 / 59	587 / 383 / 52	545 / 385 / 90	584 / 498 / 76	564 / 464 / 137	653 / 583 / 114	532 / 429 / 113	648 / 539 / 94	549 / 304 / 58	608 / 413 / 51	553 / 408 / 87	593 / 524 / 73	576 / 489 / 132	678 / 610 / 108	557 / 452 / 109	673 / 563 / 89	555 / 322 / 56	616 / 434 / 49	570 / 439 / 86	601 / 549 / 70	587 / 513 / 127	700 / 633 / 103
Wind Speed [mph]		110								115															
30	1	570 / 345 / 55	623 / 453 / 47	576 / 461 / 83	607 / 570 / 67	606 / 535 / 121	719 / 653 / 98	600 / 494 / 100	734 / 618 / 83	574 / 362 / 53	642 / 482 / 46	581 / 481 / 80	611 / 590 / 64	625 / 555 / 116	754 / 688 / 95	619 / 512 / 96	750 / 634 / 78								
Wind Speed [mph]		120								130															
30	1	589 / 385 / 52	646 / 498 / 44	585 / 501 / 76	636 / 622 / 62	641 / 572 / 111	767 / 702 / 90	651 / 541 / 94	785 / 666 / 76	574 / 362 / 53	642 / 482 / 46	581 / 481 / 80	611 / 590 / 64	625 / 555 / 116	754 / 688 / 95	619 / 512 / 96	750 / 634 / 78								

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
30	1	603 / 408 / 51	664 / 525 / 43	588 / 518 / 73	647 / 637 / 59	671 / 602 / 108	799 / 733 / 87	666 / 556 / 89	819 / 697 / 74	619 / 444 / 48	696 / 564 / 40	604 / 559 / 69	700 / 695 / 56	710 / 643 / 100	858 / 793 / 82	705 / 593 / 83	854 / 731 / 68	632 / 476 / 45	728 / 595 / 37	616 / 596 / 64	727 / 726 / 52	762 / 695 / 95	911 / 845 / 77	757 / 641 / 78	938 / 806 / 65		
	2	664 / 525 / 43	787 / 649 / 35	647 / 648 / 59	781 / 800 / 49	799 / 743 / 87	971 / 918 / 71	819 / 707 / 74	1003 / 878 / 61	696 / 564 / 40	848 / 705 / 33	681 / 687 / 55	835 / 861 / 45	858 / 803 / 82	1029 / 977 / 66	854 / 741 / 68	1067 / 937 / 57	728 / 595 / 37	903 / 755 / 31	727 / 739 / 52	882 / 913 / 42	911 / 857 / 77	1075 / 1024 / 61	938 / 818 / 65	1119 / 985 / 52		
	3	622 / 771 / 31	743 / 939 / 25	741 / 742 / 52	900 / 916 / 42	929 / 863 / 77	1098 / 1031 / 61	926 / 795 / 63	1142 / 991 / 52	665 / 830 / 29	816 / 1036 / 24	796 / 802 / 49	954 / 976 / 39	990 / 924 / 71	1203 / 1134 / 58	987 / 851 / 59	1200 / 1044 / 48	702 / 881 / 27	849 / 1082 / 22	844 / 855 / 45	996 / 1023 / 36	1041 / 975 / 66	1242 / 1174 / 53	1079 / 934 / 57	1302 / 1135 / 46		
35	1	623 / 400 / 54	692 / 525 / 47	617 / 518 / 81	653 / 637 / 66	671 / 602 / 124	799 / 733 / 100	666 / 556 / 100	819 / 697 / 83	650 / 444 / 52	708 / 564 / 44	630 / 559 / 76	700 / 695 / 62	710 / 643 / 115	858 / 793 / 94	705 / 593 / 93	854 / 731 / 76	661 / 476 / 49	728 / 595 / 40	640 / 596 / 71	727 / 726 / 57	762 / 695 / 109	911 / 845 / 88	757 / 641 / 88	938 / 806 / 74		
	2	692 / 525 / 47	787 / 649 / 38	653 / 648 / 66	781 / 800 / 54	799 / 743 / 100	971 / 918 / 82	819 / 707 / 83	1003 / 878 / 69	708 / 564 / 44	848 / 705 / 36	681 / 687 / 60	835 / 861 / 50	858 / 803 / 94	1029 / 977 / 76	854 / 741 / 76	1067 / 937 / 64	728 / 595 / 40	903 / 755 / 34	727 / 739 / 57	882 / 913 / 47	911 / 857 / 88	1075 / 1024 / 70	938 / 818 / 74	1119 / 985 / 59		
	3	622 / 771 / 34	743 / 939 / 27	741 / 742 / 57	900 / 916 / 47	929 / 863 / 88	1098 / 1031 / 70	926 / 795 / 71	1142 / 991 / 59	665 / 830 / 32	816 / 1036 / 26	796 / 802 / 54	954 / 976 / 43	990 / 924 / 82	1203 / 1134 / 67	987 / 851 / 66	1200 / 1044 / 54	702 / 881 / 30	849 / 1082 / 24	844 / 855 / 50	996 / 1023 / 40	1041 / 975 / 76	1242 / 1174 / 61	1079 / 934 / 64	1302 / 1135 / 52		
40	1	642 / 392 / 57	719 / 525 / 50	645 / 518 / 91	676 / 637 / 74	671 / 602 / 139	799 / 733 / 112	666 / 556 / 111	819 / 697 / 92	666 / 434 / 55	733 / 564 / 47	657 / 559 / 85	706 / 695 / 70	710 / 643 / 129	858 / 793 / 105	705 / 593 / 103	854 / 731 / 84	689 / 476 / 53	742 / 595 / 43	665 / 596 / 79	727 / 726 / 64	762 / 695 / 122	911 / 845 / 98	757 / 641 / 98	938 / 806 / 82		
	2	719 / 525 / 50	787 / 649 / 41	676 / 648 / 74	781 / 800 / 60	799 / 743 / 112	971 / 918 / 92	819 / 707 / 92	1003 / 878 / 76	733 / 564 / 47	848 / 705 / 39	686 / 687 / 68	835 / 861 / 56	858 / 803 / 105	1029 / 977 / 85	854 / 741 / 84	1067 / 937 / 71	742 / 595 / 43	903 / 755 / 36	727 / 739 / 64	882 / 913 / 53	911 / 857 / 98	1075 / 1024 / 78	938 / 818 / 82	1119 / 985 / 65		
	3	631 / 771 / 36	743 / 939 / 29	741 / 742 / 64	900 / 916 / 53	929 / 863 / 98	1098 / 1031 / 78	926 / 795 / 79	1142 / 991 / 65	665 / 830 / 34	816 / 1036 / 28	796 / 802 / 60	954 / 976 / 49	990 / 924 / 92	1203 / 1134 / 75	987 / 851 / 73	1200 / 1044 / 60	702 / 881 / 32	849 / 1082 / 26	844 / 855 / 56	996 / 1023 / 45	1041 / 975 / 85	1242 / 1174 / 68	1079 / 934 / 71	1302 / 1135 / 57		
Wind Speed [mph]		170								180																	
30	1	656 / 516 / 43	774 / 638 / 35	654 / 642 / 61	768 / 772 / 49	785 / 721 / 87	955 / 890 / 71	805 / 685 / 74	987 / 850 / 61	686 / 554 / 41	815 / 676 / 33	673 / 666 / 56	803 / 811 / 45	851 / 785 / 85	1029 / 962 / 69	847 / 724 / 70	1025 / 886 / 57										
	2	774 / 638 / 35	951 / 799 / 29	768 / 786 / 49	919 / 956 / 39	955 / 902 / 71	1159 / 1107 / 58	987 / 863 / 61	1209 / 1066 / 50	815 / 676 / 33	990 / 836 / 27	803 / 826 / 45	987 / 1030 / 38	989 / 937 / 66	1239 / 1185 / 56	1025 / 899 / 57	1236 / 1092 / 46										
	3	760 / 959 / 26	913 / 1167 / 21	885 / 901 / 42	1073 / 1106 / 35	1079 / 1014 / 61	1331 / 1260 / 50	1123 / 974 / 52	1398 / 1221 / 44	784 / 994 / 24	973 / 1247 / 20	916 / 936 / 39	1146 / 1184 / 33	1155 / 1088 / 58	1412 / 1339 / 48	1205 / 1047 / 50	1410 / 1233 / 39										
35	1	684 / 516 / 47	774 / 638 / 38	663 / 642 / 67	768 / 772 / 54	785 / 721 / 100	955 / 890 / 82	805 / 685 / 83	987 / 850 / 69	705 / 554 / 45	815 / 676 / 36	673 / 666 / 62	803 / 811 / 50	851 / 785 / 97	1029 / 962 / 79	847 / 724 / 78	1025 / 886 / 64										
	2	774 / 638 / 38	951 / 799 / 32	768 / 786 / 54	919 / 956 / 43	955 / 902 / 67	1159 / 1107 / 56	987 / 863 / 69	1209 / 1066 / 56	815 / 676 / 36	990 / 836 / 30	803 / 826 / 50	987 / 1030 / 42	989 / 937 / 76	1239 / 1185 / 64	1025 / 899 / 64	1236 / 1092 / 52										
	3	760 / 959 / 28	913 / 1167 / 23	885 / 901 / 47	1073 / 1106 / 38	1079 / 1014 / 70	1331 / 1260 / 58	1123 / 974 / 59	1398 / 1221 / 49	784 / 994 / 26	973 / 1247 / 22	916 / 936 / 43	1146 / 1184 / 36	1155 / 1088 / 67	1412 / 1339 / 55	1205 / 1047 / 56	1410 / 1233 / 44										
40	1	711 / 516 / 50	774 / 638 / 41	686 / 642 / 76	768 / 772 / 60	785 / 721 / 112	955 / 890 / 92	805 / 685 / 92	987 / 850 / 76	731 / 554 / 48	815 / 676 / 39	686 / 666 / 70	803 / 811 / 56	851 / 785 / 109	1029 / 962 / 88	847 / 724 / 87	1025 / 886 / 71										
	2	774 / 638 / 41	951 / 799 / 34	768 / 786 / 60	919 / 956 / 49	955 / 902 / 75	1159 / 1107 / 76	987 / 863 / 63	1209 / 1066 / 63	815 / 676 / 39	990 / 836 / 32	803 / 826 / 56	987 / 1030 / 47	989 / 937 / 85	1239 / 1185 / 71	1025 / 899 / 71	1236 / 1092 / 57										
	3	760 / 959 / 31	913 / 1167 / 25	885 / 901 / 53	1073 / 1106 / 43	1079 / 1014 / 78	1331 / 1260 / 65	1123 / 974 / 65	1398 / 1221 / 55	784 / 994 / 28	973 / 1247 / 24	916 / 936 / 49	1146 / 1184 / 41	1155 / 1088 / 75	1412 / 1339 / 61	1205 / 1047 / 63	1410 / 1233 / 49										
Wind Speed [mph]		190								200																	
30	1	705 / 574 / 38	878 / 732 / 32	705 / 703 / 53	861 / 874 / 44	887 / 821 / 79	1056 / 990 / 64	883 / 757 / 65	1097 / 950 / 55	757 / 621 / 37	909 / 762 / 30	756 / 757 / 52	884 / 901 / 41	915 / 851 / 74	1120 / 1053 / 61	944 / 812 / 63	1165 / 1011 / 52										
	2	878 / 732 / 32	1060 / 898 / 26	861 / 890 / 44	1006 / 1053 / 35	1056 / 1004 / 64	1248 / 1196 / 50	1097 / 964 / 55	1311 / 1160 / 44	909 / 762 / 30	1127 / 958 / 25	884 / 917 / 41	1063 / 1115 / 33	1120 / 1067 / 61	1308 / 1256 / 48	1165 / 1026 / 52	1379 / 1222 / 42										
	3	835 / 1063 / 23	1028 / 1321 / 19	978 / 1003 / 38	1154 / 1195 / 30	1227 / 1158 / 56	1484 / 1410 / 45	1225 / 1066 / 46	1482 / 1298 / 37	884 / 1127 / 22	1077 / 1388 / 18	1036 / 1066 / 36	1210 / 1255 / 28	1294 / 1223 / 53	1547 / 1471 / 43	1291 / 1126 / 44	1641 / 1438 / 37										
35	1	705 / 574 / 41	878 / 732 / 35	705 / 703 / 59	861 / 874 / 48	887 / 821 / 91	1056 / 990 / 73	883 / 757 / 74	1097 / 950 / 61	757 / 621 / 40	909 / 762 / 33	756 / 757 / 57	884 / 901 / 45	915 / 851 / 85	1120 / 1053 / 70	944 / 812 / 71	1165 / 1011 / 59										
	2	878 / 732 / 35	1060 / 898 / 28	861 / 890 / 48	1006 / 1053 / 38	1056 / 1004 / 73	1248 / 1196 / 58	1097 / 964 / 61	1311 / 1160 / 49	909 / 762 / 33	1127 / 958 / 27	884 / 917 / 45	1063 / 1115 / 36	1120 / 1067 / 70	1308 / 1256 / 55	1165 / 1026 / 59	1379 / 1222 / 47										
	3	835 / 1063 / 25	1028 / 1321 / 21	978 / 1003 / 42	1154 / 1195 / 33	1227 / 1158 / 64	1484 / 1410 / 52	1225 / 1066 / 52	1482 / 1298 / 42	884 / 1127 / 24	1077 / 1388 / 20	1036 / 1066 / 40	1210 / 1255 / 31	1294 / 1223 / 61	1547 / 1471 / 49	1291 / 1126 / 49	1641 / 1438 / 42										
40	1	729 / 574 / 45	878 / 732 / 38	705 / 703 / 66	861 / 874 / 54	887 / 821 / 102	1056 / 990 / 82	883 / 757 / 82	1097 / 950 / 68	764 / 621 / 43	909 / 762 / 35	756 / 757 / 64	884 / 901 / 51	915 / 851 / 95	1120 / 1053 / 78	944 / 812 / 79	1165 / 1011 / 65										
	2	878 / 732 / 38	1060 / 898 / 31	861 / 890 / 54	1006 / 1053 / 43	1056 / 1004 / 82	1248 / 1196 / 65	1097 / 964 / 68	1311 / 1160 / 55	909 / 762 / 35	1127 / 958 / 29	884 / 917 / 51	1063 / 1115 / 41	1120 / 1067 / 78	1308 / 1256 / 61	1165 / 1026 / 65	1379 / 1222 / 52										
	3	835 / 1063 / 27	1028 / 1321 / 23	978 / 1003 / 47	1154 / 1195 / 37	1227 / 1158 / 71	1484 / 1410 / 58	1225 / 1066 / 57	1482 / 1298 / 46	884 / 1127 / 26	1077 / 1388 / 21	1036 / 1066 / 45	1210 / 1255 / 35	1294 / 1223 / 68	1547 / 1471 / 55	1291 / 1126 / 55	1641 / 1438 / 46										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	603 / 262 / 112	647 / 361 / 100	606 / 358 / 150	659 / 488 / 134	615 / 446 / 193	685 / 583 / 166	532 / 429 / 155	648 / 539 / 128	615 / 283 / 110	664 / 389 / 97	608 / 379 / 145	664 / 513 / 128	636 / 479 / 189	695 / 610 / 158	557 / 452 / 149	673 / 563 / 122	615 / 299 / 106	680 / 416 / 95	621 / 407 / 142	682 / 549 / 125	643 / 502 / 181	702 / 633 / 150	579 / 474 / 143	696 / 584 / 116
	2	647 / 361 / 100	712 / 485 / 87	659 / 497 / 134	683 / 615 / 109	669 / 578 / 162	764 / 708 / 131	648 / 547 / 128	782 / 673 / 105	664 / 389 / 97	735 / 519 / 85	664 / 523 / 128	705 / 656 / 106	678 / 603 / 154	808 / 753 / 127	673 / 571 / 122	828 / 716 / 102	680 / 416 / 95	757 / 554 / 83	682 / 558 / 125	707 / 678 / 100	702 / 641 / 150	825 / 771 / 120	696 / 592 / 116	847 / 734 / 96
	3	618 / 607 / 81	657 / 759 / 67	682 / 576 / 117	723 / 707 / 95	741 / 674 / 143	892 / 826 / 116	737 / 622 / 111	888 / 761 / 90	618 / 632 / 77	656 / 781 / 63	687 / 601 / 111	750 / 751 / 92	764 / 698 / 135	908 / 844 / 108	782 / 662 / 108	937 / 805 / 87	634 / 672 / 75	674 / 824 / 61	708 / 640 / 109	765 / 769 / 86	783 / 718 / 127	951 / 887 / 104	802 / 682 / 102	983 / 847 / 84
	1	615 / 252 / 117	664 / 354 / 106	626 / 352 / 160	674 / 478 / 142	627 / 437 / 206	706 / 583 / 181	532 / 429 / 169	648 / 539 / 140	625 / 273 / 114	680 / 380 / 103	627 / 372 / 154	692 / 513 / 139	646 / 469 / 201	715 / 610 / 172	557 / 452 / 163	673 / 563 / 133	635 / 293 / 112	695 / 407 / 101	639 / 399 / 151	694 / 536 / 133	666 / 502 / 197	721 / 633 / 164	579 / 474 / 156	696 / 584 / 127
	2	664 / 354 / 106	722 / 474 / 93	674 / 487 / 142	706 / 615 / 118	690 / 578 / 176	764 / 708 / 143	648 / 547 / 140	782 / 673 / 114	680 / 380 / 103	743 / 507 / 90	692 / 523 / 139	728 / 656 / 115	697 / 603 / 168	808 / 753 / 139	673 / 571 / 133	828 / 716 / 111	695 / 407 / 101	764 / 540 / 88	694 / 546 / 133	729 / 678 / 109	721 / 641 / 164	825 / 771 / 130	696 / 592 / 127	847 / 734 / 104
	3	643 / 607 / 88	678 / 759 / 73	708 / 576 / 127	744 / 707 / 103	742 / 674 / 155	892 / 826 / 126	737 / 622 / 120	888 / 761 / 98	642 / 632 / 84	676 / 781 / 68	711 / 601 / 121	768 / 751 / 100	764 / 698 / 147	908 / 844 / 118	782 / 662 / 117	937 / 805 / 95	658 / 672 / 82	693 / 824 / 66	732 / 640 / 118	767 / 769 / 94	783 / 718 / 139	951 / 887 / 114	802 / 682 / 111	983 / 847 / 91
	1	657 / 243 / 130	695 / 339 / 117	651 / 332 / 176	699 / 458 / 158	661 / 428 / 235	731 / 570 / 205	533 / 429 / 197	648 / 539 / 163	665 / 262 / 127	708 / 364 / 114	661 / 357 / 172	715 / 491 / 155	679 / 460 / 230	755 / 610 / 201	557 / 452 / 190	673 / 563 / 156	673 / 282 / 125	721 / 390 / 112	671 / 383 / 169	730 / 524 / 151	681 / 481 / 220	759 / 633 / 191	579 / 474 / 182	696 / 584 / 148
	2	695 / 339 / 117	757 / 462 / 104	699 / 466 / 158	753 / 615 / 137	731 / 578 / 205	777 / 708 / 166	648 / 547 / 163	782 / 673 / 133	708 / 364 / 114	776 / 495 / 102	715 / 500 / 155	774 / 656 / 134	736 / 603 / 196	808 / 753 / 162	673 / 571 / 156	828 / 716 / 129	721 / 390 / 112	795 / 527 / 99	730 / 534 / 151	773 / 678 / 127	759 / 641 / 191	825 / 771 / 152	696 / 592 / 148	847 / 734 / 122
	3	694 / 607 / 102	720 / 759 / 84	758 / 576 / 148	785 / 707 / 120	778 / 674 / 181	892 / 826 / 147	737 / 622 / 140	888 / 761 / 114	691 / 632 / 97	715 / 781 / 79	760 / 601 / 141	808 / 751 / 116	783 / 698 / 171	908 / 844 / 137	782 / 662 / 137	937 / 805 / 110	705 / 672 / 94	731 / 824 / 76	779 / 640 / 137	804 / 769 / 109	785 / 718 / 162	951 / 887 / 132	802 / 682 / 129	983 / 847 / 106
45	1	626 / 320 / 104	682 / 434 / 91	634 / 435 / 139	685 / 570 / 120	663 / 535 / 177	719 / 653 / 143	600 / 494 / 137	734 / 618 / 113	637 / 341 / 102	698 / 461 / 89	647 / 463 / 136	686 / 590 / 114	668 / 555 / 170	754 / 688 / 139	619 / 512 / 131	750 / 634 / 108	ASCE Group Zone							
	2	682 / 434 / 91	760 / 573 / 79	685 / 581 / 120	728 / 717 / 98	719 / 661 / 143	864 / 810 / 116	734 / 627 / 113	889 / 773 / 93	698 / 461 / 89	781 / 605 / 77	686 / 600 / 114	726 / 732 / 92	754 / 697 / 139	902 / 848 / 112	750 / 644 / 108	929 / 810 / 90	Mono Slope							
	3	631 / 691 / 71	692 / 865 / 59	709 / 660 / 103	802 / 809 / 84	822 / 757 / 123	993 / 927 / 100	843 / 719 / 99	1027 / 887 / 81	645 / 727 / 69	695 / 872 / 55	728 / 696 / 100	836 / 847 / 81	859 / 794 / 120	1031 / 965 / 97	855 / 732 / 93	1069 / 925 / 78	1 = 1							
	1	645 / 314 / 110	711 / 434 / 99	651 / 426 / 148	711 / 570 / 130	671 / 523 / 189	725 / 653 / 155	600 / 494 / 150	734 / 618 / 124	656 / 335 / 108	709 / 450 / 95	663 / 453 / 145	710 / 590 / 124	690 / 555 / 185	754 / 688 / 151	619 / 512 / 143	750 / 634 / 117	2 = 2							
	2	711 / 434 / 99	785 / 573 / 86	711 / 581 / 130	749 / 717 / 106	725 / 661 / 155	864 / 810 / 126	734 / 627 / 124	889 / 773 / 101	709 / 450 / 95	805 / 605 / 84	710 / 600 / 124	746 / 732 / 100	754 / 697 / 151	902 / 848 / 122	750 / 644 / 117	929 / 810 / 98	3 = 3							
	3	654 / 691 / 77	709 / 865 / 64	732 / 660 / 112	802 / 809 / 91	822 / 757 / 134	993 / 927 / 109	843 / 719 / 108	1027 / 887 / 88	667 / 727 / 75	698 / 872 / 60	750 / 696 / 109	836 / 847 / 88	859 / 794 / 130	1031 / 965 / 105	855 / 732 / 101	1069 / 925 / 85	1 = 1							
	1	681 / 301 / 122	734 / 415 / 109	681 / 409 / 165	745 / 557 / 148	699 / 512 / 215	761 / 653 / 181	600 / 494 / 174	734 / 618 / 144	689 / 321 / 119	746 / 440 / 107	691 / 434 / 162	760 / 590 / 144	716 / 542 / 210	782 / 688 / 176	619 / 512 / 167	750 / 634 / 137	7.5 - 15							
	2	734 / 415 / 109	813 / 558 / 97	745 / 567 / 148	791 / 717 / 123	761 / 661 / 181	864 / 810 / 147	734 / 627 / 144	889 / 773 / 118	746 / 440 / 107	831 / 589 / 94	760 / 600 / 144	785 / 732 / 116	782 / 697 / 176	902 / 848 / 142	750 / 644 / 137	929 / 810 / 114	2 = 2							
	3	698 / 691 / 89	746 / 865 / 74	776 / 660 / 130	824 / 809 / 106	822 / 757 / 157	993 / 927 / 127	843 / 719 / 125	1027 / 887 / 103	710 / 727 / 87	733 / 872 / 69	794 / 696 / 127	843 / 847 / 102	859 / 794 / 152	1031 / 965 / 122	855 / 732 / 118	1069 / 925 / 99	3 = 3							
45	1	648 / 363 / 100	714 / 487 / 87	661 / 490 / 134	702 / 622 / 111	671 / 572 / 162	767 / 702 / 131	651 / 541 / 128	785 / 666 / 105	637 / 341 / 102	698 / 461 / 89	647 / 463 / 136	686 / 590 / 114	668 / 555 / 170	754 / 688 / 139	619 / 512 / 131	750 / 634 / 108	ASCE Group Zone							
	2	714 / 487 / 87	779 / 620 / 73	684 / 617 / 109	751 / 767 / 89	767 / 711 / 131	938 / 884 / 108	785 / 676 / 105	967 / 845 / 87	698 / 461 / 89	781 / 605 / 77	686 / 600 / 114	726 / 732 / 92	754 / 697 / 139	902 / 848 / 112	750 / 644 / 108	929 / 810 / 90	Mono Slope							
	3	639 / 739 / 65	720 / 907 / 53	725 / 710 / 95	869 / 883 / 78	895 / 829 / 116	1066 / 1000 / 93	891 / 764 / 90	1107 / 959 / 75	645 / 727 / 69	695 / 872 / 55	728 / 696 / 100	836 / 847 / 81	859 / 794 / 120	1031 / 965 / 97	855 / 732 / 93	1069 / 925 / 78	1 = 1							
	1	666 / 355 / 106	724 / 476 / 93	675 / 480 / 142	726 / 622 / 121	692 / 572 / 176	767 / 702 / 143	651 / 541 / 140	785 / 666 / 114	656 / 335 / 108	709 / 450 / 95	663 / 453 / 145	710 / 590 / 124	690 / 555 / 185	754 / 688 / 151	619 / 512 / 143	750 / 634 / 117	15 - 30							
	2	724 / 476 / 93	802 / 620 / 79	708 / 617 / 118	763 / 767 / 97	767 / 711 / 143	938 / 884 / 118	785 / 676 / 114	967 / 845 / 95	709 / 450 / 95	805 / 605 / 84	710 / 600 / 124	746 / 732 / 100	754 / 697 / 151	902 / 848 / 122	750 / 644 / 117	929 / 810 / 98	2 = 2							
	3	659 / 739 / 71	720 / 907 / 57	746 / 710 / 103	869 / 883 / 85	895 / 829 / 126	1066 / 1000 / 101	891 / 764 / 98	1107 / 959 / 82	667 / 727 / 75	698 / 872 / 60	750 / 696 / 109	836 / 847 / 88	859 / 794 / 130	1031 / 965 / 105	855 / 732 / 101	1069 / 925 / 85	3 = 3							
	1	696 / 340 / 117	759 / 464 / 104	701 / 460 / 158	774 / 622 / 141	732 / 572 / 205	779 / 702 / 166	651 / 541 / 163	785 / 666 / 133	689 / 321 / 119	746 / 440 / 107	691 / 434 / 162	760 / 590 / 144	716 / 542 / 210	782 / 688 / 176	619 / 512 / 167	750 / 634 / 137	7.5 - 15							
	2	759 / 464 / 104	848 / 620 / 92	755 / 617 / 137	801 / 767 / 113	779 / 711 / 166	938 / 884 / 137	785 / 676 / 133	967 / 845 / 110	746 / 440 / 107	831 / 589 / 94	760 / 600 / 144	785 / 732 / 116	782 / 697 / 176	902 / 848 / 142	750 / 644 / 137	929 / 810 / 114	3 = 3							
	3	700 / 739 / 81	744 / 907 / 66	787 / 710 / 120	869 / 883 / 99	895 / 829 / 147	1066 / 1000 / 118	891 / 764 / 114	1107 / 959 / 95	710 / 727 / 87	733 / 872 / 69	794 / 696 / 127	843 / 847 / 102	859 / 794 / 152	1031 / 965 / 122	855 / 732 / 118	1069 / 925 / 99	30 - 45							

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		45	1	659 / 384 / 97	729 / 513 / 85	674 / 518 / 131	699 / 637 / 106	689 / 602 / 158	799 / 733 / 127	666 / 556 / 122	819 / 697 / 102	681 / 425 / 93	759 / 564 / 81	684 / 559 / 122	728 / 695 / 100	710 / 643 / 146	858 / 793 / 120	705 / 593 / 113	854 / 731 / 93	702 / 465 / 89	765 / 595 / 75	690 / 596 / 114	731 / 726 / 92	762 / 695 / 139	911 / 845 / 112	757 / 641 / 108
45	2	729 / 513 / 85	798 / 649 / 71	699 / 648 / 106	781 / 800 / 86	799 / 743 / 127	971 / 918 / 104	819 / 707 / 102	1003 / 878 / 84	759 / 564 / 81	848 / 705 / 67	707 / 687 / 98	835 / 861 / 81	858 / 803 / 120	1029 / 977 / 97	854 / 741 / 93	1067 / 937 / 78	765 / 595 / 75	903 / 755 / 63	731 / 739 / 92	882 / 913 / 75	911 / 857 / 112	1075 / 1024 / 89	938 / 818 / 90	1119 / 985 / 72	
45	3	650 / 771 / 63	743 / 939 / 51	742 / 742 / 92	900 / 916 / 75	929 / 863 / 112	1098 / 1031 / 89	926 / 795 / 87	1142 / 991 / 72	671 / 830 / 59	816 / 1036 / 49	796 / 802 / 86	954 / 976 / 70	990 / 924 / 104	1203 / 1134 / 85	987 / 851 / 81	1200 / 1044 / 66	702 / 881 / 55	849 / 1082 / 45	844 / 855 / 81	996 / 1023 / 64	1041 / 975 / 97	1242 / 1174 / 77	1079 / 934 / 78	1302 / 1135 / 63	
50	1	676 / 376 / 103	738 / 501 / 90	687 / 507 / 139	722 / 637 / 115	709 / 602 / 172	799 / 733 / 139	666 / 556 / 133	819 / 697 / 111	695 / 416 / 99	764 / 549 / 86	710 / 559 / 133	749 / 695 / 109	723 / 643 / 160	858 / 793 / 130	705 / 593 / 124	854 / 731 / 101	713 / 455 / 95	789 / 595 / 82	715 / 596 / 124	751 / 726 / 100	762 / 695 / 151	911 / 845 / 122	757 / 641 / 117	938 / 806 / 98	
50	2	738 / 501 / 90	820 / 649 / 77	722 / 648 / 115	781 / 800 / 94	799 / 743 / 139	971 / 918 / 114	819 / 707 / 111	1003 / 878 / 91	764 / 549 / 86	852 / 705 / 73	729 / 687 / 106	835 / 861 / 88	858 / 803 / 130	1029 / 977 / 105	854 / 741 / 101	1067 / 937 / 85	789 / 595 / 82	903 / 755 / 68	751 / 739 / 100	882 / 913 / 82	911 / 857 / 122	1075 / 1024 / 97	938 / 818 / 98	1119 / 985 / 78	
50	3	670 / 771 / 68	743 / 939 / 55	762 / 742 / 100	900 / 916 / 82	929 / 863 / 122	1098 / 1031 / 97	926 / 795 / 95	1142 / 991 / 78	689 / 830 / 64	816 / 1036 / 53	796 / 802 / 94	954 / 976 / 76	990 / 924 / 114	1203 / 1134 / 93	987 / 851 / 88	1200 / 1044 / 72	703 / 881 / 60	849 / 1082 / 49	844 / 855 / 88	996 / 1023 / 70	1041 / 975 / 105	1242 / 1174 / 84	1079 / 934 / 85	1302 / 1135 / 69	
60	1	704 / 360 / 114	771 / 489 / 102	710 / 485 / 155	768 / 637 / 134	749 / 602 / 201	799 / 733 / 162	666 / 556 / 156	819 / 697 / 129	736 / 407 / 112	793 / 535 / 97	746 / 547 / 151	793 / 695 / 127	760 / 643 / 186	858 / 793 / 152	705 / 593 / 144	854 / 731 / 118	750 / 444 / 107	836 / 595 / 94	764 / 596 / 144	791 / 726 / 116	787 / 695 / 176	911 / 845 / 142	757 / 641 / 137	938 / 806 / 114	
60	2	771 / 489 / 102	864 / 649 / 89	768 / 648 / 134	816 / 800 / 109	799 / 743 / 162	971 / 918 / 132	819 / 707 / 129	1003 / 878 / 106	793 / 535 / 97	894 / 705 / 84	771 / 687 / 123	842 / 861 / 102	858 / 803 / 152	1029 / 977 / 122	854 / 741 / 118	1067 / 937 / 99	836 / 595 / 94	920 / 755 / 79	791 / 739 / 116	882 / 913 / 95	911 / 857 / 142	1075 / 1024 / 113	938 / 818 / 114	1119 / 985 / 91	
60	3	710 / 771 / 79	753 / 939 / 64	802 / 742 / 116	900 / 916 / 95	929 / 863 / 142	1098 / 1031 / 113	926 / 795 / 110	1142 / 991 / 91	726 / 830 / 74	816 / 1036 / 61	828 / 802 / 109	954 / 976 / 88	990 / 924 / 132	1203 / 1134 / 108	987 / 851 / 103	1200 / 1044 / 84	738 / 881 / 69	849 / 1082 / 56	849 / 855 / 102	996 / 1023 / 81	1041 / 975 / 122	1242 / 1174 / 98	1079 / 934 / 99	1302 / 1135 / 80	
Wind Speed [mph]		170								180																
Exposure Category : D	45	1	721 / 504 / 85	788 / 638 / 71	710 / 642 / 109	768 / 772 / 86	785 / 721 / 127	955 / 890 / 104	805 / 685 / 102	987 / 850 / 84	757 / 554 / 83	815 / 676 / 67	707 / 666 / 100	803 / 811 / 81	851 / 785 / 123	1029 / 962 / 100	847 / 724 / 96	1025 / 886 / 78	ASCE Group Zone							
		2	788 / 638 / 71	951 / 799 / 59	768 / 786 / 86	919 / 956 / 70	955 / 902 / 104	1159 / 1107 / 85	987 / 863 / 84	1209 / 1066 / 69	815 / 676 / 67	990 / 836 / 55	803 / 826 / 81	987 / 1030 / 67	989 / 937 / 97	1239 / 1185 / 81	1025 / 899 / 78	1236 / 1092 / 63								
		3	760 / 959 / 53	913 / 1167 / 43	885 / 901 / 75	1073 / 1106 / 61	1079 / 1014 / 89	1331 / 1260 / 73	1123 / 974 / 72	1398 / 1221 / 60	784 / 994 / 49	973 / 1247 / 41	916 / 936 / 70	1146 / 1184 / 59	1155 / 1088 / 85	1412 / 1339 / 70	1205 / 1047 / 75	1410 / 1233 / 54								
	50	1	748 / 504 / 93	810 / 638 / 77	733 / 642 / 118	769 / 772 / 94	785 / 721 / 139	955 / 890 / 114	805 / 685 / 111	987 / 850 / 91	764 / 540 / 88	828 / 676 / 73	729 / 666 / 109	803 / 811 / 88	851 / 785 / 134	1029 / 962 / 109	847 / 724 / 104	1025 / 886 / 85							0 - 7.5	
		2	810 / 638 / 77	951 / 799 / 64	769 / 786 / 94	919 / 956 / 76	955 / 902 / 114	1159 / 1107 / 93	987 / 863 / 91	1209 / 1066 / 75	828 / 676 / 73	990 / 836 / 63	803 / 826 / 88	987 / 1030 / 73	989 / 937 / 105	1239 / 1185 / 88	1025 / 899 / 85	1236 / 1092 / 69								7.5 - 15
		3	760 / 959 / 57	913 / 1167 / 47	885 / 901 / 82	1073 / 1106 / 67	1079 / 1014 / 97	1331 / 1260 / 80	1123 / 974 / 78	1398 / 1221 / 65	784 / 994 / 53	973 / 1247 / 44	916 / 936 / 76	1146 / 1184 / 64	1155 / 1088 / 93	1412 / 1339 / 76	1205 / 1047 / 75	1410 / 1233 / 59								
	60	1	763 / 480 / 102	855 / 638 / 89	780 / 642 / 137	806 / 772 / 109	787 / 721 / 162	955 / 890 / 132	805 / 685 / 129	987 / 850 / 106	795 / 527 / 99	870 / 676 / 84	773 / 666 / 127	818 / 811 / 102	851 / 785 / 157	1029 / 962 / 127	847 / 724 / 122	1025 / 886 / 99							15 - 30	
		2	855 / 638 / 89	951 / 799 / 74	806 / 786 / 109	919 / 956 / 88	955 / 902 / 132	1159 / 1107 / 108	987 / 863 / 106	1209 / 1066 / 87	870 / 676 / 84	990 / 836 / 69	818 / 826 / 102	987 / 1030 / 85	989 / 937 / 122	1239 / 1185 / 103	1025 / 899 / 99	1236 / 1092 / 80								30 - 45
		3	774 / 959 / 66	913 / 1167 / 54	885 / 901 / 95	1073 / 1106 / 78	1079 / 1014 / 113	1331 / 1260 / 93	1123 / 974 / 91	1398 / 1221 / 76	784 / 994 / 61	973 / 1247 / 51	916 / 936 / 88	1146 / 1184 / 74	1155 / 1088 / 108	1412 / 1339 / 88	1205 / 1047 / 87	1410 / 1233 / 69								
Wind Speed [mph]		190								200																
Exposure Category : D	45	1	754 / 574 / 77	878 / 732 / 65	720 / 703 / 95	861 / 874 / 78	887 / 821 / 116	1056 / 990 / 93	883 / 757 / 90	1097 / 950 / 75	787 / 621 / 75	909 / 762 / 61	756 / 757 / 92	884 / 901 / 73	915 / 851 / 108	1120 / 1053 / 89	944 / 812 / 87	1165 / 1011 / 72	ASCE Group Zone							
		2	878 / 732 / 65	1060 / 898 / 53	861 / 890 / 78	1006 / 1053 / 61	1056 / 1004 / 93	1248 / 1196 / 73	1097 / 964 / 75	1311 / 1160 / 60	909 / 762 / 61	1127 / 958 / 51	884 / 917 / 73	1063 / 1115 / 59	1120 / 1067 / 89	1308 / 1256 / 70	1165 / 1026 / 72	1379 / 1222 / 57								
		3	835 / 1063 / 47	1028 / 1321 / 39	978 / 1003 / 67	1154 / 1195 / 53	1227 / 1158 / 81	1484 / 1410 / 66	1225 / 1066 / 63	1482 / 1298 / 51	884 / 1127 / 45	1077 / 1388 / 37	1036 / 1066 / 64	1210 / 1255 / 50	1294 / 1223 / 77	1547 / 1471 / 62	1291 / 1126 / 60	1641 / 1438 / 51								
	50	1	778 / 574 / 84	878 / 732 / 71	741 / 703 / 103	861 / 874 / 85	887 / 821 / 126	1056 / 990 / 101	883 / 757 / 98	1097 / 950 / 82	811 / 621 / 82	909 / 762 / 66	773 / 757 / 100	884 / 901 / 79	915 / 851 / 118	1120 / 1053 / 97	944 / 812 / 95	1165 / 1011 / 78		0 - 7.5						
		2	878 / 732 / 71	1060 / 898 / 57	861 / 890 / 85	1006 / 1053 / 67	1056 / 1004 / 101	1248 / 1196 / 80	1097 / 964 / 82	1311 / 1160 / 65	909 / 762 / 66	1127 / 958 / 55	884 / 917 / 79	1063 / 1115 / 64	1120 / 1067 / 97	1308 / 1256 / 76	1165 / 1026 / 78	1379 / 1222 / 62			7.5 - 15					
		3	835 / 1063 / 51	1028 / 1321 / 42	978 / 1003 / 73	1154 / 1195 / 58	1227 / 1158 / 88	1484 / 1410 / 72	1225 / 1066 / 69	1482 / 1298 / 56	884 / 1127 / 49	1077 / 1388 / 40	1036 / 1066 / 70	1210 / 1255 / 55	1294 / 1223 / 84	1547 / 1471 / 67	1291 / 1126 / 65	1641 / 1438 / 56								
	60	1	826 / 574 / 97	909 / 732 / 81	782 / 703 / 120	861 / 874 / 99	887 / 821 / 147	1056 / 990 / 118	883 / 757 / 114	1097 / 950 / 95	835 / 604 / 92	917 / 762 / 76	812 / 757 / 116	884 / 901 / 92	915 / 851 / 137	1120 / 1053 / 113	944 / 812 / 110	1165 / 1011 / 91		15 - 30						
		2	909 / 732 / 81	1060 / 898 / 66	861 / 890 / 99	1006 / 1053 / 78	1056 / 1004 / 118	1248 / 1196 / 93	1097 / 964 / 95	1311 / 1160 / 76	917 / 762 / 76	1127 / 958 / 64	884 / 917 / 92	1063 / 1115 / 74	1120 / 1067 / 113	1308 / 1256 / 88	1165 / 1026 / 91	1379 / 1222 / 72			30 - 45					
		3	835 / 1063 / 59	1028 / 1321 / 49	978 / 1003 / 85	1154 / 1195 / 67	1227 / 1158 / 103	1484 / 1410 / 83	1225 / 1066 / 80	1482 / 1298 / 65	884 / 1127 / 56	1077 / 1388 / 46	1036 / 1066 / 81	1210 / 1255 / 64	1294 / 1223 / 98	1547 / 1471 / 79	1291 / 1126 / 76	1641 / 1438 / 65								

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
---------------	------------	------------	---------------

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	70	1	693 / 233 / 141	737 / 332 / 130	698 / 325 / 196	737 / 448 / 176	693 / 419 / 265	753 / 556 / 231	554 / 429 / 225	648 / 539 / 186	699 / 252 / 138	748 / 356 / 127	706 / 350 / 192	750 / 480 / 172	693 / 440 / 253	775 / 595 / 225	566 / 452 / 217	673 / 563 / 178	705 / 270 / 135	759 / 381 / 124	714 / 375 / 188	764 / 512 / 168	709 / 470 / 248	797 / 633 / 220	579 / 474 / 208
70	2	737 / 332 / 130	789 / 451 / 115	737 / 456 / 176	800 / 615 / 156	753 / 564 / 231	810 / 708 / 192	648 / 547 / 186	782 / 673 / 152	748 / 356 / 127	806 / 482 / 112	750 / 489 / 172	820 / 656 / 152	775 / 603 / 225	836 / 753 / 186	673 / 571 / 178	828 / 716 / 147	759 / 381 / 124	823 / 513 / 110	764 / 521 / 168	816 / 678 / 144	797 / 641 / 220	834 / 771 / 175	696 / 592 / 169	847 / 734 / 139
70	3	745 / 607 / 115	762 / 759 / 95	790 / 562 / 164	826 / 707 / 136	814 / 674 / 208	892 / 826 / 169	737 / 622 / 160	888 / 761 / 130	739 / 632 / 110	754 / 781 / 90	788 / 586 / 156	848 / 751 / 132	817 / 698 / 197	908 / 844 / 158	782 / 662 / 156	937 / 805 / 126	752 / 672 / 107	769 / 824 / 87	805 / 623 / 152	842 / 769 / 124	817 / 718 / 186	951 / 887 / 152	802 / 682 / 147	983 / 847 / 122
80	1	725 / 224 / 151	759 / 317 / 139	726 / 312 / 211	772 / 437 / 193	707 / 401 / 287	774 / 543 / 255	575 / 429 / 253	648 / 539 / 210	729 / 241 / 148	786 / 348 / 139	732 / 336 / 207	784 / 469 / 189	721 / 430 / 281	794 / 580 / 249	586 / 452 / 244	673 / 563 / 200	749 / 265 / 148	795 / 372 / 135	738 / 359 / 202	795 / 500 / 184	735 / 459 / 274	813 / 617 / 242	597 / 474 / 234	696 / 584 / 190
80	2	759 / 317 / 139	819 / 440 / 126	772 / 445 / 193	826 / 599 / 171	774 / 550 / 255	843 / 708 / 217	648 / 547 / 210	782 / 673 / 171	786 / 348 / 139	834 / 470 / 123	784 / 477 / 189	843 / 639 / 166	794 / 588 / 249	868 / 753 / 211	673 / 571 / 200	828 / 716 / 166	795 / 372 / 135	848 / 500 / 119	795 / 509 / 184	860 / 678 / 162	813 / 625 / 242	865 / 771 / 198	696 / 592 / 190	847 / 734 / 156
80	3	796 / 607 / 129	804 / 759 / 106	819 / 548 / 180	867 / 707 / 153	827 / 656 / 230	907 / 826 / 192	737 / 622 / 180	888 / 761 / 146	788 / 632 / 123	794 / 781 / 100	835 / 586 / 175	888 / 751 / 148	851 / 698 / 223	908 / 844 / 179	782 / 662 / 176	937 / 805 / 141	799 / 672 / 119	807 / 824 / 97	851 / 623 / 171	879 / 769 / 139	849 / 718 / 211	951 / 887 / 172	802 / 682 / 166	983 / 847 / 137
90	1	768 / 219 / 164	795 / 310 / 150	749 / 299 / 224	805 / 427 / 209	734 / 392 / 314	792 / 529 / 278	596 / 429 / 281	649 / 539 / 233	770 / 236 / 160	802 / 332 / 146	770 / 328 / 224	815 / 458 / 204	746 / 421 / 306	810 / 565 / 271	607 / 452 / 271	673 / 563 / 222	772 / 253 / 157	828 / 363 / 146	775 / 351 / 219	824 / 488 / 199	758 / 449 / 299	828 / 600 / 264	616 / 474 / 260	696 / 584 / 211
90	2	795 / 310 / 150	847 / 429 / 135	805 / 435 / 209	849 / 583 / 184	792 / 537 / 278	876 / 708 / 242	649 / 547 / 233	782 / 673 / 190	802 / 332 / 146	859 / 458 / 132	815 / 466 / 204	864 / 622 / 179	810 / 573 / 271	900 / 753 / 235	673 / 571 / 222	828 / 716 / 184	828 / 363 / 146	871 / 486 / 128	824 / 496 / 199	878 / 659 / 174	828 / 609 / 264	895 / 771 / 221	696 / 592 / 211	847 / 734 / 173
90	3	826 / 592 / 139	846 / 759 / 118	846 / 535 / 194	908 / 707 / 169	862 / 656 / 257	936 / 826 / 214	737 / 622 / 200	888 / 761 / 163	836 / 632 / 135	833 / 781 / 111	859 / 571 / 189	928 / 751 / 164	885 / 698 / 250	930 / 844 / 200	782 / 662 / 195	937 / 805 / 157	846 / 672 / 132	846 / 824 / 107	873 / 607 / 184	917 / 769 / 154	881 / 718 / 235	954 / 887 / 193	802 / 682 / 184	983 / 847 / 152
Wind Speed [mph]		110								115															
70	1	711 / 289 / 133	770 / 405 / 121	722 / 400 / 184	777 / 544 / 164	725 / 500 / 242	797 / 653 / 208	600 / 494 / 199	734 / 618 / 165	733 / 314 / 133	781 / 429 / 118	730 / 425 / 180	790 / 575 / 160	740 / 530 / 237	817 / 688 / 203	619 / 512 / 191	750 / 634 / 156								
70	2	770 / 405 / 121	839 / 544 / 107	777 / 554 / 164	834 / 717 / 140	797 / 661 / 208	864 / 810 / 169	734 / 627 / 165	889 / 773 / 134	781 / 429 / 118	854 / 574 / 104	790 / 586 / 160	825 / 732 / 132	817 / 697 / 203	902 / 848 / 163	750 / 644 / 156	929 / 810 / 130								
70	3	743 / 691 / 101	783 / 865 / 84	821 / 660 / 148	861 / 809 / 120	839 / 757 / 180	993 / 927 / 147	843 / 719 / 143	1027 / 887 / 117	754 / 727 / 98	767 / 872 / 78	837 / 696 / 144	878 / 847 / 116	860 / 794 / 175	1031 / 965 / 141	855 / 732 / 134	1069 / 925 / 113								
80	1	753 / 283 / 145	804 / 396 / 132	744 / 383 / 198	806 / 531 / 180	749 / 488 / 268	833 / 653 / 236	606 / 494 / 224	734 / 618 / 185	757 / 301 / 142	813 / 419 / 129	767 / 415 / 198	817 / 561 / 175	762 / 517 / 262	852 / 688 / 230	619 / 512 / 214	750 / 634 / 176								
80	2	804 / 396 / 132	862 / 529 / 116	806 / 540 / 180	876 / 717 / 157	833 / 661 / 236	886 / 810 / 192	734 / 627 / 185	889 / 773 / 151	813 / 419 / 129	875 / 558 / 113	817 / 571 / 175	865 / 732 / 148	852 / 697 / 230	907 / 848 / 185	750 / 644 / 176	929 / 810 / 146								
80	3	787 / 691 / 113	820 / 865 / 94	866 / 660 / 166	897 / 809 / 135	870 / 757 / 204	993 / 927 / 166	843 / 719 / 161	1027 / 887 / 132	797 / 727 / 110	801 / 872 / 87	881 / 696 / 162	913 / 847 / 130	891 / 794 / 198	1031 / 965 / 160	855 / 732 / 151	1069 / 925 / 127								
90	1	792 / 276 / 157	835 / 386 / 143	779 / 374 / 214	833 / 517 / 194	771 / 477 / 292	845 / 635 / 257	624 / 494 / 249	734 / 618 / 206	794 / 294 / 153	842 / 408 / 139	783 / 397 / 209	842 / 547 / 189	782 / 504 / 285	862 / 669 / 250	631 / 512 / 238	750 / 634 / 195								
90	2	835 / 386 / 143	882 / 514 / 125	833 / 527 / 194	918 / 717 / 174	845 / 644 / 257	915 / 810 / 214	734 / 627 / 206	889 / 773 / 168	842 / 408 / 139	920 / 558 / 125	842 / 556 / 189	905 / 732 / 164	862 / 678 / 250	935 / 848 / 207	750 / 644 / 195	929 / 810 / 163								
90	3	832 / 691 / 125	857 / 865 / 103	886 / 642 / 179	933 / 809 / 150	901 / 757 / 228	993 / 927 / 185	843 / 719 / 179	1027 / 887 / 146	840 / 727 / 121	836 / 872 / 96	898 / 676 / 174	948 / 847 / 145	921 / 794 / 221	1031 / 965 / 178	855 / 732 / 168	1069 / 925 / 141								
Wind Speed [mph]		120								130															
70	1	739 / 333 / 130	791 / 453 / 115	738 / 450 / 176	802 / 606 / 156	755 / 559 / 231	812 / 702 / 192	651 / 541 / 186	785 / 666 / 152	733 / 314 / 133	781 / 429 / 118	730 / 425 / 180	790 / 575 / 160	740 / 530 / 237	817 / 688 / 203	619 / 512 / 191	750 / 634 / 156								
70	2	791 / 453 / 115	869 / 603 / 101	802 / 617 / 156	840 / 767 / 128	812 / 711 / 192	938 / 884 / 158	785 / 676 / 152	967 / 845 / 126	781 / 429 / 118	854 / 574 / 104	790 / 586 / 160	825 / 732 / 132	817 / 697 / 203	902 / 848 / 163	750 / 644 / 156	929 / 810 / 130								
70	3	741 / 739 / 92	777 / 907 / 75	828 / 710 / 136	894 / 883 / 112	895 / 829 / 169	1066 / 1000 / 135	891 / 764 / 130	1107 / 959 / 109	754 / 727 / 98	767 / 872 / 78	837 / 696 / 144	878 / 847 / 116	860 / 794 / 175	1031 / 965 / 141	855 / 732 / 134	1069 / 925 / 113								
80	1	761 / 318 / 139	821 / 442 / 126	774 / 439 / 193	828 / 591 / 171	775 / 545 / 255	845 / 702 / 217	651 / 541 / 210	785 / 666 / 171	757 / 301 / 142	813 / 419 / 129	767 / 415 / 198	817 / 561 / 175	762 / 517 / 262	852 / 688 / 230	619 / 512 / 214	750 / 634 / 176								
80	2	821 / 442 / 126	887 / 585 / 110	828 / 601 / 171	879 / 767 / 144	845 / 711 / 217	938 / 884 / 179	785 / 676 / 171	967 / 845 / 141	813 / 419 / 129	875 / 558 / 113	817 / 571 / 175	865 / 732 / 148	852 / 697 / 230	907 / 848 / 185	750 / 644 / 176	929 / 810 / 146								
80	3	781 / 739 / 103	810 / 907 / 84	869 / 710 / 153	928 / 883 / 126	910 / 829 / 192	1066 / 1000 / 153	891 / 764 / 146	1107 / 959 / 122	797 / 727 / 110	801 / 872 / 87	881 / 696 / 162	913 / 847 / 130	891 / 794 / 198	1031 / 965 / 160	855 / 732 / 151	1069 / 925 / 127								
90	1	796 / 311 / 150	848 / 430 / 135	806 / 429 / 209	850 / 575 / 184	794 / 532 / 278	878 / 702 / 242	651 / 541 / 233	785 / 666 / 190	794 / 294 / 153	842 / 408 / 139	783 / 397 / 209	842 / 547 / 189	782 / 504 / 285	862 / 669 / 250	631 / 512 / 238	750 / 634 / 195								
90	2	848 / 430 / 135	931 / 585 / 121	850 / 586 / 184	917 / 767 / 159	878 / 711 / 242	953 / 884 / 200	785 / 676 / 190	967 / 845 / 157	842 / 408 / 139	920 / 558 / 125	842 / 556 / 189	905 / 732 / 164	862 / 678 / 250	935 / 848 / 207	750 / 644 / 195	929 / 810 / 163								
90	3	822 / 739 / 114	843 / 907 / 93	910 / 710 / 169	962 / 883 / 140	939 / 829 / 214	1066 / 1000 / 171	891 / 764 / 163	1107 / 959 / 136	840 / 727 / 121	836 / 872 / 96	898 / 676 / 174	948 / 847 / 145	921 / 794 / 221	1031 / 965 / 178	855 / 732 / 168	1069 / 925 / 141								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				74in x 41.2in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	745 / 352 / 127	801 / 476 / 112	746 / 474 / 172	814 / 637 / 152	769 / 587 / 225	829 / 733 / 186	666 / 556 / 178	819 / 697 / 147	756 / 388 / 121	842 / 535 / 110	761 / 521 / 164	836 / 695 / 144	797 / 643 / 214	860 / 793 / 175	705 / 593 / 165	854 / 731 / 134	785 / 434 / 118	859 / 579 / 104	794 / 581 / 160	830 / 726 / 132	822 / 695 / 203	911 / 845 / 163	757 / 641 / 156	938 / 806 / 130
	2	801 / 476 / 112	883 / 631 / 98	814 / 648 / 152	854 / 800 / 124	829 / 743 / 186	971 / 918 / 152	819 / 707 / 147	1003 / 878 / 122	842 / 535 / 110	936 / 705 / 95	813 / 687 / 140	877 / 861 / 116	860 / 803 / 175	1029 / 977 / 141	854 / 741 / 134	1067 / 937 / 113	859 / 579 / 104	960 / 755 / 90	830 / 739 / 132	895 / 913 / 108	911 / 857 / 163	1075 / 1024 / 130	938 / 818 / 130	1119 / 985 / 104
	3	749 / 771 / 90	785 / 939 / 72	841 / 742 / 132	908 / 916 / 108	929 / 863 / 163	1098 / 1031 / 130	926 / 795 / 126	1142 / 991 / 104	763 / 830 / 84	831 / 1036 / 69	865 / 802 / 124	954 / 976 / 100	990 / 924 / 152	1203 / 1134 / 124	987 / 851 / 117	1200 / 1044 / 96	772 / 881 / 78	849 / 1082 / 64	884 / 855 / 116	996 / 1023 / 92	1041 / 975 / 141	1242 / 1174 / 113	1079 / 934 / 113	1302 / 1135 / 91
80	1	782 / 344 / 139	829 / 464 / 123	780 / 463 / 189	837 / 620 / 166	788 / 573 / 249	861 / 733 / 211	666 / 556 / 200	819 / 697 / 166	790 / 379 / 132	867 / 521 / 119	791 / 509 / 180	880 / 695 / 162	812 / 626 / 236	890 / 793 / 198	705 / 593 / 185	854 / 731 / 151	816 / 423 / 129	880 / 563 / 113	821 / 567 / 175	870 / 726 / 148	857 / 695 / 230	913 / 845 / 185	757 / 641 / 176	938 / 806 / 146
	2	829 / 464 / 123	926 / 631 / 110	837 / 631 / 166	891 / 800 / 139	861 / 743 / 211	971 / 918 / 172	819 / 707 / 166	1003 / 878 / 137	867 / 521 / 119	949 / 684 / 103	855 / 687 / 157	912 / 861 / 130	890 / 803 / 198	1029 / 977 / 160	854 / 741 / 151	1067 / 937 / 127	880 / 563 / 113	999 / 755 / 100	870 / 739 / 148	927 / 913 / 121	913 / 857 / 185	1075 / 1024 / 147	938 / 818 / 146	1119 / 985 / 117
	3	788 / 771 / 100	817 / 939 / 81	881 / 742 / 148	941 / 916 / 121	929 / 863 / 185	1098 / 1031 / 147	926 / 795 / 141	1142 / 991 / 117	800 / 830 / 94	861 / 1036 / 78	903 / 802 / 139	962 / 976 / 112	990 / 924 / 172	1203 / 1134 / 141	987 / 851 / 132	1200 / 1044 / 107	806 / 881 / 87	865 / 1082 / 71	919 / 855 / 130	996 / 1023 / 104	1041 / 975 / 160	1242 / 1174 / 128	1079 / 934 / 127	1302 / 1135 / 103
90	1	798 / 328 / 146	854 / 452 / 132	811 / 452 / 204	882 / 620 / 184	805 / 558 / 271	893 / 733 / 235	666 / 556 / 222	819 / 697 / 184	822 / 370 / 143	889 / 507 / 128	818 / 496 / 194	898 / 675 / 174	848 / 626 / 264	920 / 793 / 221	705 / 593 / 206	854 / 731 / 168	846 / 413 / 139	924 / 563 / 125	846 / 552 / 189	910 / 726 / 164	867 / 676 / 250	941 / 845 / 207	757 / 641 / 195	938 / 806 / 163
	2	854 / 452 / 132	941 / 612 / 118	882 / 631 / 184	928 / 800 / 154	893 / 743 / 235	971 / 918 / 193	819 / 707 / 184	1003 / 878 / 152	889 / 507 / 128	990 / 684 / 114	898 / 687 / 174	947 / 861 / 145	920 / 803 / 221	1029 / 977 / 178	854 / 741 / 168	1067 / 937 / 141	924 / 563 / 125	1005 / 731 / 107	910 / 739 / 164	960 / 913 / 135	941 / 857 / 207	1075 / 1024 / 164	938 / 818 / 163	1119 / 985 / 130
	3	828 / 771 / 111	849 / 939 / 89	921 / 742 / 164	974 / 916 / 135	955 / 863 / 207	1098 / 1031 / 164	926 / 795 / 157	1142 / 991 / 130	837 / 830 / 103	892 / 1036 / 86	940 / 802 / 154	992 / 976 / 125	990 / 924 / 193	1203 / 1134 / 157	987 / 851 / 146	1200 / 1044 / 119	841 / 881 / 96	893 / 1082 / 79	954 / 855 / 145	1001 / 1023 / 115	1041 / 975 / 178	1242 / 1174 / 143	1079 / 934 / 141	1302 / 1135 / 114
Wind Speed [mph]		170								180															
70	1	794 / 468 / 112	874 / 620 / 98	806 / 625 / 152	844 / 772 / 124	819 / 721 / 186	955 / 890 / 152	805 / 685 / 147	987 / 850 / 122	823 / 513 / 110	912 / 676 / 95	816 / 666 / 144	853 / 811 / 116	861 / 785 / 180	1029 / 962 / 147	847 / 724 / 139	1025 / 886 / 113	ASCE Group Zone							
	2	874 / 620 / 98	977 / 799 / 84	844 / 786 / 124	919 / 956 / 100	955 / 902 / 152	1159 / 1107 / 124	987 / 863 / 122	1209 / 1066 / 100	912 / 676 / 95	990 / 836 / 78	853 / 826 / 116	987 / 1030 / 96	989 / 937 / 141	1239 / 1185 / 119	1025 / 899 / 113	1236 / 1092 / 91								
	3	807 / 959 / 75	913 / 1167 / 61	897 / 901 / 108	1073 / 1106 / 88	1079 / 1014 / 107	1331 / 1260 / 107	1123 / 974 / 104	1398 / 1221 / 87	807 / 994 / 69	973 / 1247 / 58	916 / 936 / 100	1146 / 1184 / 84	1155 / 1088 / 124	1412 / 1339 / 102	1205 / 1047 / 100	1410 / 1233 / 78								
80	1	822 / 456 / 123	917 / 620 / 110	852 / 625 / 171	881 / 772 / 139	851 / 721 / 211	955 / 890 / 172	805 / 685 / 166	987 / 850 / 137	848 / 500 / 119	954 / 676 / 106	860 / 666 / 162	888 / 811 / 130	892 / 785 / 204	1029 / 962 / 166	847 / 724 / 156	1025 / 886 / 127	ASCE Group Zone							
	2	917 / 620 / 110	1014 / 799 / 94	881 / 786 / 139	936 / 956 / 112	955 / 902 / 172	1159 / 1107 / 141	987 / 863 / 137	1209 / 1066 / 112	954 / 676 / 106	1023 / 836 / 87	888 / 826 / 130	987 / 1030 / 108	989 / 937 / 134	1239 / 1185 / 127	1025 / 899 / 103	1236 / 1092 / 103								
	3	840 / 959 / 84	913 / 1167 / 68	930 / 901 / 121	1073 / 1106 / 99	1079 / 1014 / 147	1331 / 1260 / 121	1123 / 974 / 117	1398 / 1221 / 98	837 / 994 / 78	973 / 1247 / 65	934 / 936 / 112	1146 / 1184 / 95	1155 / 1088 / 141	1412 / 1339 / 115	1205 / 1047 / 112	1410 / 1233 / 88								
90	1	870 / 456 / 135	932 / 601 / 118	874 / 609 / 184	919 / 772 / 154	883 / 721 / 235	957 / 890 / 193	805 / 685 / 152	987 / 850 / 137	871 / 486 / 128	966 / 656 / 114	878 / 648 / 174	923 / 811 / 145	924 / 785 / 228	1029 / 962 / 185	847 / 724 / 173	1025 / 886 / 141	ASCE Group Zone							
	2	932 / 601 / 118	1051 / 799 / 103	919 / 786 / 154	966 / 956 / 125	957 / 902 / 193	1159 / 1107 / 152	987 / 863 / 125	1209 / 1066 / 125	966 / 656 / 114	1057 / 836 / 96	923 / 826 / 145	1006 / 1030 / 120	989 / 937 / 178	1239 / 1185 / 150	1025 / 899 / 141	1236 / 1092 / 114								
	3	873 / 959 / 93	929 / 1167 / 75	962 / 901 / 135	1073 / 1106 / 110	1079 / 1014 / 164	1331 / 1260 / 136	1123 / 974 / 130	1398 / 1221 / 109	868 / 994 / 86	973 / 1247 / 72	964 / 936 / 125	1146 / 1184 / 105	1155 / 1088 / 157	1412 / 1339 / 129	1205 / 1047 / 125	1410 / 1233 / 98								
Wind Speed [mph]		190								200															
70	1	852 / 559 / 107	950 / 732 / 92	823 / 703 / 136	888 / 874 / 112	887 / 821 / 169	1056 / 990 / 135	883 / 757 / 130	1097 / 950 / 109	856 / 587 / 101	955 / 762 / 87	852 / 757 / 132	888 / 901 / 104	915 / 851 / 158	1120 / 1053 / 130	944 / 812 / 126	1165 / 1011 / 104	ASCE Group Zone							
	2	950 / 732 / 92	1060 / 898 / 75	888 / 890 / 112	1006 / 1053 / 88	1056 / 1004 / 135	1248 / 1196 / 107	1097 / 964 / 109	1311 / 1160 / 87	955 / 762 / 87	1127 / 958 / 72	888 / 917 / 104	1063 / 1115 / 84	1120 / 1067 / 130	1308 / 1256 / 102	1165 / 1026 / 104	1379 / 1222 / 83								
	3	836 / 1063 / 67	1028 / 1321 / 55	978 / 1003 / 96	1154 / 1195 / 76	1227 / 1158 / 119	1484 / 1410 / 96	1225 / 1066 / 91	1482 / 1298 / 74	884 / 1127 / 64	1077 / 1388 / 52	1036 / 1066 / 92	1210 / 1255 / 72	1294 / 1223 / 113	1547 / 1471 / 90	1291 / 1126 / 87	1641 / 1438 / 74								
80	1	874 / 544 / 116	960 / 709 / 100	864 / 703 / 153	922 / 874 / 126	903 / 821 / 192	1056 / 990 / 153	883 / 757 / 146	1097 / 950 / 122	900 / 587 / 113	993 / 762 / 97	892 / 757 / 148	919 / 901 / 117	915 / 851 / 179	1120 / 1053 / 147	944 / 812 / 141	1165 / 1011 / 117	ASCE Group Zone							
	2	960 / 709 / 100	1065 / 898 / 84	922 / 890 / 126	1006 / 1053 / 99	1056 / 1004 / 153	1248 / 1196 / 121	1097 / 964 / 122	1311 / 1160 / 98	993 / 762 / 97	1127 / 958 / 81	919 / 917 / 117	1063 / 1115 / 95	1120 / 1067 / 147	1308 / 1256 / 115	1165 / 1026 / 117	1379 / 1222 / 93								
	3	865 / 1063 / 74	1028 / 1321 / 62	978 / 1003 / 108	1154 / 1195 / 86	1227 / 1158 / 134	1484 / 1410 / 109	1225 / 1066 / 103	1482 / 1298 / 83	891 / 1127 / 71	1077 / 1388 / 58	1036 / 1066 / 104	1210 / 1255 / 81	1294 / 1223 / 128	1547 / 1471 / 102	1291 / 1126 / 98	1641 / 1438 / 83								
90	1	895 / 529 / 125	999 / 709 / 111	905 / 703 / 169	955 / 874 / 140	932 / 821 / 214	1056 / 990 / 171	883 / 757 / 163	1097 / 950 / 136	918 / 571 / 121	1032 / 762 / 107	932 / 757 / 164	950 / 901 / 130	936 / 851 / 200	1120 / 1053 / 164	944 / 812 / 157	1165 / 1011 / 130	ASCE Group Zone							
	2	999 / 709 / 111	1098 / 898 / 93	955 / 890 / 140	1006 / 1053 / 110	1056 / 1004 / 171	1248 / 1196 / 136	1097 / 964 / 109	1311 / 1160 / 109	1032 / 762 / 107	1137 / 958 / 89	950 / 917 / 130	1063 / 1115 / 105	1120 / 1067 / 164	1308 / 1256 / 129	1165 / 1026 / 130	1379 / 1222 / 103								
	3	895 / 1063 / 82	1028 / 1321 / 68	999 / 1003 / 120	1154 / 1195 / 95	1227 / 1158 / 150	1484 / 1410 / 121	1225 / 1066 / 114	1482 / 1298 / 92	919 / 1127 / 79	1077 / 1388 / 64	1036 / 1066 / 115	1210 / 1255 / 90	1294 / 1223 / 143	1547 / 1471 / 114	1291 / 1126 / 109	1641 / 1438 / 92								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
	100	1	791 / 210 / 172	828 / 302 / 160	786 / 292 / 241	835 / 417 / 224	759 / 383 / 339	830 / 529 / 307	605 / 420 / 303	666 / 539 / 256	791 / 226 / 168	833 / 324 / 156	788 / 314 / 235	843 / 446 / 219	770 / 411 / 331	847 / 565 / 299	614 / 443 / 292	677 / 563 / 244	809 / 247 / 168	838 / 345 / 152	809 / 343 / 235	851 / 475 / 213	780 / 438 / 323	864 / 600 / 291	636 / 474 / 286
	2	828 / 302 / 160	872 / 417 / 144	835 / 425 / 224	893 / 583 / 202	830 / 537 / 307	909 / 708 / 268	666 / 547 / 256	782 / 673 / 208	833 / 324 / 156	882 / 445 / 141	843 / 455 / 219	907 / 622 / 197	847 / 573 / 299	932 / 753 / 260	677 / 571 / 244	828 / 716 / 202	838 / 345 / 152	917 / 486 / 141	851 / 484 / 213	920 / 659 / 191	864 / 609 / 291	925 / 771 / 244	696 / 592 / 232	847 / 734 / 191
	3	853 / 577 / 148	888 / 759 / 129	870 / 521 / 208	949 / 707 / 186	872 / 638 / 276	965 / 826 / 236	737 / 622 / 220	888 / 761 / 179	884 / 632 / 148	873 / 781 / 121	882 / 556 / 202	968 / 751 / 181	893 / 678 / 268	958 / 844 / 221	782 / 662 / 214	937 / 805 / 173	893 / 672 / 144	884 / 824 / 117	893 / 590 / 197	954 / 769 / 170	913 / 718 / 260	980 / 887 / 213	802 / 682 / 202	983 / 847 / 167

Wind Speed [mph]		110								115															
100	1	809 / 264 / 164	864 / 376 / 152	812 / 365 / 230	858 / 504 / 208	791 / 465 / 315	880 / 635 / 284	643 / 494 / 274	734 / 618 / 226	829 / 287 / 164	869 / 398 / 148	814 / 387 / 224	865 / 532 / 202	821 / 504 / 315	896 / 669 / 276	649 / 512 / 262	750 / 634 / 214								
	2	864 / 376 / 152	927 / 514 / 137	858 / 513 / 208	933 / 696 / 186	880 / 644 / 284	945 / 810 / 236	734 / 627 / 226	889 / 773 / 185	869 / 398 / 148	937 / 542 / 133	865 / 542 / 202	945 / 732 / 181	896 / 678 / 276	963 / 848 / 229	750 / 644 / 214	929 / 810 / 179								
	3	877 / 691 / 137	894 / 865 / 113	904 / 624 / 191	969 / 809 / 164	933 / 757 / 252	1001 / 927 / 205	843 / 719 / 197	1027 / 887 / 161	884 / 727 / 133	870 / 872 / 106	914 / 657 / 186	983 / 847 / 159	951 / 794 / 244	1031 / 965 / 197	855 / 732 / 185	1069 / 925 / 155								

Wind Speed [mph]		120								130															
100	1	830 / 304 / 160	873 / 419 / 144	816 / 409 / 219	895 / 575 / 202	832 / 532 / 307	911 / 702 / 268	668 / 541 / 256	785 / 666 / 208	829 / 287 / 164	869 / 398 / 148	814 / 387 / 224	865 / 532 / 202	821 / 504 / 315	896 / 669 / 276	649 / 512 / 262	750 / 634 / 214								
	2	873 / 419 / 144	945 / 568 / 129	895 / 586 / 202	956 / 767 / 175	911 / 711 / 268	980 / 884 / 221	785 / 676 / 208	967 / 845 / 173	869 / 398 / 148	937 / 542 / 133	865 / 542 / 202	945 / 732 / 181	896 / 678 / 276	963 / 848 / 229	750 / 644 / 214	929 / 810 / 179								
	3	863 / 739 / 125	876 / 907 / 102	951 / 710 / 186	995 / 883 / 153	968 / 829 / 236	1066 / 1000 / 189	891 / 764 / 179	1107 / 959 / 149	884 / 727 / 133	870 / 872 / 106	914 / 657 / 186	983 / 847 / 159	951 / 794 / 244	1031 / 965 / 197	855 / 732 / 185	1069 / 925 / 155								

ASCE Group Zone	
Panal Angle	Mono Slope
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		74in x 41.2in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		140										150										160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
	100	1	830 / 320 / 156	901 / 452 / 144	839 / 441 / 219	902 / 603 / 197	842 / 558 / 299	925 / 733 / 260	671 / 556 / 244	819 / 697 / 202	851 / 361 / 152	909 / 493 / 137	843 / 483 / 208	913 / 656 / 186	860 / 609 / 284	950 / 793 / 244	705 / 593 / 226	854 / 731 / 185	872 / 402 / 148	941 / 547 / 133	868 / 538 / 202	950 / 726 / 181	901 / 676 / 276	970 / 845 / 229	757 / 641 / 214	938 / 806 / 179					
	2	901 / 452 / 144	953 / 594 / 125	902 / 614 / 197	966 / 800 / 170	925 / 743 / 260	995 / 918 / 213	819 / 707 / 202	1003 / 878 / 167	909 / 493 / 137	998 / 662 / 121	913 / 668 / 186	982 / 861 / 159	950 / 803 / 244	1029 / 977 / 197	854 / 741 / 185	1067 / 937 / 155	941 / 547 / 133	1043 / 731 / 117	950 / 739 / 181	993 / 913 / 148	970 / 857 / 229	1075 / 1024 / 181	938 / 818 / 179	1119 / 985 / 143						
	3	867 / 771 / 121	880 / 939 / 98	961 / 742 / 181	1006 / 916 / 148	983 / 863 / 229	1098 / 1031 / 181	926 / 795 / 173	1142 / 991 / 143	874 / 830 / 113	922 / 1036 / 94	977 / 802 / 170	1022 / 976 / 137	1010 / 924 / 213	1203 / 1134 / 173	987 / 851 / 161	1200 / 1044 / 131	875 / 881 / 106	921 / 1082 / 86	989 / 855 / 159	1029 / 1023 / 126	1041 / 975 / 197	1242 / 1174 / 158	1079 / 934 / 155	1302 / 1135 / 125						
Wind Speed [mph]		170										180																			
100	1	894 / 444 / 144	974 / 601 / 129	894 / 593 / 197	956 / 772 / 170	915 / 721 / 260	983 / 890 / 213	805 / 685 / 202	987 / 850 / 167	917 / 486 / 141	975 / 635 / 121	920 / 648 / 191	958 / 811 / 159	955 / 785 / 252	1029 / 962 / 205	847 / 724 / 191	1025 / 886 / 155														
	2	974 / 601 / 129	1050 / 772 / 109	956 / 786 / 170	996 / 956 / 137	983 / 902 / 213	1159 / 1107 / 173	987 / 863 / 167	1209 / 1066 / 137	975 / 635 / 121	1091 / 836 / 106	958 / 826 / 159	1035 / 1030 / 131	989 / 937 / 197	1239 / 1185 / 166	1025 / 899 / 155	1236 / 1092 / 125														
	3	906 / 959 / 102	956 / 1167 / 82	995 / 901 / 148	1075 / 1106 / 121	1079 / 1014 / 181	1331 / 1260 / 150	1123 / 974 / 143	1398 / 1221 / 119	898 / 994 / 94	988 / 1247 / 78	994 / 936 / 137	1146 / 1184 / 115	1155 / 1088 / 173	1412 / 1339 / 142	1205 / 1047 / 137	1410 / 1233 / 107														
Wind Speed [mph]		190										200																			
100	1	939 / 529 / 137	1005 / 686 / 117	946 / 703 / 186	989 / 874 / 153	962 / 821 / 236	1056 / 990 / 189	883 / 757 / 179	1097 / 950 / 149	933 / 554 / 129	1034 / 737 / 113	972 / 757 / 181	982 / 901 / 142	963 / 851 / 221	1120 / 1053 / 181	944 / 812 / 173	1165 / 1011 / 143														
	2	1005 / 686 / 117	1131 / 898 / 102	989 / 890 / 153	1025 / 1053 / 121	1056 / 1004 / 189	1248 / 1196 / 150	1097 / 964 / 149	1311 / 1160 / 119	1034 / 737 / 113	1168 / 958 / 98	982 / 917 / 142	1063 / 1115 / 115	1120 / 1067 / 181	1308 / 1256 / 142	1165 / 1026 / 143	1379 / 1222 / 113														
	3	924 / 1063 / 90	1028 / 1321 / 74	1028 / 1003 / 131	1154 / 1195 / 104	1227 / 1158 / 166	1484 / 1410 / 134	1225 / 1066 / 125	1482 / 1298 / 101	947 / 1127 / 86	1077 / 1388 / 71	1060 / 1066 / 126	1210 / 1255 / 99	1294 / 1223 / 158	1547 / 1471 / 126	1291 / 1126 / 119	1641 / 1438 / 101														

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
0	1	394 / 261 / 47	485 / 353 / 40	421 / 356 / 51	510 / 464 / 43	497 / 414 / 52	607 / 530 / 44	499 / 390 / 58	600 / 489 / 48	412 / 280 / 45	507 / 375 / 39	441 / 380 / 50	523 / 481 / 41	520 / 438 / 51	631 / 555 / 42	513 / 406 / 55	625 / 513 / 46	437 / 303 / 45	528 / 395 / 38	460 / 403 / 48	543 / 506 / 39	542 / 461 / 49	653 / 579 / 40	535 / 427 / 53	647 / 535 / 44	
	2	485 / 353 / 40	580 / 448 / 33	501 / 464 / 43	591 / 575 / 35	607 / 537 / 44	718 / 656 / 35	600 / 497 / 48	732 / 622 / 40	507 / 375 / 39	603 / 471 / 32	523 / 490 / 41	613 / 601 / 33	631 / 563 / 42	740 / 680 / 34	625 / 521 / 46	756 / 646 / 38	528 / 395 / 38	639 / 504 / 31	532 / 504 / 39	632 / 624 / 32	653 / 587 / 40	780 / 720 / 33	647 / 543 / 44	798 / 685 / 37	
	3	487 / 567 / 31	566 / 685 / 25	567 / 535 / 37	668 / 654 / 30	693 / 620 / 38	820 / 751 / 31	688 / 572 / 42	841 / 714 / 34	505 / 593 / 30	598 / 729 / 24	589 / 561 / 35	708 / 697 / 29	717 / 645 / 36	866 / 796 / 30	712 / 595 / 40	862 / 734 / 32	520 / 617 / 28	610 / 749 / 23	609 / 585 / 34	725 / 719 / 28	737 / 667 / 35	880 / 812 / 28	753 / 632 / 39	906 / 775 / 31	
	5	1	394 / 261 / 47	485 / 353 / 40	421 / 356 / 60	510 / 464 / 50	497 / 414 / 65	607 / 530 / 54	499 / 390 / 67	600 / 489 / 55	412 / 280 / 45	507 / 375 / 39	441 / 380 / 58	523 / 481 / 48	520 / 438 / 63	631 / 555 / 52	513 / 406 / 63	625 / 513 / 52	437 / 303 / 45	528 / 395 / 38	460 / 403 / 56	543 / 506 / 46	542 / 461 / 60	653 / 579 / 50	535 / 427 / 61	647 / 535 / 50
	2	485 / 353 / 40	580 / 448 / 33	501 / 464 / 49	591 / 575 / 40	607 / 537 / 54	718 / 656 / 44	600 / 497 / 55	732 / 622 / 45	507 / 375 / 39	603 / 471 / 32	523 / 490 / 48	613 / 601 / 38	631 / 563 / 52	740 / 680 / 41	625 / 521 / 52	756 / 646 / 43	528 / 395 / 38	639 / 504 / 31	532 / 504 / 45	632 / 624 / 36	653 / 587 / 50	780 / 720 / 40	647 / 543 / 50	798 / 685 / 42	
	3	487 / 567 / 31	566 / 685 / 25	567 / 535 / 43	668 / 654 / 35	693 / 620 / 47	820 / 751 / 38	688 / 572 / 48	841 / 714 / 39	505 / 593 / 30	598 / 729 / 24	589 / 561 / 41	708 / 697 / 34	717 / 645 / 45	866 / 796 / 37	712 / 595 / 45	862 / 734 / 37	520 / 617 / 28	610 / 749 / 23	609 / 585 / 39	725 / 719 / 32	737 / 667 / 43	880 / 812 / 34	753 / 632 / 44	906 / 775 / 36	
	10	1	443 / 257 / 55	497 / 353 / 48	458 / 356 / 77	510 / 464 / 65	497 / 414 / 84	607 / 530 / 71	499 / 390 / 81	600 / 489 / 67	459 / 280 / 54	509 / 375 / 46	469 / 380 / 74	523 / 481 / 61	520 / 438 / 81	631 / 555 / 68	513 / 406 / 77	625 / 513 / 64	475 / 303 / 53	528 / 395 / 45	479 / 403 / 72	543 / 506 / 59	542 / 461 / 78	653 / 579 / 65	535 / 427 / 74	647 / 535 / 61
	2	497 / 353 / 48	580 / 448 / 40	501 / 464 / 64	591 / 575 / 52	607 / 537 / 71	718 / 656 / 57	600 / 497 / 67	732 / 622 / 55	509 / 375 / 46	603 / 471 / 38	523 / 490 / 61	613 / 601 / 49	631 / 563 / 68	740 / 680 / 54	625 / 521 / 64	756 / 646 / 52	528 / 395 / 45	639 / 504 / 37	532 / 504 / 58	632 / 624 / 47	653 / 587 / 65	780 / 720 / 52	647 / 543 / 61	798 / 685 / 51	
	3	487 / 567 / 37	566 / 685 / 30	567 / 535 / 55	668 / 654 / 45	693 / 620 / 61	820 / 751 / 49	688 / 572 / 58	841 / 714 / 48	505 / 593 / 35	598 / 729 / 29	589 / 561 / 53	708 / 697 / 43	717 / 645 / 58	866 / 796 / 48	712 / 595 / 55	862 / 734 / 45	520 / 617 / 34	610 / 749 / 27	609 / 585 / 51	725 / 719 / 41	737 / 667 / 55	880 / 812 / 45	753 / 632 / 54	906 / 775 / 44	
0	1	454 / 321 / 43	548 / 415 / 36	479 / 425 / 47	562 / 528 / 38	561 / 483 / 47	672 / 600 / 38	555 / 446 / 51	684 / 568 / 43	471 / 338 / 42	566 / 433 / 35	496 / 446 / 45	579 / 549 / 36	580 / 502 / 45	707 / 634 / 37	585 / 474 / 50	701 / 585 / 41	ASCE Group Zone								
	2	548 / 415 / 36	659 / 523 / 30	550 / 526 / 37	666 / 662 / 31	672 / 608 / 38	820 / 760 / 32	684 / 576 / 43	815 / 701 / 34	566 / 433 / 35	676 / 541 / 28	579 / 559 / 36	680 / 680 / 29	707 / 643 / 37	831 / 773 / 30	701 / 594 / 41	853 / 737 / 33	Panal Angle								
	3	534 / 638 / 27	639 / 788 / 22	627 / 606 / 32	761 / 758 / 27	776 / 705 / 34	920 / 852 / 27	771 / 650 / 37	949 / 813 / 30	559 / 673 / 26	667 / 826 / 21	658 / 641 / 32	772 / 771 / 25	789 / 720 / 32	958 / 890 / 26	808 / 684 / 36	990 / 850 / 29	Mono Slope								
	5	1	454 / 321 / 43	548 / 415 / 36	479 / 425 / 54	562 / 528 / 44	561 / 483 / 58	672 / 600 / 47	555 / 446 / 58	684 / 568 / 49	471 / 338 / 42	566 / 433 / 35	496 / 446 / 52	579 / 549 / 42	580 / 502 / 56	707 / 634 / 46	585 / 474 / 57	701 / 585 / 47	0 - 7.5							
	2	548 / 415 / 36	659 / 523 / 30	550 / 526 / 43	666 / 662 / 36	672 / 608 / 47	820 / 760 / 39	684 / 576 / 49	815 / 701 / 39	566 / 433 / 35	676 / 541 / 28	579 / 559 / 42	680 / 680 / 34	707 / 643 / 46	831 / 773 / 37	701 / 594 / 47	853 / 737 / 38	2 = 2								
	3	534 / 638 / 27	639 / 788 / 22	627 / 606 / 37	761 / 758 / 31	776 / 705 / 41	920 / 852 / 33	771 / 650 / 42	949 / 813 / 35	559 / 673 / 26	667 / 826 / 21	658 / 641 / 36	772 / 771 / 29	789 / 720 / 39	958 / 890 / 32	808 / 684 / 41	990 / 850 / 34	3 = 3								
	10	1	484 / 321 / 51	548 / 415 / 43	488 / 425 / 70	562 / 528 / 57	561 / 483 / 75	672 / 600 / 61	555 / 446 / 71	684 / 568 / 59	492 / 338 / 50	566 / 433 / 41	497 / 446 / 67	579 / 549 / 54	580 / 502 / 72	707 / 634 / 60	585 / 474 / 69	701 / 585 / 56	7.5 - 15							
	2	548 / 415 / 43	659 / 523 / 35	550 / 526 / 55	666 / 662 / 46	672 / 608 / 61	820 / 760 / 51	684 / 576 / 59	815 / 701 / 48	566 / 433 / 41	676 / 541 / 34	579 / 559 / 54	680 / 680 / 43	707 / 643 / 60	831 / 773 / 48	701 / 594 / 56	853 / 737 / 46	2 = 2								
	3	534 / 638 / 32	639 / 788 / 26	627 / 606 / 48	761 / 758 / 40	776 / 705 / 54	920 / 852 / 43	771 / 650 / 51	949 / 813 / 42	559 / 673 / 31	667 / 826 / 25	658 / 641 / 47	772 / 771 / 37	789 / 720 / 51	958 / 890 / 42	808 / 684 / 49	990 / 850 / 41	3 = 3								
0	1	487 / 354 / 40	582 / 450 / 33	512 / 466 / 43	594 / 567 / 35	609 / 532 / 44	721 / 650 / 35	603 / 491 / 48	735 / 616 / 40	471 / 338 / 42	566 / 433 / 35	496 / 446 / 45	579 / 549 / 36	580 / 502 / 45	707 / 634 / 37	585 / 474 / 50	701 / 585 / 41	ASCE Group Zone								
	2	582 / 450 / 33	708 / 570 / 28	594 / 578 / 35	710 / 714 / 28	721 / 659 / 35	865 / 808 / 29	735 / 625 / 40	890 / 770 / 32	566 / 433 / 35	676 / 541 / 28	579 / 559 / 36	680 / 680 / 29	707 / 643 / 37	831 / 773 / 30	701 / 594 / 41	853 / 737 / 33	Panal Angle								
	3	568 / 688 / 25	694 / 863 / 21	671 / 657 / 30	803 / 806 / 24	823 / 754 / 31	993 / 925 / 25	844 / 717 / 34	1028 / 885 / 28	559 / 673 / 26	667 / 826 / 21	658 / 641 / 32	772 / 771 / 25	789 / 720 / 32	958 / 890 / 26	808 / 684 / 36	990 / 850 / 29	Mono Slope								
	5	1	487 / 354 / 40	582 / 450 / 33	512 / 466 / 50	594 / 567 / 40	609 / 532 / 54	721 / 650 / 44	603 / 491 / 55	735 / 616 / 45	471 / 338 / 42	566 / 433 / 35	496 / 446 / 52	579 / 549 / 42	580 / 502 / 56	707 / 634 / 46	585 / 474 / 57	701 / 585 / 47	0 - 7.5							
	2	582 / 450 / 33	708 / 570 / 28	594 / 578 / 40	710 / 714 / 33	721 / 659 / 44	865 / 808 / 36	735 / 625 / 45	890 / 770 / 37	566 / 433 / 35	676 / 541 / 28	579 / 559 / 42	680 / 680 / 34	707 / 643 / 46	831 / 773 / 37	701 / 594 / 47	853 / 737 / 38	2 = 2								
	3	568 / 688 / 25	694 / 863 / 21	671 / 657 / 35	803 / 806 / 28	823 / 754 / 38	993 / 925 / 31	844 / 717 / 39	1028 / 885 / 32	559 / 673 / 26	667 / 826 / 21	658 / 641 / 36	772 / 771 / 29	789 / 720 / 39	958 / 890 / 32	808 / 684 / 41	990 / 850 / 34	3 = 3								
	10	1	499 / 354 / 48	582 / 450 / 40	512 / 466 / 65	594 / 567 / 52	609 / 532 / 71	721 / 650 / 57	603 / 491 / 67	735 / 616 / 55	492 / 338 / 50	566 / 433 / 41	497 / 446 / 67	579 / 549 / 54	580 / 502 / 72	707 / 634 / 60	585 / 474 / 69	701 / 585 / 56	7.5 - 15							
	2	582 / 450 / 40	708 / 570 / 33	594 / 578 / 52	710 / 714 / 42	721 / 659 / 57	865 / 808 / 46	735 / 625 / 55	890 / 770 / 45	566 / 433 / 41	676 / 541 / 34	579 / 559 / 54	680 / 680 / 43	707 / 643 / 60	831 / 773 / 48	701 / 594 / 56	853 / 737 / 46	2 = 2								
	3	568 / 688 / 30	694 / 863 / 25	671 / 657 / 45	803 / 806 / 36	823 / 754 / 49	993 / 925 / 40	844 / 717 / 48	1028 / 885 / 39	559 / 673 / 31	667 / 826 / 25	658 / 641 / 47	772 / 771 / 37	789 / 720 / 51	958 / 890 / 42	808 / 684 / 49	990 / 850 / 41	3 = 3								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs																																																											
Wind Speed [mph]		140																150																160																																											
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																															
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																	
		0	1	502/370/39	610/476/33	517/475/41	621/597/34	624/549/42	752/681/35	618/507/46	747/628/38	538/405/37	649/514/31	553/517/39	657/640/32	663/590/39	788/719/32	657/544/43	807/683/36	571/438/35	682/546/28	584/554/36	686/674/29	713/640/37	839/770/30	708/591/41	862/733/33	0	2	610/476/33	739/599/27	606/594/33	718/725/27	752/691/35	898/841/28	747/638/38	925/803/31	649/514/31	777/636/25	640/635/31	770/784/25	788/729/32	957/900/26	807/693/36	988/861/29	682/546/28	830/684/24	686/686/29	817/837/24	839/781/30	1005/950/24	862/744/33	1042/911/27	0	3	591/720/24	718/897/20	700/689/29	833/839/24	856/787/30	1026/957/24	879/749/33	1063/917/27	635/781/23	762/958/19	732/727/27	887/899/22	916/847/28	1081/1012/22	912/780/30	1125/973/25	674/835/21	798/1008/17	779/779/25	932/949/20	967/899/26	1174/1103/21
5	1	502/370/39	610/476/33	517/475/48	621/597/39	624/549/52	752/681/43	618/507/52	747/628/43	538/405/37	649/514/31	553/517/45	657/640/36	663/590/48	788/719/39	657/544/49	807/683/41	571/438/35	682/546/28	584/554/42	686/674/34	713/640/46	839/770/37	708/591/47	862/733/38	5	2	610/476/33	739/599/27	606/594/38	718/725/31	752/691/43	898/841/34	747/638/43	925/803/36	649/514/31	777/636/25	640/635/36	770/784/29	788/729/39	957/900/41	807/693/34	988/861/28	682/546/28	830/684/24	686/686/34	817/837/27	839/781/37	1005/950/30	862/744/38	1042/911/31	5	3	591/720/24	718/897/20	700/689/34	833/839/27	856/787/37	1026/957/30	879/749/38	1063/917/31	635/781/23	762/958/19	732/727/31	887/899/25	916/847/34	1081/1012/27	912/780/35	1125/973/29	674/835/21	798/1008/17	779/779/29	932/949/24	967/899/32	1174/1103/26	999/859/34	1224/1062/28
10	1	505/370/46	610/476/39	517/475/61	621/597/51	624/549/68	752/681/55	618/507/64	747/628/52	538/405/44	649/514/36	553/517/58	657/640/47	663/590/63	788/719/51	657/544/59	807/683/49	571/438/41	682/546/34	584/554/54	686/674/43	713/640/60	839/770/48	708/591/56	862/733/46	10	2	610/476/39	739/599/32	606/594/49	718/725/40	752/691/55	898/841/45	747/638/52	925/803/44	649/514/36	777/636/30	640/635/46	770/784/51	788/729/42	957/900/49	807/693/41	988/861/34	682/546/34	830/684/28	686/686/43	817/837/35	839/781/48	1005/950/39	862/744/46	1042/911/38	10	3	591/720/29	718/897/24	700/689/43	833/839/35	856/787/48	1026/957/39	879/749/46	1063/917/38	635/781/27	762/958/22	732/727/40	887/899/33	916/847/45	1081/1012/36	912/780/42	1125/973/35	674/835/25	798/1008/20	779/779/37	932/949/30	967/899/42	1174/1103/34	999/859/41	1224/1062/34
Wind Speed [mph]		170																180																																																											
0	1	600/467/33	727/588/27	611/587/34	728/721/28	740/669/35	883/815/28	755/635/39	909/777/31	639/504/31	769/627/26	632/613/32	765/763/26	780/711/33	953/884/27	798/675/37	950/815/29	0	2	727/588/27	877/728/22	728/734/28	855/881/22	883/826/28	1087/1031/31	909/789/25	1084/951/25	769/627/26	916/765/21	765/776/26	921/953/21	953/896/27	1115/1061/21	950/827/29	1163/1023/24	0	3	707/881/20	861/1092/17	819/825/24	1007/1030/20	1009/941/24	1263/1190/20	1046/901/27	1260/1096/22	733/919/19	879/1119/15	884/894/23	1033/1060/18	1083/1014/23	1279/1208/18	1125/973/26	1344/1171/21																								
5	1	600/467/33	727/588/27	611/587/39	728/721/32	740/669/43	883/815/34	755/635/44	909/777/36	639/504/31	769/627/26	632/613/36	765/763/30	780/711/40	953/884/33	798/675/42	950/815/34	5	2	727/588/27	877/728/22	728/734/32	855/881/25	883/826/34	1087/1031/29	909/789/36	1084/951/29	769/627/26	916/765/21	765/776/30	921/953/24	953/896/33	1115/1061/26	950/827/34	1163/1023/28	5	3	707/881/20	861/1092/17	819/825/27	1007/1030/23	1009/941/30	1263/1190/25	1046/901/31	1260/1096/25	733/919/19	879/1119/15	884/894/26	1033/1060/21	1083/1014/29	1279/1208/23	1125/973/30	1344/1171/24																								
10	1	600/467/39	727/588/32	611/587/51	728/721/41	740/669/55	883/815/45	755/635/54	909/777/44	639/504/37	769/627/30	632/613/47	765/763/39	780/711/52	953/884/43	798/675/51	950/815/41	10	2	727/588/32	877/728/26	728/734/41	855/881/33	883/826/45	1087/1031/37	909/789/44	1084/951/35	769/627/30	916/765/25	765/776/39	921/953/32	953/896/43	1115/1061/34	950/827/41	1163/1023/34	10	3	707/881/24	861/1092/20	819/825/35	1007/1030/29	1009/941/39	1263/1190/33	1046/901/38	1260/1096/31	733/919/22	879/1119/18	884/894/34	1033/1060/27	1083/1014/37	1279/1208/29	1125/973/36	1344/1171/29																								
Wind Speed [mph]		190																200																																																											
0	1	659/525/29	806/662/24	665/650/30	796/798/24	816/747/31	984/916/25	836/710/34	1018/876/28	691/556/28	837/692/23	693/684/28	850/857/24	873/803/30	1046/977/24	869/740/32	1043/900/26	0	2	806/662/24	983/825/20	796/813/24	945/981/20	984/928/25	1184/1129/28	1018/889/23	1238/1091/23	837/692/23	1009/850/19	820/842/23	1001/1043/19	1046/990/24	1248/1193/19	1043/913/26	1308/1154/22	0	3	783/986/18	930/1188/14	912/927/21	1096/1128/17	1155/1084/22	1349/1276/18	1152/998/24	1421/1240/20	796/1006/17	978/1252/14	970/989/20	1155/1192/16	1167/1097/20	1410/1336/17	1219/1059/23	1491/1302/19																								
5	1	659/525/29	806/662/24	665/650/35	796/798/28	816/747/38	984/916/31	836/710/39	1018/876/32	691/556/28	837/692/23	693/684/33	850/857/27	873/803/37	1046/977/30	869/740/37	1043/900/30	5	2	806/662/24	983/825/20	796/813/28	945/981/23	984/928/31	1184/1129/25	1018/889/32	1238/1091/26	837/692/23	1009/850/19	820/842/26	1001/1043/22	1046/990/30	1248/1193/24	1043/913/30	1308/1154/25	5	3	783/986/18	930/1188/14	912/927/24	1096/1128/20	1155/1084/27	1349/1276/22	1152/998/28	1421/1240/23	796/1006/17	978/1252/14	970/989/24	1155/1192/19	1167/1097/25	1410/1336/20	1219/1059/26	1491/1302/22																								
10	1	659/525/35	806/662/29	665/650/45	796/798/36	816/747/49	984/916/40	836/710/48	1018/876/39	691/556/33	837/692/27	693/684/42	850/857/35	873/803/48	1046/977/39	869/740/45	1043/900/36	10	2	806/662/29	983/825/24	796/813/36	945/981/29	984/928/40	1184/1129/33	1018/889/39	1238/1091/32	837/692/27	1009/850/22	820/842/34	1001/1043/28	1046/990/39	1248/1193/31	1043/913/36	1308/1154/31	10	3	783/986/21	930/1188/17	912/927/32	1096/1128/26	1155/1084/36	1349/1276/28	1152/998/34	1421/1240/28	796/1006/20	978/1252/16	970/989/30	1155/1192/24	1167/1097/33	1410/1336/26	1219/1059/32	1491/1302/26																								

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	496 / 249 / 62	548 / 346 / 55	507 / 345 / 91	557 / 464 / 80	497 / 414 / 104	607 / 530 / 87	499 / 390 / 95	600 / 489 / 78	510 / 271 / 61	557 / 368 / 53	514 / 368 / 88	557 / 481 / 75	520 / 438 / 100	631 / 555 / 83	513 / 406 / 90	625 / 513 / 75	516 / 288 / 59	577 / 395 / 52	530 / 396 / 87	566 / 506 / 72	542 / 461 / 96	653 / 579 / 79	535 / 427 / 87	647 / 535 / 72
	2	548 / 346 / 55	595 / 448 / 46	547 / 464 / 78	591 / 575 / 63	607 / 537 / 87	718 / 656 / 70	600 / 497 / 78	732 / 622 / 65	557 / 368 / 53	606 / 471 / 44	557 / 490 / 75	613 / 601 / 60	631 / 563 / 83	740 / 680 / 66	625 / 521 / 75	756 / 646 / 61	577 / 395 / 52	639 / 504 / 43	554 / 504 / 71	632 / 624 / 58	653 / 587 / 79	780 / 720 / 64	647 / 543 / 72	798 / 685 / 60
	3	515 / 567 / 43	566 / 685 / 35	574 / 535 / 68	668 / 654 / 55	693 / 620 / 76	820 / 751 / 61	688 / 572 / 68	841 / 714 / 56	521 / 593 / 41	598 / 729 / 34	589 / 561 / 65	708 / 697 / 53	717 / 645 / 72	866 / 796 / 59	712 / 595 / 65	862 / 734 / 53	526 / 617 / 39	610 / 749 / 32	609 / 585 / 62	725 / 719 / 50	737 / 667 / 68	880 / 812 / 55	753 / 632 / 63	906 / 775 / 51
20	1	536 / 237 / 67	586 / 334 / 61	542 / 328 / 103	589 / 447 / 91	518 / 414 / 128	607 / 530 / 107	499 / 390 / 111	600 / 489 / 91	548 / 258 / 66	592 / 354 / 58	556 / 355 / 101	609 / 481 / 89	530 / 438 / 123	631 / 555 / 103	513 / 406 / 105	625 / 513 / 87	551 / 274 / 64	609 / 380 / 57	560 / 376 / 98	615 / 506 / 85	542 / 461 / 119	653 / 579 / 98	535 / 427 / 101	647 / 535 / 83
	2	586 / 334 / 61	645 / 448 / 53	589 / 455 / 91	626 / 575 / 75	607 / 537 / 107	718 / 656 / 86	600 / 497 / 91	732 / 622 / 75	592 / 354 / 58	654 / 471 / 51	609 / 490 / 89	634 / 601 / 72	631 / 563 / 103	740 / 680 / 82	625 / 521 / 87	756 / 646 / 72	609 / 380 / 57	676 / 504 / 49	603 / 504 / 84	640 / 624 / 68	653 / 587 / 98	780 / 720 / 79	647 / 543 / 83	798 / 685 / 70
	3	562 / 567 / 49	581 / 685 / 39	620 / 535 / 80	668 / 654 / 65	693 / 620 / 93	820 / 751 / 75	688 / 572 / 79	841 / 714 / 66	566 / 593 / 47	600 / 729 / 38	629 / 561 / 77	708 / 697 / 63	717 / 645 / 89	866 / 796 / 72	712 / 595 / 75	862 / 734 / 62	569 / 617 / 45	610 / 749 / 36	635 / 585 / 73	725 / 719 / 59	737 / 667 / 84	880 / 812 / 68	753 / 632 / 74	906 / 775 / 60
25	1	536 / 237 / 67	586 / 334 / 61	542 / 328 / 103	589 / 447 / 91	552 / 414 / 154	607 / 530 / 129	499 / 390 / 130	600 / 489 / 107	548 / 258 / 66	592 / 354 / 58	556 / 355 / 101	609 / 481 / 89	563 / 438 / 148	631 / 555 / 123	513 / 406 / 123	625 / 513 / 102	551 / 274 / 64	609 / 380 / 57	560 / 376 / 98	615 / 506 / 85	572 / 461 / 143	653 / 579 / 118	535 / 427 / 118	647 / 535 / 98
	2	586 / 334 / 61	645 / 448 / 53	589 / 455 / 91	626 / 575 / 75	607 / 537 / 129	718 / 656 / 104	600 / 497 / 107	732 / 622 / 88	592 / 354 / 58	654 / 471 / 51	609 / 490 / 89	634 / 601 / 72	631 / 563 / 123	740 / 680 / 98	625 / 521 / 102	756 / 646 / 84	609 / 380 / 57	676 / 504 / 49	603 / 504 / 84	640 / 624 / 68	653 / 587 / 118	780 / 720 / 95	647 / 543 / 98	798 / 685 / 81
	3	562 / 567 / 49	581 / 685 / 39	620 / 535 / 80	668 / 654 / 65	693 / 620 / 112	820 / 751 / 90	688 / 572 / 93	841 / 714 / 77	566 / 593 / 47	600 / 729 / 38	629 / 561 / 77	708 / 697 / 63	717 / 645 / 107	866 / 796 / 87	712 / 595 / 88	862 / 734 / 72	569 / 617 / 45	610 / 749 / 36	635 / 585 / 73	725 / 719 / 59	737 / 667 / 101	880 / 812 / 81	753 / 632 / 86	906 / 775 / 70
15	1	530 / 310 / 58	585 / 415 / 50	537 / 418 / 84	574 / 528 / 69	561 / 483 / 93	672 / 600 / 76	555 / 446 / 83	684 / 568 / 70	535 / 326 / 56	591 / 433 / 48	553 / 446 / 82	580 / 549 / 66	580 / 502 / 89	707 / 634 / 74	585 / 474 / 82	701 / 585 / 66	591 / 433 / 48	676 / 541 / 39	580 / 559 / 66	680 / 680 / 53	707 / 643 / 74	831 / 773 / 59	701 / 594 / 66	853 / 737 / 55
	2	585 / 415 / 50	659 / 523 / 41	561 / 526 / 68	666 / 662 / 56	672 / 608 / 76	820 / 760 / 62	684 / 576 / 70	815 / 701 / 56	591 / 433 / 48	676 / 541 / 39	580 / 559 / 66	680 / 680 / 53	707 / 643 / 74	831 / 773 / 59	701 / 594 / 66	853 / 737 / 55	559 / 673 / 36	667 / 826 / 30	658 / 641 / 58	772 / 771 / 46	789 / 720 / 62	958 / 890 / 51	808 / 684 / 58	990 / 850 / 48
	3	534 / 638 / 37	639 / 788 / 31	627 / 606 / 59	761 / 758 / 49	776 / 705 / 66	920 / 852 / 53	771 / 650 / 60	949 / 813 / 50	559 / 673 / 36	667 / 826 / 30	658 / 641 / 58	772 / 771 / 46	789 / 720 / 62	958 / 890 / 51	808 / 684 / 58	990 / 850 / 48	563 / 294 / 63	626 / 407 / 56	574 / 403 / 96	621 / 528 / 82	561 / 483 / 114	672 / 600 / 93	555 / 446 / 97	684 / 568 / 81
20	1	563 / 294 / 63	626 / 407 / 56	574 / 403 / 96	621 / 528 / 82	561 / 483 / 114	672 / 600 / 93	555 / 446 / 97	684 / 568 / 81	575 / 315 / 62	630 / 424 / 54	577 / 422 / 92	625 / 549 / 78	580 / 502 / 109	707 / 634 / 91	585 / 474 / 95	701 / 585 / 77	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64
	2	626 / 407 / 56	682 / 523 / 47	608 / 526 / 80	666 / 662 / 66	672 / 608 / 93	820 / 760 / 77	684 / 576 / 81	815 / 701 / 66	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64	585 / 673 / 42	667 / 826 / 34	659 / 641 / 68	772 / 771 / 54	789 / 720 / 77	958 / 890 / 63	808 / 684 / 68	990 / 850 / 56
	3	570 / 638 / 43	639 / 788 / 35	640 / 606 / 70	761 / 758 / 58	776 / 705 / 82	920 / 852 / 65	771 / 650 / 70	949 / 813 / 58	585 / 673 / 42	667 / 826 / 34	659 / 641 / 68	772 / 771 / 54	789 / 720 / 77	958 / 890 / 63	808 / 684 / 68	990 / 850 / 56	563 / 294 / 63	626 / 407 / 56	574 / 403 / 96	621 / 528 / 82	561 / 483 / 114	672 / 600 / 93	555 / 446 / 97	684 / 568 / 81
25	1	563 / 294 / 63	626 / 407 / 56	574 / 403 / 96	621 / 528 / 82	581 / 483 / 137	672 / 600 / 112	555 / 446 / 114	684 / 568 / 95	575 / 315 / 62	630 / 424 / 54	577 / 422 / 92	625 / 549 / 78	588 / 502 / 132	707 / 634 / 109	585 / 474 / 112	701 / 585 / 91	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64
	2	626 / 407 / 56	682 / 523 / 47	608 / 526 / 80	666 / 662 / 66	672 / 608 / 112	820 / 760 / 93	684 / 576 / 95	815 / 701 / 77	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64	585 / 673 / 42	667 / 826 / 34	659 / 641 / 68	772 / 771 / 54	789 / 720 / 77	958 / 890 / 63	808 / 684 / 68	990 / 850 / 56
	3	570 / 638 / 43	639 / 788 / 35	640 / 606 / 70	761 / 758 / 58	776 / 705 / 98	920 / 852 / 79	771 / 650 / 81	949 / 813 / 68	585 / 673 / 42	667 / 826 / 34	659 / 641 / 68	772 / 771 / 54	789 / 720 / 93	958 / 890 / 76	808 / 684 / 79	990 / 850 / 65	563 / 294 / 63	626 / 407 / 56	574 / 403 / 96	621 / 528 / 82	561 / 483 / 114	672 / 600 / 93	555 / 446 / 97	684 / 568 / 81
15	1	550 / 348 / 55	597 / 450 / 46	559 / 466 / 80	594 / 567 / 63	609 / 532 / 87	721 / 650 / 70	603 / 491 / 78	735 / 616 / 65	535 / 326 / 56	591 / 433 / 48	553 / 446 / 82	580 / 549 / 66	580 / 502 / 89	707 / 634 / 74	585 / 474 / 82	701 / 585 / 66	591 / 433 / 48	676 / 541 / 39	580 / 559 / 66	680 / 680 / 53	707 / 643 / 74	831 / 773 / 59	701 / 594 / 66	853 / 737 / 55
	2	597 / 450 / 46	708 / 570 / 38	594 / 578 / 63	710 / 714 / 52	721 / 659 / 70	865 / 808 / 57	735 / 625 / 65	890 / 770 / 53	591 / 433 / 48	676 / 541 / 39	580 / 559 / 66	680 / 680 / 53	707 / 643 / 74	831 / 773 / 59	701 / 594 / 66	853 / 737 / 55	559 / 673 / 36	667 / 826 / 30	658 / 641 / 58	772 / 771 / 46	789 / 720 / 62	958 / 890 / 51	808 / 684 / 58	990 / 850 / 48
	3	568 / 688 / 35	694 / 863 / 29	671 / 657 / 55	803 / 806 / 44	823 / 754 / 61	993 / 925 / 49	844 / 717 / 56	1028 / 885 / 46	559 / 673 / 36	667 / 826 / 30	658 / 641 / 58	772 / 771 / 46	789 / 720 / 62	958 / 890 / 51	808 / 684 / 58	990 / 850 / 48	587 / 336 / 61	647 / 450 / 53	591 / 449 / 91	628 / 567 / 75	609 / 532 / 107	721 / 650 / 86	603 / 491 / 91	735 / 616 / 75
20	1	587 / 336 / 61	647 / 450 / 53	591 / 449 / 91	628 / 567 / 75	609 / 532 / 107	721 / 650 / 86	603 / 491 / 91	735 / 616 / 75	575 / 315 / 62	630 / 424 / 54	577 / 422 / 92	625 / 549 / 78	580 / 502 / 109	707 / 634 / 91	585 / 474 / 95	701 / 585 / 77	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64
	2	647 / 450 / 53	708 / 570 / 44	628 / 578 / 75	710 / 714 / 61	721 / 659 / 86	865 / 808 / 70	735 / 625 / 75	890 / 770 / 62	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64	585 / 673 / 42	667 / 826 / 34	659 / 641 / 68	772 / 771 / 54	789 / 720 / 77	958 / 890 / 63	808 / 684 / 68	990 / 850 / 56
	3	582 / 688 / 39	694 / 863 / 33	671 / 657 / 65	803 / 806 / 52	823 / 754 / 75	993 / 925 / 61	844 / 717 / 66	1028 / 885 / 54	585 / 673 / 42	667 / 826 / 34	659 / 641 / 68	772 / 771 / 54	789 / 720 / 77	958 / 890 / 63	808 / 684 / 68	990 / 850 / 56	587 / 336 / 61	647 / 450 / 53	591 / 449 / 91	628 / 567 / 75	609 / 532 / 107	721 / 650 / 86	603 / 491 / 91	735 / 616 / 75
25	1	587 / 336 / 61	647 / 450 / 53	591 / 449 / 91	628 / 567 / 75	609 / 532 / 129	721 / 650 / 104	603 / 491 / 107	735 / 616 / 88	575 / 315 / 62	630 / 424 / 54	577 / 422 / 92	625 / 549 / 78	588 / 502 / 132	707 / 634 / 109	585 / 474 / 112	701 / 585 / 91	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64
	2	647 / 450 / 53	708 / 570 / 44	628 / 578 / 75	710 / 714 / 61	721 / 659 / 104	865 / 808 / 84	735 / 625 / 88	890 / 770 / 72	630 / 424 / 54	685 / 541 / 45	625 / 559 / 78	680 / 680 / 63	707 / 643 / 91	831 / 773 / 72	701 / 594 / 77	853 / 737 / 64	585 / 673 / 42	667 / 826 / 34	659 / 641 / 68					

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	564 / 370 / 54	614 / 476 / 45	553 / 475 / 75	621 / 597 / 62	624 / 549 / 83	752 / 681 / 68	618 / 507 / 75	747 / 628 / 61	581 / 405 / 51	649 / 514 / 42	570 / 517 / 71	657 / 640 / 58	663 / 590 / 77	788 / 719 / 62	657 / 544 / 70	807 / 683 / 58	595 / 438 / 48	682 / 546 / 39	584 / 554 / 66	686 / 674 / 53	713 / 640 / 74	839 / 770 / 59	708 / 591 / 66	862 / 733 / 55
	2	614 / 476 / 45	739 / 599 / 37	606 / 594 / 60	718 / 725 / 49	752 / 691 / 68	898 / 841 / 55	747 / 638 / 61	925 / 803 / 51	649 / 514 / 42	777 / 636 / 35	640 / 635 / 56	770 / 784 / 46	788 / 729 / 62	957 / 900 / 51	807 / 693 / 58	988 / 861 / 48	682 / 546 / 39	830 / 684 / 33	686 / 686 / 53	817 / 837 / 43	839 / 781 / 59	1005 / 950 / 47	862 / 744 / 55	1042 / 911 / 44
	3	591 / 720 / 34	718 / 897 / 28	700 / 689 / 53	833 / 839 / 43	856 / 787 / 59	1026 / 957 / 47	879 / 749 / 55	1063 / 917 / 44	635 / 781 / 32	762 / 958 / 26	732 / 727 / 49	887 / 899 / 40	916 / 847 / 55	1081 / 1012 / 44	912 / 780 / 50	1125 / 973 / 41	674 / 835 / 30	798 / 1008 / 24	779 / 779 / 46	932 / 949 / 37	967 / 899 / 51	1174 / 1103 / 42	999 / 859 / 48	1224 / 1062 / 39
	1	599 / 356 / 59	663 / 476 / 52	604 / 475 / 89	644 / 597 / 73	624 / 549 / 103	752 / 681 / 84	618 / 507 / 87	747 / 628 / 72	611 / 390 / 56	679 / 514 / 48	618 / 517 / 84	658 / 640 / 68	663 / 590 / 96	788 / 719 / 77	657 / 544 / 81	807 / 683 / 68	634 / 429 / 54	690 / 546 / 45	629 / 554 / 78	686 / 674 / 63	713 / 640 / 91	839 / 770 / 72	708 / 591 / 77	862 / 733 / 64
	2	663 / 476 / 52	739 / 599 / 43	629 / 594 / 72	718 / 725 / 58	752 / 691 / 84	898 / 841 / 68	747 / 638 / 72	925 / 803 / 60	679 / 514 / 48	777 / 636 / 39	642 / 635 / 66	770 / 784 / 54	788 / 729 / 77	957 / 900 / 63	807 / 693 / 68	988 / 861 / 56	690 / 546 / 45	830 / 684 / 37	686 / 686 / 63	817 / 837 / 51	839 / 781 / 72	1005 / 950 / 58	862 / 744 / 64	1042 / 911 / 52
	3	595 / 720 / 38	718 / 897 / 32	700 / 689 / 63	833 / 839 / 51	856 / 787 / 72	1026 / 957 / 58	879 / 749 / 64	1063 / 917 / 52	635 / 781 / 36	762 / 958 / 29	732 / 727 / 58	887 / 899 / 47	916 / 847 / 68	1081 / 1012 / 54	912 / 780 / 58	1125 / 973 / 48	674 / 835 / 34	798 / 1008 / 27	779 / 779 / 54	932 / 949 / 44	967 / 899 / 63	1174 / 1103 / 52	999 / 859 / 56	1224 / 1062 / 46
	1	599 / 356 / 59	663 / 476 / 52	604 / 475 / 89	644 / 597 / 73	624 / 549 / 123	752 / 681 / 101	618 / 507 / 102	747 / 628 / 84	611 / 390 / 56	679 / 514 / 48	618 / 517 / 84	658 / 640 / 68	663 / 590 / 115	788 / 719 / 93	657 / 544 / 95	807 / 683 / 79	634 / 429 / 54	690 / 546 / 45	629 / 554 / 78	686 / 674 / 63	713 / 640 / 109	839 / 770 / 87	708 / 591 / 91	862 / 733 / 75
	2	663 / 476 / 52	739 / 599 / 43	629 / 594 / 72	718 / 725 / 58	752 / 691 / 101	898 / 841 / 81	747 / 638 / 84	925 / 803 / 70	679 / 514 / 48	777 / 636 / 39	642 / 635 / 66	770 / 784 / 54	788 / 729 / 93	957 / 900 / 76	807 / 693 / 79	988 / 861 / 65	690 / 546 / 45	830 / 684 / 37	686 / 686 / 63	817 / 837 / 51	839 / 781 / 87	1005 / 950 / 70	862 / 744 / 75	1042 / 911 / 61
	3	595 / 720 / 38	718 / 897 / 32	700 / 689 / 63	833 / 839 / 51	856 / 787 / 87	1026 / 957 / 70	879 / 749 / 75	1063 / 917 / 61	635 / 781 / 36	762 / 958 / 29	732 / 727 / 58	887 / 899 / 47	916 / 847 / 81	1081 / 1012 / 65	912 / 780 / 68	1125 / 973 / 56	674 / 835 / 34	798 / 1008 / 27	779 / 779 / 54	932 / 949 / 44	967 / 899 / 76	1174 / 1103 / 62	999 / 859 / 65	1224 / 1062 / 54
15	1	607 / 467 / 45	727 / 588 / 37	611 / 587 / 62	728 / 721 / 50	740 / 669 / 68	883 / 815 / 55	755 / 635 / 63	909 / 777 / 51	639 / 504 / 43	769 / 627 / 36	632 / 613 / 58	765 / 763 / 47	780 / 711 / 64	953 / 884 / 53	798 / 675 / 60	950 / 815 / 48	639 / 504 / 43	769 / 627 / 36	632 / 613 / 58	765 / 763 / 47	780 / 711 / 64	953 / 884 / 53	798 / 675 / 60	950 / 815 / 48
	2	727 / 588 / 37	877 / 728 / 31	728 / 734 / 50	855 / 881 / 40	883 / 826 / 55	1087 / 1031 / 46	909 / 789 / 51	1084 / 951 / 41	769 / 627 / 36	916 / 765 / 29	765 / 776 / 47	921 / 953 / 39	953 / 896 / 53	1115 / 1061 / 42	950 / 827 / 48	1163 / 1023 / 39	769 / 627 / 36	916 / 765 / 29	765 / 776 / 47	921 / 953 / 39	953 / 896 / 53	1115 / 1061 / 42	950 / 827 / 48	1163 / 1023 / 39
	3	707 / 881 / 28	861 / 1092 / 23	819 / 825 / 43	1007 / 1030 / 36	1009 / 941 / 47	1263 / 1190 / 40	1046 / 901 / 44	1260 / 1096 / 36	733 / 919 / 26	879 / 1119 / 21	884 / 894 / 41	1033 / 1060 / 33	1083 / 1014 / 46	1279 / 1208 / 36	1125 / 973 / 43	1344 / 1171 / 34	733 / 919 / 26	879 / 1119 / 21	884 / 894 / 41	1033 / 1060 / 33	1083 / 1014 / 46	1279 / 1208 / 36	1125 / 973 / 43	1344 / 1171 / 34
	1	656 / 467 / 52	727 / 588 / 43	637 / 587 / 73	728 / 721 / 59	740 / 669 / 84	883 / 815 / 68	755 / 635 / 74	909 / 777 / 60	676 / 504 / 49	769 / 627 / 41	640 / 613 / 68	765 / 763 / 56	780 / 711 / 79	953 / 884 / 65	798 / 675 / 70	950 / 815 / 56	676 / 504 / 49	769 / 627 / 41	640 / 613 / 68	765 / 763 / 56	780 / 711 / 79	953 / 884 / 65	798 / 675 / 70	950 / 815 / 56
	2	727 / 588 / 43	877 / 728 / 35	728 / 734 / 59	855 / 881 / 47	883 / 826 / 56	1087 / 1031 / 60	909 / 789 / 60	1084 / 951 / 48	769 / 627 / 41	916 / 765 / 33	765 / 776 / 56	921 / 953 / 46	953 / 896 / 65	1115 / 1061 / 52	950 / 827 / 56	1163 / 1023 / 46	769 / 627 / 41	916 / 765 / 33	765 / 776 / 56	921 / 953 / 46	953 / 896 / 65	1115 / 1061 / 52	950 / 827 / 56	1163 / 1023 / 46
	3	707 / 881 / 32	861 / 1092 / 26	819 / 825 / 51	1007 / 1030 / 42	1009 / 941 / 58	1263 / 1190 / 49	1046 / 901 / 52	1260 / 1096 / 42	733 / 919 / 29	879 / 1119 / 24	884 / 894 / 49	1033 / 1060 / 39	1083 / 1014 / 56	1279 / 1208 / 45	1125 / 973 / 50	1344 / 1171 / 40	733 / 919 / 29	879 / 1119 / 24	884 / 894 / 49	1033 / 1060 / 39	1083 / 1014 / 56	1279 / 1208 / 45	1125 / 973 / 50	1344 / 1171 / 40
	1	656 / 467 / 52	727 / 588 / 43	637 / 587 / 73	728 / 721 / 59	740 / 669 / 101	883 / 815 / 81	755 / 635 / 86	909 / 777 / 70	676 / 504 / 49	769 / 627 / 41	640 / 613 / 68	765 / 763 / 56	780 / 711 / 95	953 / 884 / 79	798 / 675 / 81	950 / 815 / 65	676 / 504 / 49	769 / 627 / 41	640 / 613 / 68	765 / 763 / 56	780 / 711 / 95	953 / 884 / 79	798 / 675 / 81	950 / 815 / 65
	2	727 / 588 / 43	877 / 728 / 35	728 / 734 / 59	855 / 881 / 47	883 / 826 / 81	1087 / 1031 / 67	909 / 789 / 70	1084 / 951 / 56	769 / 627 / 41	916 / 765 / 33	765 / 776 / 56	921 / 953 / 46	953 / 896 / 79	1115 / 1061 / 62	950 / 827 / 65	1163 / 1023 / 54	769 / 627 / 41	916 / 765 / 33	765 / 776 / 56	921 / 953 / 46	953 / 896 / 79	1115 / 1061 / 62	950 / 827 / 65	1163 / 1023 / 54
	3	707 / 881 / 32	861 / 1092 / 26	819 / 825 / 51	1007 / 1030 / 42	1009 / 941 / 70	1263 / 1190 / 59	1046 / 901 / 61	1260 / 1096 / 49	733 / 919 / 29	879 / 1119 / 24	884 / 894 / 49	1033 / 1060 / 39	1083 / 1014 / 67	1279 / 1208 / 54	1125 / 973 / 58	1344 / 1171 / 47	733 / 919 / 29	879 / 1119 / 24	884 / 894 / 49	1033 / 1060 / 39	1083 / 1014 / 67	1279 / 1208 / 54	1125 / 973 / 58	1344 / 1171 / 47
15	1	659 / 525 / 40	806 / 662 / 34	665 / 650 / 55	796 / 798 / 44	816 / 747 / 61	984 / 916 / 49	836 / 710 / 56	1018 / 876 / 46	691 / 556 / 38	837 / 692 / 32	693 / 684 / 52	850 / 857 / 43	873 / 803 / 59	1046 / 977 / 47	869 / 740 / 53	1043 / 900 / 43	691 / 556 / 38	837 / 692 / 32	693 / 684 / 52	850 / 857 / 43	873 / 803 / 59	1046 / 977 / 47	869 / 740 / 53	1043 / 900 / 43
	2	806 / 662 / 34	983 / 825 / 28	796 / 813 / 44	945 / 981 / 36	984 / 928 / 49	1184 / 1129 / 40	1018 / 889 / 46	1238 / 1091 / 38	837 / 692 / 32	1009 / 850 / 26	820 / 842 / 41	1001 / 1043 / 34	1046 / 990 / 47	1248 / 1193 / 38	1043 / 913 / 43	1308 / 1154 / 36	837 / 692 / 32	1009 / 850 / 26	820 / 842 / 41	1001 / 1043 / 34	1046 / 990 / 47	1248 / 1193 / 38	1043 / 913 / 43	1308 / 1154 / 36
	3	783 / 986 / 25	930 / 1188 / 20	912 / 927 / 39	1096 / 1128 / 31	1155 / 1084 / 44	1349 / 1276 / 34	1152 / 998 / 39	1421 / 1240 / 33	796 / 1006 / 23	978 / 1252 / 19	970 / 989 / 37	1155 / 1192 / 30	1167 / 1097 / 40	1410 / 1336 / 32	1219 / 1059 / 38	1491 / 1302 / 31	796 / 1006 / 23	978 / 1252 / 19	970 / 989 / 37	1155 / 1192 / 30	1167 / 1097 / 40	1410 / 1336 / 32	1219 / 1059 / 38	1491 / 1302 / 31
	1	678 / 525 / 46	806 / 662 / 38	665 / 650 / 65	796 / 798 / 52	816 / 747 / 75	984 / 916 / 61	836 / 710 / 66	1018 / 876 / 54	693 / 556 / 44	837 / 692 / 36	693 / 684 / 61	850 / 857 / 51	873 / 803 / 72	1046 / 977 / 58	869 / 740 / 62	1043 / 900 / 50	693 / 556 / 44	837 / 692 / 36	693 / 684 / 61	850 / 857 / 51	873 / 803 / 72	1046 / 977 / 58	869 / 740 / 62	1043 / 900 / 50
	2	806 / 662 / 38	983 / 825 / 32	796 / 813 / 52	945 / 981 / 42	984 / 928 / 61	1184 / 1129 / 49	1018 / 889 / 54	1238 / 1091 / 44	837 / 692 / 36	1009 / 850 / 29	820 / 842 / 49	1001 / 1043 / 40	1046 / 990 / 58	1248 / 1193 / 47	1043 / 913 / 50	1308 / 1154 / 42	837 / 692 / 36	1009 / 850 / 29	820 / 842 / 49	1001 / 1043 / 40	1046 / 990 / 58	1248 / 1193 / 47	1043 / 913 / 50	1308 / 1154 / 42
	3	783 / 986 / 28	930 / 1188 / 23	912 / 927 / 46	1096 / 1128 / 37	1155 / 1084 / 54	1349 / 1276 / 42	1152 / 998 / 46	1421 / 1240 / 38	796 / 1006 / 26	978 / 1252 / 22	970 / 989 / 44	1155 / 1192 / 35	1167 / 1097 / 49	1410 / 1336 / 40	1219 / 1059 / 44	1491 / 1302 / 36	796 / 1006 / 26	978 / 1252 / 22	970 / 989 / 44	1155 / 1192 / 35	1167 / 1097 / 49	1410 / 1336 / 40	1219 / 1059 / 44	1491 / 1302 / 36
	1	678 / 525 / 46	806 / 662 / 38	665 / 650 / 65	796 / 798 / 52	816 / 747 / 90	984 / 916 / 73	836 / 710 / 77	1018 / 876 / 63	693 / 556 / 44	837 / 692 / 36	693 / 684 / 61	850 / 857 / 51	873 / 803 / 87	1046 / 977 / 70	869 / 740 / 72	1043 / 900 / 58	693 / 556 / 44	837 / 692 / 36	693 / 684 / 61	850 / 857 / 51	873 / 803 / 87	1046 / 977 / 70	869 / 740 / 72	1043 / 900 / 58
	2	806 / 662 / 38	983 / 825 / 32	796 / 813 / 52	945 / 981 / 42	984 / 928 / 73	1184 / 1129 / 59	1018 / 889 / 63	1238 / 1091 / 51	837 / 692 / 36	1009 / 850 / 29	820 / 842 / 49	1001 / 1043 / 40	10											

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof										0-30ft										83in x 41.5in										Load: Up / Down / Side , lbs																																																																																																							
Wind Speed [mph]										95										100										105																																																																																																							
Panal Angle										0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45																																																																																										
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																																																																													
		30	1	561 / 233 / 71	605 / 328 / 63	564 / 323 / 109	605 / 438 / 96	575 / 406 / 177	633 / 530 / 151	499 / 390 / 149	600 / 489 / 123	562 / 249 / 68	610 / 347 / 61	567 / 343 / 106	624 / 472 / 94	584 / 430 / 170	644 / 555 / 144	513 / 406 / 141	625 / 513 / 117	573 / 269 / 67	626 / 373 / 60	580 / 369 / 104	642 / 506 / 93	603 / 461 / 167	653 / 579 / 138	535 / 427 / 136	647 / 535 / 112	35	1	588 / 226 / 74	623 / 316 / 66	587 / 312 / 120	632 / 430 / 107	597 / 399 / 198	661 / 530 / 172	499 / 390 / 168	600 / 489 / 138	597 / 245 / 73	638 / 341 / 65	599 / 337 / 118	649 / 462 / 105	604 / 422 / 191	670 / 555 / 165	513 / 406 / 159	625 / 513 / 132	596 / 259 / 70	652 / 366 / 64	599 / 356 / 113	652 / 485 / 101	622 / 452 / 187	678 / 579 / 157	535 / 427 / 153	647 / 535 / 126	40	1	611 / 218 / 126	651 / 309 / 114	607 / 300 / 169	656 / 421 / 153	618 / 391 / 225	674 / 518 / 195	499 / 390 / 187	600 / 489 / 154	619 / 236 / 124	665 / 334 / 112	617 / 325 / 166	672 / 453 / 150	623 / 413 / 216	697 / 555 / 190	513 / 406 / 177	625 / 513 / 147	628 / 255 / 121	678 / 358 / 110	627 / 349 / 163	673 / 475 / 144	640 / 443 / 212	704 / 579 / 182	535 / 427 / 171	647 / 535 / 141	110	1	584 / 289 / 66	642 / 399 / 59	593 / 396 / 102	646 / 528 / 89	611 / 483 / 160	672 / 600 / 131	555 / 446 / 131	684 / 568 / 109	595 / 309 / 65	644 / 416 / 56	594 / 414 / 98	650 / 549 / 85	616 / 502 / 154	707 / 634 / 128	585 / 474 / 128	701 / 585 / 104	115	1	606 / 279 / 69	667 / 391 / 63	610 / 381 / 111	668 / 517 / 98	628 / 473 / 180	684 / 600 / 150	555 / 446 / 147	684 / 568 / 123	615 / 298 / 68	667 / 407 / 60	622 / 406 / 109	684 / 549 / 96	645 / 502 / 176	707 / 634 / 146	585 / 474 / 144	701 / 585 / 117	ASCE Group Zone	<table border="1"> <thead> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 7.5</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">7.5 - 15</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">15 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">30 - 45</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>	Panal Angle	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3	7.5 - 15	1 = 1	2 = 2	3 = 3	15 - 30	1 = 1	2 = 2	3 = 3	30 - 45	1 = 1
Panal Angle	Mono Slope																																																																																																																																				
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Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72"$	$64"$ to $71"$	$48"$ to $63"$	$x \leq 47"$
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]			140								150								160							
Panal Angle			0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group		Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1		606 / 343 / 61	674 / 465 / 54	619 / 466 / 94	667 / 597 / 79	638 / 549 / 144	752 / 681 / 118	618 / 507 / 117	747 / 628 / 96	627 / 382 / 59	703 / 514 / 52	644 / 517 / 91	679 / 640 / 74	663 / 590 / 134	788 / 719 / 108	657 / 544 / 109	807 / 683 / 91	648 / 420 / 56	713 / 546 / 48	654 / 554 / 85	687 / 674 / 68	713 / 640 / 128	839 / 770 / 102	708 / 591 / 104	862 / 733 / 85
	2		674 / 465 / 54	746 / 599 / 46	651 / 594 / 77	718 / 725 / 62	752 / 691 / 118	898 / 841 / 95	747 / 638 / 96	925 / 803 / 80	703 / 514 / 52	777 / 636 / 42	662 / 635 / 72	770 / 784 / 59	788 / 729 / 108	957 / 900 / 89	807 / 693 / 91	988 / 861 / 75	713 / 546 / 48	830 / 684 / 40	687 / 686 / 68	817 / 837 / 55	839 / 781 / 102	1005 / 950 / 82	862 / 744 / 85	1042 / 911 / 70
	3		615 / 720 / 41	718 / 897 / 34	700 / 689 / 68	833 / 839 / 55	856 / 787 / 102	1026 / 957 / 82	879 / 749 / 85	1063 / 917 / 70	637 / 781 / 38	762 / 958 / 31	732 / 727 / 62	887 / 899 / 51	916 / 847 / 95	1081 / 1012 / 76	912 / 780 / 77	1125 / 973 / 64	674 / 835 / 36	798 / 1008 / 29	779 / 779 / 59	932 / 949 / 47	967 / 899 / 89	1174 / 1103 / 72	999 / 859 / 75	1224 / 1062 / 62
35	1		634 / 336 / 65	694 / 455 / 57	644 / 457 / 105	699 / 597 / 90	665 / 549 / 165	752 / 681 / 135	618 / 507 / 132	747 / 628 / 108	653 / 374 / 63	721 / 502 / 55	667 / 506 / 101	709 / 640 / 84	681 / 590 / 154	788 / 719 / 124	657 / 544 / 123	807 / 683 / 102	671 / 411 / 60	745 / 546 / 52	688 / 554 / 96	714 / 674 / 77	713 / 640 / 146	839 / 770 / 116	708 / 591 / 117	862 / 733 / 96
	2		694 / 455 / 57	776 / 599 / 50	682 / 594 / 88	722 / 725 / 71	752 / 691 / 135	898 / 841 / 109	747 / 638 / 108	925 / 803 / 90	721 / 502 / 55	787 / 636 / 46	691 / 635 / 81	770 / 784 / 67	788 / 729 / 124	957 / 900 / 101	807 / 693 / 102	988 / 861 / 84	745 / 546 / 52	830 / 684 / 43	714 / 686 / 77	817 / 837 / 62	839 / 781 / 116	1005 / 950 / 94	862 / 744 / 96	1042 / 911 / 78
	3		642 / 720 / 44	718 / 897 / 37	724 / 689 / 77	833 / 839 / 62	856 / 787 / 116	1026 / 957 / 94	879 / 749 / 96	1063 / 917 / 78	663 / 781 / 42	762 / 958 / 34	732 / 727 / 71	887 / 899 / 58	916 / 847 / 109	1081 / 1012 / 86	912 / 780 / 87	1125 / 973 / 72	680 / 835 / 39	798 / 1008 / 32	779 / 779 / 67	932 / 949 / 54	967 / 899 / 101	1174 / 1103 / 83	999 / 859 / 84	1224 / 1062 / 69
40	1		661 / 329 / 112	713 / 445 / 98	668 / 447 / 150	731 / 597 / 132	692 / 549 / 190	752 / 681 / 156	618 / 507 / 147	747 / 628 / 121	677 / 366 / 108	736 / 490 / 94	687 / 495 / 144	739 / 640 / 122	706 / 590 / 178	788 / 719 / 143	657 / 544 / 137	807 / 683 / 114	692 / 402 / 103	777 / 546 / 92	706 / 542 / 138	742 / 674 / 113	734 / 640 / 169	839 / 770 / 134	708 / 591 / 131	862 / 733 / 107
	2		713 / 445 / 98	807 / 599 / 87	713 / 594 / 128	747 / 725 / 104	752 / 691 / 156	898 / 841 / 126	747 / 638 / 121	925 / 803 / 101	736 / 490 / 94	815 / 636 / 80	720 / 635 / 119	773 / 784 / 97	788 / 729 / 143	957 / 900 / 117	807 / 693 / 114	988 / 861 / 94	777 / 546 / 92	842 / 684 / 76	742 / 686 / 113	817 / 837 / 91	839 / 781 / 134	1005 / 950 / 108	862 / 744 / 107	1042 / 911 / 87
	3		669 / 720 / 78	725 / 897 / 64	752 / 689 / 113	833 / 839 / 91	856 / 787 / 134	1026 / 957 / 108	879 / 749 / 107	1063 / 917 / 87	689 / 781 / 73	762 / 958 / 60	757 / 727 / 104	887 / 899 / 85	916 / 847 / 126	1081 / 1012 / 100	912 / 780 / 97	1125 / 973 / 81	704 / 835 / 69	798 / 1008 / 55	780 / 779 / 97	932 / 949 / 79	967 / 899 / 117	1174 / 1103 / 95	999 / 859 / 94	1224 / 1062 / 77
Wind Speed [mph]			170								180															
30	1		667 / 457 / 54	737 / 588 / 46	659 / 587 / 79	728 / 721 / 64	740 / 669 / 118	883 / 815 / 95	755 / 635 / 99	909 / 777 / 80	701 / 504 / 53	769 / 627 / 43	661 / 613 / 74	765 / 763 / 61	780 / 711 / 111	953 / 884 / 92	798 / 675 / 93	950 / 815 / 75	ASCE Group Zone							
	2		737 / 588 / 46	877 / 728 / 37	728 / 734 / 64	855 / 881 / 51	883 / 826 / 95	1087 / 1031 / 79	909 / 789 / 80	1084 / 951 / 64	769 / 627 / 43	916 / 765 / 35	765 / 776 / 61	921 / 953 / 49	953 / 896 / 92	1115 / 1061 / 72	950 / 827 / 75	1163 / 1023 / 62	0 - 7.5	Mono Slope						
	3		707 / 881 / 34	861 / 1092 / 28	819 / 825 / 55	1007 / 1030 / 46	1009 / 941 / 82	1263 / 1190 / 69	1046 / 901 / 70	1260 / 1096 / 56	733 / 919 / 31	879 / 1119 / 25	884 / 894 / 53	1033 / 1060 / 42	1083 / 1014 / 79	1279 / 1208 / 62	1125 / 973 / 67	1344 / 1171 / 54		1 = 1						
1		687 / 447 / 57	767 / 588 / 50	691 / 587 / 90	734 / 721 / 73	740 / 669 / 135	883 / 815 / 109	755 / 635 / 111	909 / 777 / 90	719 / 492 / 56	787 / 627 / 47	690 / 613 / 84	765 / 763 / 69	780 / 711 / 127	953 / 884 / 105	798 / 675 / 105	950 / 815 / 84	2 = 2								
35	2		767 / 588 / 50	877 / 728 / 41	734 / 734 / 73	855 / 881 / 58	883 / 826 / 90	1087 / 1031 / 90	909 / 789 / 72	1084 / 951 / 72	787 / 627 / 47	916 / 765 / 38	765 / 776 / 69	921 / 953 / 56	953 / 896 / 105	1115 / 1061 / 83	950 / 827 / 84	1163 / 1023 / 69	3 = 3							
	3		707 / 881 / 37	861 / 1092 / 30	819 / 825 / 62	1007 / 1030 / 52	1009 / 941 / 94	1263 / 1190 / 79	1046 / 901 / 78	1260 / 1096 / 63	733 / 919 / 34	879 / 1119 / 28	884 / 894 / 60	1033 / 1060 / 47	1083 / 1014 / 90	1279 / 1208 / 71	1125 / 973 / 75	1344 / 1171 / 60	1 = 1							
	1		723 / 447 / 101	798 / 588 / 87	723 / 587 / 132	760 / 721 / 107	740 / 669 / 156	883 / 815 / 126	755 / 635 / 124	909 / 777 / 101	736 / 481 / 96	816 / 627 / 83	720 / 613 / 122	775 / 763 / 100	780 / 711 / 147	953 / 884 / 121	798 / 675 / 117	950 / 815 / 94	7.5 - 15	Mono Slope						
2		798 / 588 / 87	877 / 728 / 71	760 / 734 / 107	855 / 881 / 85	883 / 826 / 126	1087 / 1031 / 104	909 / 789 / 101	1084 / 951 / 81	816 / 627 / 83	916 / 765 / 67	775 / 776 / 100	921 / 953 / 82	953 / 896 / 121	1115 / 1061 / 95	950 / 827 / 94	1163 / 1023 / 77	2 = 2								
3		716 / 881 / 64	861 / 1092 / 53	819 / 825 / 91	1007 / 1030 / 75	1009 / 941 / 108	1263 / 1190 / 91	1046 / 901 / 87	1260 / 1096 / 71	733 / 919 / 60	879 / 1119 / 48	884 / 894 / 88	1033 / 1060 / 69	1083 / 1014 / 104	1279 / 1208 / 83	1125 / 973 / 84	1344 / 1171 / 67	3 = 3								
Wind Speed [mph]			190								200															
30	1		701 / 525 / 49	806 / 662 / 41	676 / 650 / 70	796 / 798 / 57	816 / 747 / 105	984 / 916 / 85	836 / 710 / 88	1018 / 876 / 72	715 / 556 / 47	837 / 692 / 38	693 / 684 / 66	850 / 857 / 55	873 / 803 / 102	1046 / 977 / 82	869 / 740 / 83	1043 / 900 / 67	15 - 30	Mono Slope						
	2		806 / 662 / 41	983 / 825 / 34	796 / 813 / 57	945 / 981 / 46	984 / 928 / 85	1184 / 1129 / 69	1018 / 889 / 72	1238 / 1091 / 59	837 / 692 / 38	1009 / 850 / 31	820 / 842 / 53	1001 / 1043 / 44	1046 / 990 / 82	1248 / 1193 / 66	1043 / 913 / 67	1308 / 1154 / 56		1 = 1						
	3		783 / 986 / 30	930 / 1188 / 24	912 / 927 / 49	1096 / 1128 / 40	1155 / 1084 / 76	1349 / 1276 / 59	1152 / 998 / 62	1421 / 1240 / 51	796 / 1006 / 28	978 / 1252 / 23	970 / 989 / 47	1155 / 1192 / 38	1167 / 1097 / 69	1410 / 1336 / 56	1219 / 1059 / 59	1491 / 1302 / 48		2 = 2						
35	1		734 / 525 / 54	806 / 662 / 44	704 / 650 / 79	796 / 798 / 64	816 / 747 / 120	984 / 916 / 98	836 / 710 / 99	1018 / 876 / 81	746 / 556 / 51	837 / 692 / 42	714 / 684 / 75	850 / 857 / 62	873 / 803 / 116	1046 / 977 / 94	869 / 740 / 93	1043 / 900 / 75	30 - 45	Mono Slope						
	2		806 / 662 / 44	983 / 825 / 37	796 / 813 / 64	945 / 981 / 52	984 / 928 / 98	1184 / 1129 / 79	1018 / 889 / 81	1238 / 1091 / 66	837 / 692 / 42	1009 / 850 / 34	820 / 842 / 60	1001 / 1043 / 49	1046 / 990 / 94	1248 / 1193 / 75	1043 / 913 / 75	1308 / 1154 / 63		3 = 3						
	3		783 / 986 / 33	930 / 1188 / 26	912 / 927 / 56	1096 / 1128 / 45	1155 / 1084 / 86	1349 / 1276 / 68	1152 / 998 / 69	1421 / 1240 / 57	796 / 1006 / 30	978 / 1252 / 25	970 / 989 / 54	1155 / 1192 / 43	1167 / 1097 / 79	1410 / 1336 / 64	1219 / 1059 / 66	1491 / 1302 / 54								
40	1		748 / 512 / 92	830 / 662 / 78	732 / 650 / 116	796 / 798 / 94	816 / 747 / 139	984 / 916 / 113	836 / 710 / 111	1018 / 876 / 91	778 / 556 / 89	840 / 692 / 73	741 / 684 / 110	850 / 857 / 91	873 / 803 / 134	1046 / 977 / 108	869 / 740 / 104	1043 / 900 / 84	ASCE Group Zone	Mono Slope						
	2		830 / 662 / 78	983 / 825 / 64	796 / 813 / 94	945 / 981 / 75	984 / 928 / 113	1184 / 1129 / 91	1018 / 889 / 91	1238 / 1091 / 74	840 / 692 / 73	1009 / 850 / 60	820 / 842 / 88	1001 / 1043 / 72	1046 / 990 / 108	1248 / 1193 / 87	1043 / 913 / 84	1308 / 1154 / 71		1 = 1						
	3		783 / 986 / 57	930 / 1188 / 46	912 / 927 / 82	1096 / 1128 / 66	1155 / 1084 / 100	1349 / 1276 / 78	1152 / 998 / 77	1421 / 1240 / 64	796 / 1006 / 53	978 / 1252 / 44	970 / 989 / 79	1155 / 1192 / 63	1167 / 1097 / 91	1410 / 1336 / 74	1219 / 1059 / 74	1491 / 1302 / 61		2 = 2						

Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft (m).
 h=Mean roof height, in ft (m).
 θ=Angle of roof from horizontal, in degrees

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
		45	1	632 / 210 / 133	678 / 303 / 123	636 / 295 / 182	680 / 412 / 165	637 / 384 / 243	686 / 507 / 210	511 / 390 / 206	600 / 489 / 170	638 / 227 / 130	690 / 327 / 120	645 / 319 / 179	694 / 444 / 162	640 / 405 / 234	708 / 543 / 205	515 / 406 / 195	625 / 513 / 162	645 / 245 / 128	701 / 351 / 118	654 / 342 / 175	692 / 464 / 155	656 / 434 / 229	730 / 579 / 200	535 / 427 / 188
2	678 / 303 / 123		735 / 420 / 110	680 / 420 / 165	730 / 562 / 145	686 / 514 / 210	750 / 656 / 176	600 / 497 / 170	732 / 622 / 140	690 / 327 / 120	735 / 440 / 105	694 / 452 / 162	750 / 601 / 141	708 / 550 / 205	755 / 680 / 167	625 / 521 / 162	756 / 646 / 133	701 / 351 / 118	752 / 469 / 103	692 / 473 / 155	750 / 624 / 134	730 / 587 / 200	780 / 720 / 162	647 / 543 / 155	798 / 685 / 129	
3	693 / 567 / 110		685 / 685 / 88	718 / 511 / 151	763 / 654 / 127	748 / 620 / 191	820 / 751 / 153	688 / 572 / 148	841 / 714 / 122	691 / 593 / 105	702 / 729 / 85	736 / 548 / 148	785 / 697 / 124	755 / 645 / 181	866 / 796 / 148	712 / 595 / 140	862 / 734 / 114	688 / 617 / 100	696 / 749 / 80	754 / 585 / 145	784 / 719 / 117	758 / 667 / 172	880 / 812 / 138	753 / 632 / 136	906 / 775 / 111	
50	1		662 / 206 / 141	702 / 297 / 131	651 / 284 / 191	701 / 404 / 176	655 / 376 / 260	713 / 507 / 229	526 / 390 / 225	600 / 489 / 185	667 / 223 / 139	713 / 320 / 128	659 / 306 / 187	714 / 434 / 172	657 / 397 / 250	734 / 543 / 224	528 / 406 / 213	625 / 513 / 177	672 / 240 / 136	723 / 343 / 125	666 / 329 / 184	727 / 464 / 169	671 / 425 / 245	737 / 565 / 213	539 / 427 / 205	647 / 535 / 169
	2		702 / 297 / 131	753 / 410 / 117	701 / 411 / 176	762 / 562 / 158	713 / 514 / 229	772 / 656 / 193	600 / 497 / 185	732 / 622 / 153	713 / 320 / 128	769 / 440 / 114	714 / 442 / 172	781 / 601 / 154	734 / 550 / 224	776 / 680 / 182	625 / 521 / 177	756 / 646 / 145	723 / 343 / 125	785 / 469 / 112	727 / 473 / 169	780 / 624 / 146	737 / 573 / 213	800 / 720 / 177	647 / 543 / 169	798 / 685 / 141
	3		728 / 567 / 120	713 / 685 / 95	734 / 500 / 161	791 / 654 / 139	773 / 620 / 208	820 / 751 / 167	688 / 572 / 161	841 / 714 / 133	725 / 593 / 114	729 / 729 / 93	751 / 535 / 158	813 / 697 / 135	778 / 645 / 198	866 / 796 / 161	712 / 595 / 153	862 / 734 / 125	720 / 617 / 109	722 / 749 / 87	767 / 571 / 154	810 / 719 / 128	781 / 667 / 187	880 / 812 / 151	753 / 632 / 149	906 / 775 / 121
60	1		702 / 194 / 154	731 / 279 / 142	700 / 273 / 214	740 / 387 / 197	688 / 361 / 293	750 / 495 / 262	554 / 390 / 264	600 / 489 / 217	705 / 210 / 151	755 / 307 / 142	705 / 294 / 210	750 / 415 / 192	701 / 389 / 250	750 / 518 / 250	555 / 406 / 249	625 / 513 / 207	723 / 231 / 151	763 / 328 / 139	710 / 316 / 205	760 / 444 / 188	713 / 416 / 281	768 / 551 / 244	565 / 427 / 240	647 / 535 / 198
	2		731 / 279 / 142	784 / 391 / 129	740 / 394 / 197	787 / 535 / 175	750 / 502 / 262	818 / 656 / 226	600 / 497 / 217	732 / 622 / 179	755 / 307 / 142	796 / 419 / 126	750 / 423 / 192	802 / 572 / 170	750 / 525 / 214	819 / 680 / 214	625 / 521 / 207	756 / 646 / 170	763 / 328 / 139	809 / 446 / 123	760 / 452 / 188	818 / 608 / 166	768 / 559 / 244	842 / 720 / 208	647 / 543 / 198	798 / 685 / 165
	3		763 / 541 / 132	769 / 685 / 110	781 / 488 / 183	847 / 654 / 162	801 / 604 / 238	856 / 751 / 195	688 / 572 / 188	841 / 714 / 155	792 / 593 / 132	784 / 729 / 107	795 / 523 / 179	868 / 697 / 157	825 / 645 / 232	883 / 796 / 189	712 / 595 / 179	862 / 734 / 146	784 / 617 / 126	773 / 749 / 101	809 / 557 / 175	862 / 719 / 149	825 / 667 / 220	880 / 812 / 177	753 / 632 / 174	906 / 775 / 141
45	1	652 / 263 / 125	698 / 366 / 113	663 / 366 / 172	706 / 495 / 151	672 / 463 / 224	733 / 600 / 191	555 / 446 / 181	684 / 568 / 151	672 / 286 / 125	709 / 389 / 110	672 / 390 / 169	719 / 524 / 148	688 / 492 / 219	753 / 634 / 186	585 / 474 / 177	701 / 585 / 144	ASCE Group Zone	Panal Angle	Mono Slope	0 - 7.5	1 = 1				
	2	698 / 366 / 113	768 / 498 / 100	706 / 504 / 151	768 / 662 / 131	733 / 608 / 191	820 / 760 / 157	684 / 576 / 151	815 / 701 / 122	709 / 389 / 110	785 / 527 / 98	719 / 534 / 148	764 / 680 / 124	753 / 643 / 186	831 / 773 / 148	701 / 594 / 144	853 / 737 / 118					2 = 2				
	3	683 / 638 / 95	710 / 788 / 78	753 / 606 / 138	804 / 758 / 114	781 / 705 / 167	920 / 852 / 134	771 / 650 / 129	949 / 813 / 107	695 / 673 / 93	724 / 826 / 75	769 / 641 / 134	798 / 771 / 107	789 / 720 / 157	958 / 890 / 129	808 / 684 / 125	990 / 850 / 103					3 = 3				
	50	1	678 / 258 / 133	734 / 366 / 122	687 / 359 / 184	739 / 495 / 165	686 / 453 / 239	757 / 600 / 208	555 / 446 / 197	684 / 568 / 165	684 / 275 / 131	744 / 389 / 120	695 / 382 / 180	752 / 524 / 161	701 / 481 / 234	776 / 634 / 203	585 / 474 / 193				701 / 585 / 157	1 = 1				
		2	734 / 366 / 122	800 / 498 / 109	739 / 504 / 165	797 / 662 / 143	757 / 608 / 208	823 / 760 / 172	684 / 576 / 165	815 / 701 / 133	744 / 389 / 120	816 / 527 / 106	752 / 534 / 161	792 / 680 / 135	776 / 643 / 203	831 / 773 / 161	701 / 594 / 157				853 / 737 / 129	2 = 2				
		3	714 / 638 / 103	735 / 788 / 84	783 / 606 / 150	830 / 758 / 124	803 / 705 / 182	920 / 852 / 146	771 / 650 / 141	949 / 813 / 117	725 / 673 / 101	748 / 826 / 82	799 / 641 / 146	822 / 771 / 116	800 / 720 / 172	958 / 890 / 141	808 / 684 / 137				990 / 850 / 113	3 = 3				
	60	1	726 / 247 / 148	770 / 350 / 136	715 / 337 / 201	770 / 472 / 183	710 / 433 / 269	786 / 585 / 238	574 / 446 / 231	684 / 568 / 193	729 / 264 / 145	778 / 371 / 132	736 / 366 / 201	779 / 500 / 179	722 / 460 / 262	803 / 618 / 232	594 / 474 / 226				701 / 585 / 184	1 = 1				
		2	770 / 350 / 136	822 / 474 / 120	770 / 481 / 183	832 / 644 / 162	786 / 593 / 238	864 / 760 / 202	684 / 576 / 193	815 / 701 / 155	778 / 371 / 132	833 / 500 / 117	779 / 509 / 179	847 / 680 / 157	803 / 626 / 232	857 / 773 / 189	701 / 594 / 184				853 / 737 / 151	2 = 2				
		3	775 / 638 / 120	785 / 788 / 98	823 / 591 / 170	880 / 758 / 144	846 / 705 / 214	920 / 852 / 171	771 / 650 / 165	949 / 813 / 137	784 / 673 / 117	796 / 826 / 95	837 / 624 / 166	869 / 771 / 136	841 / 720 / 202	958 / 890 / 165	808 / 684 / 160				990 / 850 / 132	3 = 3				
45	1	679 / 305 / 123	720 / 412 / 108	681 / 414 / 165	732 / 554 / 145	688 / 509 / 210	752 / 650 / 176	603 / 491 / 170	735 / 616 / 140	672 / 286 / 125	709 / 389 / 110	672 / 390 / 169	719 / 524 / 148	688 / 492 / 219	753 / 634 / 186	585 / 474 / 177	701 / 585 / 144	ASCE Group Zone	Panal Angle	Mono Slope	15 - 30	1 = 1				
	2	720 / 412 / 108	800 / 556 / 95	732 / 564 / 145	780 / 714 / 121	752 / 659 / 176	865 / 808 / 143	735 / 625 / 140	890 / 770 / 114	709 / 389 / 110	785 / 527 / 98	719 / 534 / 148	764 / 680 / 124	753 / 643 / 186	831 / 773 / 148	701 / 594 / 144	853 / 737 / 118					2 = 2				
	3	687 / 688 / 88	736 / 863 / 73	765 / 657 / 127	815 / 806 / 103	823 / 754 / 153	993 / 925 / 124	844 / 717 / 122	1028 / 885 / 100	695 / 673 / 93	724 / 826 / 75	769 / 641 / 134	798 / 771 / 107	789 / 720 / 157	958 / 890 / 129	808 / 684 / 125	990 / 850 / 103					3 = 3				
	50	1	689 / 292 / 128	754 / 412 / 117	703 / 406 / 176	764 / 554 / 158	715 / 509 / 229	774 / 650 / 193	603 / 491 / 185	735 / 616 / 153	684 / 275 / 131	744 / 389 / 120	695 / 382 / 180	752 / 524 / 161	701 / 481 / 234	776 / 634 / 203	585 / 474 / 193				701 / 585 / 157	1 = 1				
		2	754 / 412 / 117	831 / 556 / 103	764 / 564 / 158	807 / 714 / 131	774 / 659 / 193	865 / 808 / 156	735 / 625 / 153	890 / 770 / 125	744 / 389 / 120	816 / 527 / 106	752 / 534 / 161	792 / 680 / 135	776 / 643 / 203	831 / 773 / 161	701 / 594 / 157				853 / 737 / 129	2 = 2				
		3	715 / 688 / 95	759 / 863 / 79	793 / 657 / 139	837 / 806 / 113	823 / 754 / 167	993 / 925 / 136	844 / 717 / 133	1028 / 885 / 109	725 / 673 / 101	748 / 826 / 82	799 / 641 / 146	822 / 771 / 116	800 / 720 / 172	958 / 890 / 141	808 / 684 / 137				990 / 850 / 113	3 = 3				
	60	1	732 / 280 / 142	785 / 393 / 129	741 / 388 / 197	789 / 528 / 175	734 / 486 / 256	820 / 650 / 226	603 / 491 / 217	735 / 616 / 179	729 / 264 / 145	778 / 371 / 132	736 / 366 / 201	779 / 500 / 179	722 / 460 / 262	803 / 618 / 232	594 / 474 / 226				701 / 585 / 184	1 = 1				
		2	785 / 393 / 129	868 / 541 / 117	789 / 537 / 175	860 / 714 / 153	820 / 659 / 226	875 / 808 / 183	735 / 625 / 179	890 / 770 / 146	778 / 371 / 132	833 / 500 / 117	779 / 509 / 179	847 / 680 / 157	803 / 626 / 232	857 / 773 / 189	701 / 594 / 184				853 / 737 / 151	2 = 2				
		3	771 / 688 / 110	806 / 863 / 92	849 / 657 / 162	883 / 806 / 131	859 / 754 / 195	993 / 925 / 159	844 / 717 / 155	1028 / 885 / 127	784 / 673 / 117	796 / 826 / 95	837 / 624 / 166	869 / 771 / 136	841 / 720 / 202	958 / 890 / 165	808 / 684 / 160				990 / 850 / 132	3 = 3				

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		45	1	686 / 323 / 120	748 / 445 / 108	690 / 438 / 162	745 / 583 / 141	703 / 536 / 205	770 / 681 / 172	618 / 507 / 162	747 / 628 / 133	700 / 358 / 115	769 / 490 / 103	707 / 485 / 155	769 / 640 / 134	731 / 590 / 195	788 / 719 / 157	657 / 544 / 151	807 / 683 / 125	712 / 393 / 110	789 / 533 / 98	723 / 530 / 148	769 / 674 / 124	758 / 640 / 186	839 / 770 / 148	708 / 591 / 144	862 / 733 / 118	748 / 445 / 108	815 / 583 / 93	745 / 594 / 141	772 / 725 / 114	770 / 691 / 172	898 / 841 / 138	747 / 638 / 133	925 / 803 / 111	769 / 490 / 103	844 / 636 / 88	749 / 635 / 131	797 / 784 / 107	788 / 729 / 157	957 / 900 / 129	807 / 693 / 125	988 / 861 / 103	789 / 533 / 98	868 / 684 / 83	769 / 686 / 124	818 / 837 / 100	839 / 781 / 148	1005 / 950 / 119
50	1	709 / 316 / 128	764 / 434 / 114	710 / 429 / 172	776 / 583 / 154	729 / 536 / 224	792 / 681 / 187	618 / 507 / 177	747 / 628 / 145	720 / 351 / 122	783 / 478 / 109	725 / 474 / 165	798 / 640 / 146	756 / 590 / 213	799 / 719 / 172	657 / 544 / 165	807 / 683 / 137	731 / 384 / 117	799 / 519 / 103	738 / 518 / 158	797 / 674 / 135	781 / 640 / 203	839 / 770 / 161	708 / 591 / 157	862 / 733 / 129	764 / 434 / 114	845 / 583 / 101	776 / 594 / 154	797 / 725 / 124	792 / 691 / 187	898 / 841 / 151	747 / 638 / 145	925 / 803 / 121	783 / 478 / 109	872 / 636 / 95	778 / 635 / 143	821 / 784 / 116	799 / 729 / 172	957 / 900 / 141	807 / 693 / 137	988 / 861 / 113	799 / 519 / 103	895 / 684 / 90	797 / 686 / 135	840 / 837 / 109	839 / 781 / 161	1005 / 950 / 130	862 / 744 / 129	1042 / 911 / 105
60	1	752 / 303 / 142	792 / 414 / 126	746 / 410 / 192	798 / 555 / 170	764 / 524 / 256	836 / 681 / 220	618 / 507 / 207	747 / 628 / 170	758 / 335 / 136	826 / 466 / 123	774 / 463 / 188	836 / 623 / 166	787 / 575 / 244	840 / 719 / 202	657 / 544 / 193	807 / 683 / 160	781 / 375 / 132	838 / 505 / 117	783 / 505 / 179	851 / 674 / 157	808 / 624 / 232	863 / 770 / 189	708 / 591 / 184	862 / 733 / 151	792 / 414 / 126	880 / 567 / 114	798 / 565 / 170	847 / 725 / 144	836 / 691 / 220	898 / 841 / 177	747 / 638 / 170	925 / 803 / 141	826 / 466 / 123	901 / 618 / 107	836 / 635 / 166	868 / 784 / 202	840 / 729 / 165	957 / 900 / 160	807 / 693 / 132	988 / 861 / 103	838 / 505 / 117	948 / 684 / 104	851 / 686 / 157	884 / 837 / 127	863 / 781 / 189	1005 / 950 / 153	862 / 744 / 151	1042 / 911 / 123
170	1	741 / 437 / 108	807 / 573 / 93	755 / 587 / 145	786 / 721 / 117	760 / 669 / 172	883 / 815 / 138	755 / 635 / 136	909 / 777 / 111	752 / 469 / 103	845 / 627 / 90	750 / 613 / 134	800 / 763 / 110	780 / 711 / 162	953 / 884 / 134	798 / 675 / 129	950 / 815 / 103	741 / 437 / 108	807 / 573 / 93	755 / 587 / 145	786 / 721 / 117	760 / 669 / 172	883 / 815 / 138	755 / 635 / 136	909 / 777 / 111	752 / 469 / 103	845 / 627 / 90	750 / 613 / 134	800 / 763 / 110	780 / 711 / 162	953 / 884 / 134	798 / 675 / 129	950 / 815 / 103	741 / 437 / 108	807 / 573 / 93	755 / 587 / 145	786 / 721 / 117	760 / 669 / 172	883 / 815 / 138	755 / 635 / 136	909 / 777 / 111	752 / 469 / 103	845 / 627 / 90	750 / 613 / 134	800 / 763 / 110	780 / 711 / 162	953 / 884 / 134	798 / 675 / 129	950 / 815 / 103
180	1	757 / 426 / 114	836 / 573 / 101	769 / 573 / 154	812 / 721 / 128	782 / 669 / 187	883 / 815 / 151	755 / 635 / 149	909 / 777 / 121	785 / 469 / 112	849 / 610 / 95	780 / 613 / 146	824 / 763 / 120	800 / 711 / 177	953 / 884 / 146	798 / 675 / 141	950 / 815 / 113	757 / 426 / 114	836 / 573 / 101	769 / 573 / 154	812 / 721 / 128	782 / 669 / 187	883 / 815 / 151	755 / 635 / 149	909 / 777 / 121	785 / 469 / 112	849 / 610 / 95	780 / 613 / 146	824 / 763 / 120	800 / 711 / 177	953 / 884 / 146	798 / 675 / 141	950 / 815 / 113	757 / 426 / 114	836 / 573 / 101	769 / 573 / 154	812 / 721 / 128	782 / 669 / 187	883 / 815 / 151	755 / 635 / 149	909 / 777 / 121	785 / 469 / 112	849 / 610 / 95	780 / 613 / 146	824 / 763 / 120	800 / 711 / 177	953 / 884 / 146	798 / 675 / 141	950 / 815 / 113
190	1	780 / 512 / 100	857 / 662 / 85	760 / 650 / 127	809 / 798 / 103	816 / 747 / 153	984 / 916 / 124	836 / 710 / 122	1018 / 876 / 100	788 / 541 / 95	866 / 692 / 80	768 / 684 / 121	850 / 857 / 100	873 / 803 / 148	1046 / 977 / 119	869 / 740 / 114	1043 / 900 / 92	780 / 512 / 100	857 / 662 / 85	760 / 650 / 127	809 / 798 / 103	816 / 747 / 153	984 / 916 / 124	836 / 710 / 122	1018 / 876 / 100	788 / 541 / 95	866 / 692 / 80	768 / 684 / 121	850 / 857 / 100	873 / 803 / 148	1046 / 977 / 119	869 / 740 / 114	1043 / 900 / 92	780 / 512 / 100	857 / 662 / 85	760 / 650 / 127	809 / 798 / 103	816 / 747 / 153	984 / 916 / 124	836 / 710 / 122	1018 / 876 / 100	788 / 541 / 95	866 / 692 / 80	768 / 684 / 121	850 / 857 / 100	873 / 803 / 148	1046 / 977 / 119	869 / 740 / 114	1043 / 900 / 92
200	1	792 / 500 / 106	885 / 662 / 93	788 / 650 / 139	832 / 798 / 113	816 / 747 / 167	984 / 916 / 136	836 / 710 / 133	1018 / 876 / 109	819 / 541 / 103	892 / 692 / 87	794 / 684 / 131	864 / 857 / 109	873 / 803 / 161	1046 / 977 / 130	869 / 740 / 125	1043 / 900 / 101	792 / 500 / 106	885 / 662 / 93	788 / 650 / 139	832 / 798 / 113	816 / 747 / 167	984 / 916 / 136	836 / 710 / 133	1018 / 876 / 109	819 / 541 / 103	892 / 692 / 87	794 / 684 / 131	864 / 857 / 109	873 / 803 / 161	1046 / 977 / 130	869 / 740 / 125	1043 / 900 / 101	792 / 500 / 106	885 / 662 / 93	788 / 650 / 139	832 / 798 / 113	816 / 747 / 167	984 / 916 / 136	836 / 710 / 133	1018 / 876 / 109	819 / 541 / 103	892 / 692 / 87	794 / 684 / 131	864 / 857 / 109	873 / 803 / 161	1046 / 977 / 130	869 / 740 / 125	1043 / 900 / 101

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		70	1	749 / 186 / 168	785 / 272 / 158	744 / 262 / 234	773 / 370 / 214	715 / 346 / 324	765 / 472 / 289	562 / 377 / 291	622 / 489 / 248	749 / 201 / 165	790 / 293 / 154	746 / 282 / 229	780 / 396 / 209	726 / 372 / 317	781 / 505 / 282	582 / 406 / 286	633 / 513 / 237	766 / 221 / 165	795 / 313 / 151	749 / 302 / 224	787 / 423 / 204	736 / 398 / 310	797 / 538 / 275
70	1	767 / 237 / 161	800 / 334 / 147	768 / 330 / 224	814 / 461 / 204	747 / 424 / 303	812 / 570 / 268	599 / 446 / 264	684 / 568 / 221	768 / 252 / 158	825 / 363 / 147	771 / 351 / 219	821 / 488 / 199	757 / 449 / 296	827 / 601 / 261	618 / 474 / 259	701 / 585 / 210								
70	1	800 / 334 / 147	859 / 461 / 133	814 / 469 / 204	865 / 627 / 180	812 / 578 / 268	904 / 760 / 233	684 / 576 / 221	815 / 701 / 178	825 / 363 / 147	869 / 487 / 129	821 / 497 / 199	876 / 661 / 175	827 / 610 / 261	895 / 773 / 219	701 / 594 / 210	853 / 737 / 173								
70	1	836 / 638 / 136	835 / 788 / 111	860 / 576 / 189	930 / 758 / 165	889 / 705 / 198	936 / 852 / 198	771 / 650 / 189	949 / 813 / 156	843 / 673 / 133	844 / 826 / 108	871 / 608 / 184	916 / 771 / 155	881 / 720 / 233	958 / 890 / 190	808 / 684 / 183	990 / 850 / 151								
70	1	878 / 274 / 158	830 / 383 / 143	774 / 371 / 214	828 / 515 / 194	767 / 474 / 289	842 / 632 / 254	624 / 491 / 248	735 / 616 / 205	768 / 252 / 158	825 / 363 / 147	771 / 351 / 219	821 / 488 / 199	757 / 449 / 296	827 / 601 / 261	618 / 474 / 259	701 / 585 / 210								

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs		150								160										
Wind Speed [mph]			140				150				150				160				160								
Panal Angle			0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge			
		70	1	787 / 289 / 154	835 / 403 / 140	777 / 391 / 209	835 / 541 / 189	776 / 499 / 282	855 / 662 / 247	628 / 507 / 237	747 / 628 / 194	807 / 327 / 151	866 / 454 / 136	800 / 442 / 204	870 / 607 / 184	815 / 561 / 275	880 / 719 / 233	657 / 544 / 221	807 / 683 / 183	808 / 358 / 143	873 / 492 / 129	825 / 493 / 199	881 / 656 / 175	832 / 608 / 261	901 / 770 / 219	708 / 591 / 210	862 / 733 / 173
70	2	835 / 403 / 140	912 / 552 / 126	835 / 550 / 189	898 / 725 / 165	855 / 671 / 247	928 / 841 / 205	747 / 638 / 194	925 / 803 / 162	866 / 454 / 136	928 / 600 / 118	870 / 618 / 184	915 / 784 / 155	880 / 729 / 233	957 / 900 / 190	807 / 693 / 183	988 / 861 / 151	873 / 492 / 129	970 / 664 / 115	881 / 667 / 175	928 / 837 / 145	901 / 781 / 219	1005 / 950 / 176	862 / 744 / 173	1042 / 911 / 140		
70	3	833 / 720 / 122	860 / 897 / 101	891 / 670 / 175	941 / 839 / 145	914 / 787 / 219	1026 / 957 / 176	879 / 749 / 173	1063 / 917 / 140	843 / 781 / 115	870 / 958 / 93	908 / 727 / 165	959 / 899 / 135	941 / 847 / 205	1081 / 1012 / 162	912 / 780 / 156	1125 / 973 / 130	849 / 835 / 108	873 / 1008 / 86	922 / 779 / 155	971 / 949 / 125	967 / 899 / 190	1174 / 1103 / 155	999 / 859 / 151	1224 / 1062 / 124		
80	1	816 / 276 / 165	874 / 393 / 153	821 / 382 / 230	869 / 526 / 207	805 / 486 / 312	898 / 662 / 280	650 / 507 / 267	747 / 628 / 219	833 / 312 / 161	902 / 442 / 149	842 / 431 / 224	902 / 590 / 202	841 / 546 / 304	921 / 719 / 264	667 / 544 / 249	807 / 683 / 206	851 / 349 / 157	905 / 478 / 141	864 / 481 / 219	908 / 837 / 191	854 / 591 / 288	939 / 770 / 248	708 / 591 / 237	862 / 733 / 194		
80	2	874 / 393 / 153	940 / 536 / 137	869 / 536 / 207	948 / 725 / 185	898 / 671 / 280	963 / 841 / 232	747 / 638 / 219	925 / 803 / 182	902 / 442 / 149	981 / 600 / 133	902 / 601 / 202	963 / 784 / 174	921 / 729 / 264	987 / 900 / 216	807 / 693 / 206	988 / 861 / 170	905 / 478 / 141	990 / 643 / 125	908 / 648 / 191	972 / 837 / 163	939 / 781 / 248	1005 / 950 / 200	862 / 744 / 194	1042 / 911 / 158		
80	3	888 / 720 / 137	905 / 897 / 113	917 / 650 / 191	985 / 839 / 163	952 / 787 / 248	1026 / 957 / 200	879 / 749 / 194	1063 / 917 / 158	894 / 781 / 129	912 / 958 / 105	959 / 727 / 185	1000 / 899 / 151	977 / 847 / 232	1081 / 1012 / 184	912 / 780 / 176	1125 / 973 / 146	897 / 835 / 121	912 / 1008 / 97	969 / 779 / 174	1009 / 949 / 140	995 / 899 / 216	1174 / 1103 / 176	999 / 859 / 170	1224 / 1062 / 140		
90	1	861 / 269 / 178	911 / 383 / 165	862 / 373 / 249	901 / 512 / 224	831 / 474 / 340	914 / 643 / 304	673 / 507 / 297	747 / 628 / 243	875 / 304 / 173	936 / 430 / 160	880 / 420 / 243	930 / 574 / 218	864 / 532 / 331	961 / 719 / 295	688 / 544 / 277	807 / 683 / 230	890 / 340 / 169	934 / 464 / 151	876 / 456 / 230	960 / 637 / 212	898 / 591 / 322	977 / 770 / 277	716 / 591 / 263	862 / 733 / 216		
90	2	911 / 383 / 165	966 / 520 / 147	901 / 521 / 224	968 / 703 / 199	914 / 652 / 304	999 / 841 / 259	747 / 638 / 243	925 / 803 / 203	936 / 430 / 160	1003 / 581 / 142	930 / 584 / 218	1010 / 784 / 193	961 / 729 / 295	1021 / 900 / 241	807 / 693 / 230	988 / 861 / 189	934 / 464 / 151	1040 / 643 / 138	960 / 648 / 212	1017 / 837 / 181	977 / 781 / 277	1035 / 950 / 224	862 / 744 / 216	1042 / 911 / 176		
90	3	942 / 720 / 151	950 / 897 / 125	941 / 631 / 205	1029 / 839 / 181	990 / 787 / 277	1050 / 957 / 224	879 / 749 / 216	1063 / 917 / 176	946 / 781 / 142	953 / 958 / 116	978 / 705 / 199	1042 / 899 / 168	1012 / 847 / 259	1081 / 1012 / 206	912 / 780 / 196	1125 / 973 / 162	945 / 835 / 134	951 / 1008 / 107	1016 / 779 / 193	1047 / 949 / 156	1029 / 899 / 241	1174 / 1103 / 197	999 / 859 / 189	1224 / 1062 / 155		
70	1	829 / 396 / 140	904 / 542 / 126	828 / 531 / 189	916 / 721 / 170	871 / 669 / 254	917 / 815 / 205	755 / 635 / 199	909 / 777 / 162	849 / 435 / 136	934 / 592 / 122	853 / 582 / 184	922 / 763 / 160	883 / 711 / 240	961 / 884 / 198	798 / 675 / 189	950 / 815 / 151										
70	2	904 / 542 / 126	1013 / 728 / 111	916 / 734 / 170	935 / 881 / 135	917 / 826 / 205	1087 / 1031 / 169	909 / 789 / 162	1084 / 951 / 130	934 / 592 / 122	1020 / 765 / 104	922 / 776 / 160	974 / 953 / 130	961 / 896 / 198	1115 / 1061 / 155	950 / 827 / 151	1163 / 1023 / 124										
70	3	851 / 881 / 101	909 / 1092 / 83	930 / 825 / 145	1017 / 1030 / 120	1009 / 941 / 176	1263 / 1190 / 148	1046 / 901 / 140	1260 / 1096 / 113	848 / 919 / 93	900 / 1119 / 76	968 / 894 / 140	1033 / 1060 / 110	1083 / 1014 / 169	1279 / 1208 / 134	1125 / 973 / 135	1344 / 1171 / 108										
80	1	868 / 386 / 153	932 / 527 / 137	863 / 517 / 207	939 / 700 / 185	889 / 651 / 280	952 / 815 / 232	755 / 635 / 225	909 / 777 / 182	887 / 424 / 149	960 / 575 / 133	884 / 566 / 202	971 / 763 / 179	925 / 711 / 272	995 / 884 / 224	798 / 675 / 213	950 / 815 / 170										
80	2	932 / 527 / 137	1028 / 704 / 121	939 / 712 / 185	977 / 881 / 151	952 / 826 / 192	1087 / 1031 / 182	909 / 789 / 179	1084 / 951 / 146	960 / 575 / 133	1066 / 765 / 117	971 / 776 / 179	1013 / 953 / 146	995 / 896 / 224	1115 / 1061 / 176	950 / 827 / 170	1163 / 1023 / 140										
80	3	896 / 881 / 113	946 / 1092 / 93	974 / 825 / 163	1053 / 1030 / 135	1009 / 941 / 200	1263 / 1190 / 168	1046 / 901 / 158	1260 / 1096 / 128	889 / 919 / 105	933 / 1119 / 85	1011 / 894 / 157	1048 / 1060 / 123	1083 / 1014 / 192	1279 / 1208 / 152	1125 / 973 / 152	1344 / 1171 / 122										
90	1	905 / 376 / 165	958 / 511 / 147	894 / 503 / 224	990 / 700 / 205	906 / 632 / 304	988 / 815 / 259	755 / 635 / 250	909 / 777 / 203	920 / 412 / 160	982 / 558 / 142	913 / 550 / 218	987 / 739 / 193	938 / 690 / 295	1029 / 884 / 250	798 / 675 / 236	950 / 815 / 189										
90	2	958 / 511 / 147	1041 / 681 / 129	990 / 712 / 205	1018 / 881 / 168	988 / 826 / 259	1087 / 1031 / 215	909 / 789 / 203	1084 / 951 / 162	982 / 558 / 142	1074 / 739 / 125	987 / 752 / 193	1053 / 953 / 162	1029 / 896 / 250	1115 / 1061 / 197	950 / 827 / 189	1163 / 1023 / 155										
90	3	941 / 881 / 125	983 / 1092 / 102	1019 / 825 / 181	1090 / 1030 / 149	1037 / 941 / 224	1263 / 1190 / 188	1046 / 901 / 176	1260 / 1096 / 142	931 / 919 / 116	967 / 1119 / 94	1053 / 894 / 174	1081 / 1060 / 137	1083 / 1014 / 215	1279 / 1208 / 170	1125 / 973 / 169	1344 / 1171 / 135										
70	1	870 / 474 / 133	965 / 642 / 118	877 / 633 / 180	923 / 798 / 150	892 / 747 / 226	984 / 916 / 183	836 / 710 / 178	1018 / 876 / 146	891 / 513 / 129	964 / 670 / 111	901 / 684 / 175	953 / 857 / 145	927 / 803 / 219	1046 / 977 / 176	869 / 740 / 167	1043 / 900 / 135										
70	2	965 / 642 / 118	1058 / 825 / 101	923 / 813 / 150	970 / 981 / 120	984 / 928 / 183	1184 / 1129 / 148	1018 / 889 / 146	1238 / 1091 / 119	964 / 670 / 111	1055 / 850 / 93	920 / 842 / 140	1001 / 1043 / 115	1046 / 990 / 176	1248 / 1193 / 141	1043 / 913 / 135	1308 / 1154 / 113										
70	3	874 / 986 / 90	930 / 1188 / 72	967 / 927 / 130	1096 / 1128 / 105	1155 / 1084 / 162	1349 / 1276 / 127	1152 / 998 / 124	1421 / 1240 / 103	860 / 1006 / 83	978 / 1252 / 68	999 / 989 / 125	1155 / 1192 / 100	1167 / 1097 / 148	1410 / 1336 / 120	1219 / 1059 / 119	1491 / 1302 / 97										
80	1	905 / 461 / 145	987 / 623 / 129	906 / 615 / 196	969 / 798 / 168	932 / 747 / 256	998 / 916 / 208	836 / 710 / 200	1018 / 876 / 164	923 / 499 / 141	1013 / 670 / 125	927 / 664 / 191	997 / 857 / 163	965 / 803 / 248	1046 / 977 / 200	869 / 740 / 188	1043 / 900 / 152										
80	2	987 / 623 / 129	1103 / 825 / 113	969 / 813 / 168	1006 / 981 / 135	998 / 928 / 208	1184 / 1129 / 168	1018 / 889 / 164	1238 / 1091 / 134	1013 / 670 / 125	1096 / 850 / 105	963 / 842 / 157	1036 / 1043 / 129	1046 / 990 / 200	1248 / 1193 / 160	1043 / 913 / 152	1308 / 1154 / 128										
80	3	914 / 986 / 101	959 / 1188 / 81	1007 / 927 / 146	1096 / 1128 / 118	1155 / 1084 / 184	1349 / 1276 / 144	1152 / 998 / 140	1421 / 1240 / 116	897 / 1006 / 93	982 / 1252 / 77	1037 / 989 / 140	1155 / 1192 / 112	1167 / 1097 / 168	1410 / 1336 / 136	1219 / 1059 / 134	1491 / 1302 / 110										
90	1	936 / 448 / 156	1006 / 604 / 138	932 / 598 / 212	1015 / 798 / 187	971 / 747 / 286	1030 / 916 / 233	836 / 710 / 223	1018 / 876 / 182	951 / 485 / 151	1029 / 649 / 134	950 / 645 / 205	1041 / 857 / 181	1003 / 803 / 277	1065 / 977 / 224	869 / 740 / 209	1043 / 900 / 169										
90	2	1006 / 604 / 138	1107 / 795 / 120	1015 / 813 / 187	1043 / 981 / 149	1030 / 928 / 233	1184 / 1129 / 188	1018 / 889 / 182	1238 / 1091 / 149	1029 / 649 / 134	1138 / 850 / 116	1005 / 842 / 174	1071 / 1043 / 143	1065 / 990 / 224	1248 / 1193 / 179	1043 / 913 / 169	1308 / 1154 / 142										
90	3	954 / 986 / 111	991 / 1188 / 89	1046 / 927 / 162	1115 / 1128 / 131	1155 / 1084 / 206	1349 / 1276 / 161	1152 / 998 / 155	1421 / 1240 / 129	934 / 1006 / 102	1012 / 1252 / 85	1076 / 989 / 156	1155 / 1192 / 125	1167 / 1097 / 188	1410 / 1336 / 152	1219 / 1059 / 149	1491 / 1302 / 122										

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																											
Wind Speed [mph]		140								150								160															
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
100	1	902 / 262 / 190	944 / 372 / 176	899 / 363 / 267	929 / 498 / 239	877 / 474 / 375	928 / 625 / 326	695 / 507 / 327	750 / 628 / 268	914 / 296 / 185	966 / 418 / 171	916 / 409 / 260	955 / 558 / 233	885 / 518 / 356	971 / 697 / 316	709 / 544 / 305	807 / 683 / 253	926 / 331 / 181	988 / 464 / 166	907 / 444 / 246	982 / 618 / 226	916 / 575 / 346	1015 / 770 / 306	736 / 591 / 290	862 / 733 / 238								
	2	944 / 372 / 176	988 / 504 / 156	929 / 507 / 239	1017 / 703 / 219	928 / 633 / 326	1034 / 841 / 287	750 / 638 / 268	925 / 803 / 223	966 / 418 / 171	1021 / 563 / 151	955 / 568 / 233	1023 / 759 / 205	971 / 707 / 316	1054 / 900 / 267	807 / 693 / 253	988 / 861 / 208	988 / 464 / 166	1054 / 622 / 146	982 / 629 / 226	1061 / 837 / 198	1015 / 781 / 306	1065 / 950 / 247	862 / 744 / 238	1042 / 911 / 193								
	3	968 / 699 / 161	995 / 897 / 137	991 / 631 / 226	1073 / 839 / 198	995 / 761 / 296	1081 / 957 / 247	879 / 749 / 238	1063 / 917 / 193	997 / 781 / 156	995 / 958 / 127	1027 / 705 / 219	1083 / 899 / 185	1048 / 847 / 287	1097 / 1012 / 227	912 / 780 / 216	1125 / 973 / 179	994 / 835 / 146	989 / 1008 / 117	1029 / 754 / 205	1085 / 949 / 171	1062 / 899 / 267	1174 / 1103 / 218	999 / 859 / 208	1224 / 1062 / 171								
Wind Speed [mph]		170								180																							
100	1	938 / 366 / 176	1011 / 511 / 161	923 / 489 / 239	1008 / 679 / 219	947 / 632 / 336	1023 / 815 / 287	761 / 635 / 275	909 / 777 / 223	951 / 401 / 171	1033 / 558 / 156	939 / 535 / 233	1035 / 739 / 212	949 / 669 / 316	1064 / 884 / 277	798 / 675 / 260	950 / 815 / 208	938 / 366 / 176	1011 / 511 / 161	923 / 489 / 239	1008 / 679 / 219	947 / 632 / 336	1023 / 815 / 287	761 / 635 / 275	909 / 777 / 223	951 / 401 / 171	1033 / 558 / 156	939 / 535 / 233	1035 / 739 / 212	949 / 669 / 316	1064 / 884 / 277	798 / 675 / 260	950 / 815 / 208
	2	1011 / 511 / 161	1087 / 681 / 142	1008 / 691 / 219	1059 / 881 / 185	1023 / 826 / 287	1114 / 1031 / 237	909 / 789 / 223	1084 / 951 / 179	1033 / 558 / 156	1119 / 739 / 137	1035 / 752 / 212	1093 / 953 / 178	1064 / 896 / 277	1115 / 1061 / 218	950 / 827 / 208	1163 / 1023 / 171	1011 / 511 / 161	1087 / 681 / 142	1008 / 691 / 219	1059 / 881 / 185	1023 / 826 / 287	1114 / 1031 / 237	909 / 789 / 223	1084 / 951 / 179	1033 / 558 / 156	1119 / 739 / 137	1035 / 752 / 212	1093 / 953 / 178	1064 / 896 / 277	1115 / 1061 / 218	950 / 827 / 208	1163 / 1023 / 171
	3	986 / 881 / 137	1020 / 1092 / 112	1063 / 825 / 198	1126 / 1030 / 164	1068 / 941 / 247	1263 / 1190 / 208	1046 / 901 / 193	1260 / 1096 / 156	973 / 919 / 127	1001 / 1119 / 103	1096 / 894 / 192	1115 / 1060 / 151	1111 / 1014 / 237	1279 / 1208 / 188	1125 / 973 / 186	1344 / 1171 / 149	986 / 881 / 137	1020 / 1092 / 112	1063 / 825 / 198	1126 / 1030 / 164	1068 / 941 / 247	1263 / 1190 / 208	1046 / 901 / 193	1260 / 1096 / 156	973 / 919 / 127	1001 / 1119 / 103	1096 / 894 / 192	1115 / 1060 / 151	1111 / 1014 / 237	1279 / 1208 / 188	1125 / 973 / 186	1344 / 1171 / 149
Wind Speed [mph]		190								200																							
100	1	964 / 436 / 166	1056 / 604 / 151	984 / 598 / 233	1061 / 798 / 205	978 / 723 / 306	1062 / 916 / 257	836 / 710 / 245	1018 / 876 / 201	976 / 470 / 161	1077 / 649 / 146	1001 / 645 / 226	1086 / 857 / 198	1007 / 777 / 296	1096 / 977 / 247	869 / 740 / 231	1043 / 900 / 186	964 / 436 / 166	1056 / 604 / 151	984 / 598 / 233	1061 / 798 / 205	978 / 723 / 306	1062 / 916 / 257	836 / 710 / 245	1018 / 876 / 201	976 / 470 / 161	1077 / 649 / 146	1001 / 645 / 226	1086 / 857 / 198	1007 / 777 / 296	1096 / 977 / 247	869 / 740 / 231	1043 / 900 / 186
	2	1056 / 604 / 151	1150 / 795 / 132	1061 / 813 / 205	1080 / 981 / 164	1062 / 928 / 257	1184 / 1129 / 208	1018 / 889 / 201	1238 / 1091 / 164	1077 / 649 / 146	1180 / 850 / 127	1048 / 842 / 192	1106 / 1043 / 157	1096 / 990 / 247	1248 / 1193 / 198	1043 / 913 / 186	1308 / 1154 / 156	1056 / 604 / 151	1150 / 795 / 132	1061 / 813 / 205	1080 / 981 / 164	1062 / 928 / 257	1184 / 1129 / 208	1018 / 889 / 201	1238 / 1091 / 164	1077 / 649 / 146	1180 / 850 / 127	1048 / 842 / 192	1106 / 1043 / 157	1096 / 990 / 247	1248 / 1193 / 198	1043 / 913 / 186	1308 / 1154 / 156
	3	994 / 986 / 122	1023 / 1188 / 98	1086 / 927 / 178	1147 / 1128 / 144	1155 / 1084 / 227	1349 / 1276 / 178	1152 / 998 / 171	1421 / 1240 / 141	971 / 1006 / 112	1043 / 1252 / 93	1114 / 989 / 171	1175 / 1192 / 137	1167 / 1097 / 208	1410 / 1336 / 168	1219 / 1059 / 164	1491 / 1302 / 134	994 / 986 / 122	1023 / 1188 / 98	1086 / 927 / 178	1147 / 1128 / 144	1155 / 1084 / 227	1349 / 1276 / 178	1152 / 998 / 171	1421 / 1240 / 141	971 / 1006 / 112	1043 / 1252 / 93	1114 / 989 / 171	1175 / 1192 / 137	1167 / 1097 / 208	1410 / 1336 / 168	1219 / 1059 / 164	1491 / 1302 / 134

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	472 / 339 / 42	567 / 434 / 35	497 / 447 / 45	580 / 550 / 36	581 / 504 / 45	708 / 636 / 37	587 / 475 / 50	703 / 587 / 41	494 / 360 / 40	591 / 458 / 33	510 / 465 / 43	603 / 577 / 35	605 / 529 / 43	732 / 661 / 35	612 / 500 / 48	727 / 609 / 39	506 / 374 / 38	613 / 479 / 32	531 / 489 / 41	623 / 600 / 33	641 / 565 / 42	752 / 682 / 34
0	2	567 / 434 / 35	677 / 542 / 28	567 / 548 / 35	681 / 681 / 29	708 / 644 / 37	833 / 775 / 30	703 / 595 / 41	855 / 738 / 33	591 / 458 / 33	719 / 580 / 28	589 / 573 / 34	700 / 705 / 28	732 / 670 / 35	879 / 821 / 29	727 / 618 / 39	904 / 783 / 32	613 / 479 / 32	739 / 600 / 26	623 / 611 / 33	738 / 746 / 27	752 / 691 / 34	923 / 865 / 28	768 / 656 / 38	919 / 798 / 30
0	3	560 / 675 / 26	669 / 828 / 21	660 / 642 / 32	773 / 773 / 25	791 / 722 / 32	960 / 892 / 26	810 / 686 / 36	992 / 852 / 29	577 / 699 / 25	680 / 846 / 20	681 / 668 / 30	816 / 819 / 24	836 / 766 / 31	1009 / 940 / 25	832 / 707 / 33	1044 / 899 / 28	590 / 719 / 24	712 / 890 / 19	699 / 689 / 28	856 / 864 / 24	880 / 810 / 30	1055 / 985 / 24	875 / 746 / 32	1051 / 907 / 26
5	1	472 / 339 / 42	567 / 434 / 35	497 / 447 / 52	580 / 550 / 42	581 / 504 / 56	708 / 636 / 46	587 / 475 / 57	703 / 587 / 47	494 / 360 / 40	591 / 458 / 33	510 / 465 / 49	603 / 577 / 40	605 / 529 / 53	732 / 661 / 44	612 / 500 / 55	727 / 609 / 44	506 / 374 / 38	613 / 479 / 32	531 / 489 / 48	623 / 600 / 38	641 / 565 / 52	752 / 682 / 41	635 / 522 / 52	768 / 647 / 43
5	2	567 / 434 / 35	677 / 542 / 28	567 / 548 / 41	681 / 681 / 34	708 / 644 / 46	833 / 775 / 37	703 / 595 / 47	855 / 738 / 38	591 / 458 / 33	719 / 580 / 28	589 / 573 / 39	700 / 705 / 32	732 / 670 / 44	879 / 821 / 36	727 / 618 / 44	904 / 783 / 37	613 / 479 / 32	739 / 600 / 26	623 / 611 / 38	738 / 746 / 31	752 / 691 / 41	923 / 865 / 34	768 / 656 / 43	919 / 798 / 35
5	3	560 / 675 / 26	669 / 828 / 21	660 / 642 / 36	773 / 773 / 29	791 / 722 / 39	960 / 892 / 32	810 / 686 / 41	992 / 852 / 34	577 / 699 / 25	680 / 846 / 20	681 / 668 / 35	816 / 819 / 28	836 / 766 / 38	1009 / 940 / 31	832 / 707 / 38	1044 / 899 / 32	590 / 719 / 24	712 / 890 / 19	699 / 689 / 33	856 / 864 / 27	880 / 810 / 37	1055 / 985 / 30	875 / 746 / 37	1051 / 907 / 30
10	1	492 / 339 / 50	567 / 434 / 41	498 / 447 / 67	580 / 550 / 54	581 / 504 / 72	708 / 636 / 60	587 / 475 / 69	703 / 587 / 56	504 / 360 / 48	591 / 458 / 40	510 / 465 / 64	603 / 577 / 52	605 / 529 / 69	732 / 661 / 57	612 / 500 / 67	727 / 609 / 54	506 / 374 / 45	613 / 479 / 38	531 / 489 / 61	623 / 600 / 49	641 / 565 / 68	752 / 682 / 54	635 / 522 / 64	768 / 647 / 52
10	2	567 / 434 / 41	677 / 542 / 34	567 / 548 / 53	681 / 681 / 43	708 / 644 / 60	833 / 775 / 48	703 / 595 / 56	855 / 738 / 46	591 / 458 / 40	719 / 580 / 33	589 / 573 / 51	700 / 705 / 41	732 / 670 / 57	879 / 821 / 46	727 / 618 / 54	904 / 783 / 45	613 / 479 / 38	739 / 600 / 31	623 / 611 / 49	738 / 746 / 40	752 / 691 / 54	923 / 865 / 45	768 / 656 / 52	919 / 798 / 42
10	3	560 / 675 / 31	669 / 828 / 25	660 / 642 / 47	773 / 773 / 37	791 / 722 / 51	960 / 892 / 42	810 / 686 / 49	992 / 852 / 41	577 / 699 / 30	680 / 846 / 24	681 / 668 / 45	816 / 819 / 36	836 / 766 / 49	1009 / 940 / 40	832 / 707 / 46	1044 / 899 / 39	590 / 719 / 28	712 / 890 / 23	699 / 689 / 42	856 / 864 / 35	880 / 810 / 48	1055 / 985 / 39	875 / 746 / 45	1051 / 907 / 36
Wind Speed [mph]		110								115															
0	1	524 / 393 / 37	632 / 499 / 31	550 / 512 / 39	640 / 621 / 32	661 / 587 / 40	790 / 720 / 33	655 / 542 / 44	785 / 664 / 36	553 / 419 / 36	665 / 529 / 30	567 / 533 / 38	672 / 656 / 31	679 / 606 / 38	827 / 757 / 32	673 / 559 / 42	823 / 698 / 34								
0	2	632 / 499 / 31	778 / 635 / 26	640 / 633 / 32	750 / 762 / 25	790 / 730 / 33	931 / 875 / 26	785 / 674 / 36	961 / 837 / 29	665 / 529 / 30	792 / 650 / 24	654 / 651 / 30	783 / 799 / 24	802 / 744 / 31	968 / 912 / 25	823 / 708 / 34	1001 / 874 / 28								
0	3	618 / 758 / 23	742 / 931 / 19	734 / 728 / 28	863 / 874 / 22	891 / 823 / 28	1097 / 1027 / 23	918 / 785 / 31	1094 / 946 / 25	645 / 796 / 22	770 / 969 / 18	745 / 742 / 26	897 / 911 / 21	929 / 860 / 27	1136 / 1065 / 22	958 / 821 / 30	1133 / 981 / 24								
5	1	524 / 393 / 37	632 / 499 / 31	550 / 512 / 46	640 / 621 / 36	661 / 587 / 50	790 / 720 / 40	655 / 542 / 50	785 / 664 / 41	553 / 419 / 36	665 / 529 / 30	567 / 533 / 44	672 / 656 / 36	679 / 606 / 47	827 / 757 / 39	673 / 559 / 48	823 / 698 / 39								
5	2	632 / 499 / 31	778 / 635 / 26	640 / 633 / 36	750 / 762 / 29	790 / 730 / 40	931 / 875 / 32	785 / 674 / 41	961 / 837 / 34	665 / 529 / 30	792 / 650 / 24	654 / 651 / 35	783 / 799 / 28	802 / 744 / 38	968 / 912 / 31	823 / 708 / 39	1001 / 874 / 32								
5	3	618 / 758 / 23	742 / 931 / 19	734 / 728 / 32	863 / 874 / 25	891 / 823 / 34	1097 / 1027 / 29	918 / 785 / 36	1094 / 946 / 29	645 / 796 / 22	770 / 969 / 18	745 / 742 / 30	897 / 911 / 24	929 / 860 / 33	1136 / 1065 / 27	958 / 821 / 35	1133 / 981 / 28								
10	1	524 / 393 / 44	632 / 499 / 36	550 / 512 / 59	640 / 621 / 47	661 / 587 / 65	790 / 720 / 52	655 / 542 / 61	785 / 664 / 49	553 / 419 / 43	665 / 529 / 35	567 / 533 / 57	672 / 656 / 46	679 / 606 / 61	827 / 757 / 51	673 / 559 / 58	823 / 698 / 48								
10	2	632 / 499 / 36	778 / 635 / 30	640 / 633 / 47	750 / 762 / 37	790 / 730 / 52	931 / 875 / 42	785 / 674 / 49	961 / 837 / 41	665 / 529 / 35	792 / 650 / 29	654 / 651 / 45	783 / 799 / 36	802 / 744 / 49	968 / 912 / 40	823 / 708 / 48	1001 / 874 / 39								
10	3	618 / 758 / 27	742 / 931 / 22	734 / 728 / 41	863 / 874 / 33	891 / 823 / 45	1097 / 1027 / 37	918 / 785 / 44	1094 / 946 / 35	645 / 796 / 26	770 / 969 / 21	745 / 742 / 39	897 / 911 / 32	929 / 860 / 43	1136 / 1065 / 36	958 / 821 / 42	1133 / 981 / 34								
Wind Speed [mph]		120								130															
0	1	569 / 436 / 35	680 / 544 / 28	582 / 553 / 36	684 / 672 / 29	711 / 638 / 37	836 / 768 / 30	706 / 589 / 41	859 / 731 / 33	553 / 419 / 36	665 / 529 / 30	567 / 533 / 38	672 / 656 / 31	679 / 606 / 38	827 / 757 / 32	673 / 559 / 42	823 / 698 / 34								
0	2	680 / 544 / 28	827 / 682 / 24	684 / 684 / 29	814 / 834 / 24	836 / 778 / 30	1002 / 947 / 24	859 / 741 / 33	1039 / 908 / 27	665 / 529 / 30	792 / 650 / 24	654 / 651 / 30	783 / 799 / 24	802 / 744 / 31	968 / 912 / 25	823 / 708 / 34	1001 / 874 / 28								
0	3	671 / 832 / 21	795 / 1004 / 17	776 / 777 / 25	929 / 946 / 20	964 / 896 / 26	1170 / 1099 / 21	996 / 856 / 29	1220 / 1059 / 24	645 / 796 / 22	770 / 969 / 18	745 / 742 / 26	897 / 911 / 21	929 / 860 / 27	1136 / 1065 / 22	958 / 821 / 30	1133 / 981 / 24								
5	1	569 / 436 / 35	680 / 544 / 28	582 / 553 / 42	684 / 672 / 34	711 / 638 / 46	836 / 768 / 37	706 / 589 / 47	859 / 731 / 38	553 / 419 / 36	665 / 529 / 30	567 / 533 / 44	672 / 656 / 36	679 / 606 / 47	827 / 757 / 39	673 / 559 / 48	823 / 698 / 39								
5	2	680 / 544 / 28	827 / 682 / 24	684 / 684 / 34	814 / 834 / 27	836 / 778 / 37	1002 / 947 / 30	859 / 741 / 38	1039 / 908 / 31	665 / 529 / 30	792 / 650 / 24	654 / 651 / 35	783 / 799 / 28	802 / 744 / 38	968 / 912 / 31	823 / 708 / 39	1001 / 874 / 32								
5	3	671 / 832 / 21	795 / 1004 / 17	776 / 777 / 29	929 / 946 / 24	964 / 896 / 32	1170 / 1099 / 26	996 / 856 / 34	1220 / 1059 / 28	645 / 796 / 22	770 / 969 / 18	745 / 742 / 30	897 / 911 / 24	929 / 860 / 33	1136 / 1065 / 27	958 / 821 / 35	1133 / 981 / 28								
10	1	569 / 436 / 41	680 / 544 / 34	582 / 553 / 54	684 / 672 / 43	711 / 638 / 60	836 / 768 / 48	706 / 589 / 56	859 / 731 / 46	553 / 419 / 43	665 / 529 / 35	567 / 533 / 57	672 / 656 / 46	679 / 606 / 61	827 / 757 / 51	673 / 559 / 58	823 / 698 / 48								
10	2	680 / 544 / 34	827 / 682 / 28	684 / 684 / 43	814 / 834 / 35	836 / 778 / 48	1002 / 947 / 39	859 / 741 / 46	1039 / 908 / 38	665 / 529 / 35	792 / 650 / 29	654 / 651 / 45	783 / 799 / 36	802 / 744 / 49	968 / 912 / 40	823 / 708 / 48	1001 / 874 / 39								
10	3	671 / 832 / 25	795 / 1004 / 20	776 / 777 / 37	929 / 946 / 30	964 / 896 / 42	1170 / 1099 / 34	996 / 856 / 41	1220 / 1059 / 34	645 / 796 / 26	770 / 969 / 21	745 / 742 / 39	897 / 911 / 32	929 / 860 / 43	1136 / 1065 / 36	958 / 821 / 42	1133 / 981 / 34								

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	3 = 3
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	2 = 2
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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																																																																																																																																																																																																																																													
Wind Speed [mph]		140										150										160																																																																																																																																																																																																																													
Panal Angle		0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45																																																																																																																																																																																																																
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																																																																																																																																																																																															
		0	1	584 / 452 / 33	710 / 572 / 28	596 / 569 / 35	713 / 704 / 28	723 / 652 / 35	869 / 800 / 29	738 / 618 / 40	893 / 762 / 32	622 / 489 / 31	748 / 609 / 26	631 / 611 / 32	744 / 741 / 26	782 / 711 / 34	927 / 859 / 27	777 / 656 / 37	957 / 820 / 30	671 / 534 / 30	800 / 657 / 24	660 / 646 / 30	790 / 793 / 24	810 / 741 / 31	977 / 909 / 25	831 / 705 / 34	1011 / 870 / 28	0	2	710 / 572 / 28	861 / 713 / 23	713 / 717 / 28	843 / 867 / 23	869 / 811 / 29	1033 / 978 / 23	893 / 773 / 32	1073 / 940 / 26	748 / 609 / 26	922 / 769 / 21	744 / 754 / 26	896 / 926 / 21	927 / 871 / 27	1134 / 1078 / 22	957 / 832 / 30	1131 / 994 / 24	800 / 657 / 24	976 / 819 / 20	790 / 807 / 24	938 / 974 / 20	977 / 921 / 25	1176 / 1121 / 20	1011 / 883 / 28	1229 / 1083 / 23	0	3	696 / 866 / 21	818 / 1036 / 17	806 / 809 / 24	957 / 977 / 20	997 / 928 / 25	1200 / 1129 / 20	1032 / 888 / 28	1254 / 1090 / 23	740 / 927 / 19	895 / 1139 / 16	860 / 869 / 23	1050 / 1077 / 19	1054 / 985 / 23	1310 / 1236 / 19	1094 / 945 / 26	1307 / 1138 / 21	777 / 979 / 18	924 / 1180 / 14	906 / 920 / 21	1089 / 1120 / 17	1147 / 1076 / 22	1339 / 1267 / 18	1144 / 991 / 24	1411 / 1231 / 20	5	1	584 / 452 / 33	710 / 572 / 28	596 / 569 / 40	713 / 704 / 33	723 / 652 / 44	869 / 800 / 36	738 / 618 / 45	893 / 762 / 37	622 / 489 / 31	748 / 609 / 26	631 / 611 / 37	744 / 741 / 30	782 / 711 / 41	927 / 859 / 33	777 / 656 / 42	957 / 820 / 35	671 / 534 / 30	800 / 657 / 24	660 / 646 / 35	790 / 793 / 28	810 / 741 / 38	977 / 909 / 31	831 / 705 / 39	1011 / 870 / 32	5	2	710 / 572 / 28	861 / 713 / 23	713 / 717 / 33	843 / 867 / 26	869 / 811 / 36	1033 / 978 / 29	893 / 773 / 37	1073 / 940 / 30	748 / 609 / 26	922 / 769 / 21	744 / 754 / 30	896 / 926 / 24	927 / 871 / 33	1134 / 1078 / 27	957 / 832 / 35	1131 / 994 / 28	800 / 657 / 24	976 / 819 / 20	790 / 807 / 28	938 / 974 / 23	977 / 921 / 31	1176 / 1121 / 25	1011 / 883 / 32	1229 / 1083 / 26	5	3	696 / 866 / 21	818 / 1036 / 17	806 / 809 / 28	957 / 977 / 23	997 / 928 / 31	1200 / 1129 / 25	1032 / 888 / 32	1254 / 1090 / 26	740 / 927 / 19	895 / 1139 / 16	860 / 869 / 26	1050 / 1077 / 22	1054 / 985 / 29	1310 / 1236 / 24	1094 / 945 / 30	1307 / 1138 / 24	777 / 979 / 18	924 / 1180 / 14	906 / 920 / 24	1089 / 1120 / 20	1147 / 1076 / 27	1339 / 1267 / 22	1144 / 991 / 28	1411 / 1231 / 23	10	1	584 / 452 / 40	710 / 572 / 33	596 / 569 / 52	713 / 704 / 42	723 / 652 / 57	869 / 800 / 46	738 / 618 / 55	893 / 762 / 45	622 / 489 / 37	748 / 609 / 30	631 / 611 / 48	744 / 741 / 39	782 / 711 / 54	927 / 859 / 43	777 / 656 / 51	957 / 820 / 42	671 / 534 / 35	800 / 657 / 29	660 / 646 / 45	790 / 793 / 36	810 / 741 / 49	977 / 909 / 40	831 / 705 / 48	1011 / 870 / 39	10	2	710 / 572 / 33	861 / 713 / 27	713 / 717 / 42	843 / 867 / 34	869 / 811 / 46	1033 / 978 / 37	893 / 773 / 45	1073 / 940 / 36	748 / 609 / 30	922 / 769 / 25	744 / 754 / 39	896 / 926 / 32	927 / 871 / 43	1134 / 1078 / 36	957 / 832 / 42	1131 / 994 / 34	800 / 657 / 29	976 / 819 / 24	790 / 807 / 36	938 / 974 / 29	977 / 921 / 40	1176 / 1121 / 33	1011 / 883 / 39	1229 / 1083 / 32	10	3	696 / 866 / 25	818 / 1036 / 20	806 / 809 / 36	957 / 977 / 29	997 / 928 / 40	1200 / 1129 / 33	1032 / 888 / 39	1254 / 1090 / 32	740 / 927 / 23	895 / 1139 / 19	860 / 869 / 34	1050 / 1077 / 28	1054 / 985 / 31	1310 / 1236 / 36	1094 / 945 / 29	1307 / 1138 / 29	777 / 979 / 21	924 / 1180 / 17	906 / 920 / 32	1089 / 1120 / 26	1147 / 1076 / 36	1339 / 1267 / 28	1144 / 991 / 34	1411 / 1231 / 28								
Wind Speed [mph]		170										180										190										200																																																																																																																																																																																																																			
0	1	699 / 562 / 28	846 / 700 / 23	701 / 692 / 28	859 / 867 / 24	854 / 786 / 29	1058 / 988 / 24	878 / 749 / 32	1055 / 910 / 26	739 / 600 / 26	886 / 738 / 21	738 / 733 / 27	894 / 906 / 22	923 / 854 / 28	1089 / 1021 / 22	919 / 787 / 30	1133 / 981 / 25	886 / 738 / 21	1097 / 928 / 18	894 / 922 / 22	1083 / 1133 / 18	1089 / 1034 / 22	1343 / 1286 / 18	1133 / 995 / 25	1340 / 1185 / 20	860 / 1093 / 16	1048 / 1346 / 13	1009 / 1033 / 19	1242 / 1285 / 16	1258 / 1186 / 19	1503 / 1427 / 16	1318 / 1147 / 22	1595 / 1396 / 18	886 / 738 / 21	1097 / 928 / 18	894 / 922 / 25	1083 / 1133 / 21	1089 / 1034 / 27	1343 / 1286 / 23	1133 / 995 / 29	1340 / 1185 / 23	860 / 1093 / 16	1048 / 1346 / 13	1009 / 1033 / 22	1242 / 1285 / 18	1258 / 1186 / 24	1503 / 1427 / 19	1318 / 1147 / 25	1595 / 1396 / 21	5	1	699 / 562 / 28	846 / 700 / 23	701 / 692 / 33	859 / 867 / 27	854 / 786 / 36	1058 / 988 / 30	878 / 749 / 37	1055 / 910 / 30	739 / 600 / 26	886 / 738 / 21	738 / 733 / 31	894 / 906 / 25	923 / 854 / 34	1089 / 1021 / 27	919 / 787 / 35	1133 / 981 / 29	886 / 738 / 21	1097 / 928 / 18	894 / 922 / 25	1083 / 1133 / 21	1089 / 1034 / 27	1343 / 1286 / 23	1133 / 995 / 29	1340 / 1185 / 23	860 / 1093 / 16	1048 / 1346 / 13	1009 / 1033 / 22	1242 / 1285 / 18	1258 / 1186 / 24	1503 / 1427 / 19	1318 / 1147 / 25	1595 / 1396 / 21	5	2	846 / 700 / 23	1020 / 860 / 19	830 / 852 / 26	1012 / 1055 / 22	1058 / 1002 / 30	1262 / 1206 / 24	1055 / 924 / 30	1323 / 1168 / 25	886 / 738 / 21	1097 / 928 / 18	894 / 922 / 25	1083 / 1133 / 21	1089 / 1034 / 27	1343 / 1286 / 23	1133 / 995 / 29	1340 / 1185 / 23	860 / 1093 / 16	1048 / 1346 / 13	1009 / 1033 / 22	1242 / 1285 / 18	1258 / 1186 / 24	1503 / 1427 / 19	1318 / 1147 / 25	1595 / 1396 / 21	886 / 738 / 21	1097 / 928 / 18	894 / 922 / 25	1083 / 1133 / 21	1089 / 1034 / 27	1343 / 1286 / 23	1133 / 995 / 29	1340 / 1185 / 23	860 / 1093 / 16	1048 / 1346 / 13	1009 / 1033 / 22	1242 / 1285 / 18	1258 / 1186 / 24	1503 / 1427 / 19	1318 / 1147 / 25	1595 / 1396 / 21	10	1	699 / 562 / 33	846 / 700 / 27	701 / 692 / 42	859 / 867 / 35	854 / 786 / 46	1058 / 988 / 39	878 / 749 / 45	1055 / 910 / 36	739 / 600 / 31	886 / 738 / 25	738 / 733 / 40	894 / 906 / 33	923 / 854 / 45	1089 / 1021 / 36	919 / 787 / 42	1133 / 981 / 35	886 / 738 / 25	1097 / 928 / 31	894 / 922 / 36	1083 / 1133 / 33	1089 / 1034 / 36	1343 / 1286 / 29	1133 / 995 / 35	1340 / 1185 / 28	860 / 1093 / 19	1048 / 1346 / 15	1009 / 1033 / 28	1242 / 1285 / 23	1258 / 1186 / 31	1503 / 1427 / 25	1318 / 1147 / 31	1595 / 1396 / 25	886 / 738 / 25	1097 / 928 / 31	894 / 922 / 36	1083 / 1133 / 33	1089 / 1034 / 36	1343 / 1286 / 29	1133 / 995 / 35	1340 / 1185 / 28	860 / 1093 / 19	1048 / 1346 / 15	1009 / 1033 / 28	1242 / 1285 / 23	1258 / 1186 / 31	1503 / 1427 / 25	1318 / 1147 / 31	1595 / 1396 / 25	10	2	846 / 700 / 27	1020 / 860 / 22	830 / 852 / 34	1012 / 1055 / 28	1058 / 1002 / 39	1262 / 1206 / 31	1055 / 924 / 36	1323 / 1168 / 31	886 / 738 / 25	1097 / 928 / 31	894 / 922 / 36	1083 / 1133 / 33	1089 / 1034 / 36	1343 / 1286 / 29	1133 / 995 / 35	1340 / 1185 / 28	860 / 1093 / 19	1048 / 1346 / 15	1009 / 1033 / 28	1242 / 1285 / 23	1258 / 1186 / 31	1503 / 1427 / 25	1318 / 1147 / 31	1595 / 1396 / 25	886 / 738 / 25	1097 / 928 / 31	894 / 922 / 36	1083 / 1133 / 33	1089 / 1034 / 36	1343 / 1286 / 29	1133 / 995 / 35	1340 / 1185 / 28	860 / 1093 / 19	1048 / 1346 / 15	1009 / 1033 / 28	1242 / 1285 / 23	1258 / 1186 / 31	1503 / 1427 / 25	1318 / 1147 / 31	1595 / 1396 / 25	10	3	805 / 1018 / 17	989 / 1266 / 14	980 / 1000 / 24	1168 / 1205 / 19	1180 / 1110 / 25	1426 / 1352 / 20	1233 / 1071 / 26	1508 / 1317 / 22	860 / 1093 / 16	1048 / 1346 / 13	1009 / 1033 / 22	1242 / 1285 / 18	1258 / 1186 / 24	1503 / 1427 / 19	1318 / 1147 / 25	1595 / 1396 / 21	860 / 1093 / 16	1048 / 1346 / 13	1009 / 1033 / 22	1242 / 1285 / 18	1258 / 1186 / 24	1503 / 1427 / 19	1318 / 1147 / 25	1595 / 1396 / 21
Wind Speed [mph]		190										200																																																																																																																																																																																																																																							
0	1	776 / 635 / 25	952 / 796 / 21	769 / 769 / 25	920 / 936 / 20	955 / 887 / 26	1159 / 1089 / 21	987 / 847 / 29	1209 / 1048 / 24	808 / 665 / 24	979 / 823 / 19	822 / 826 / 24	976 / 997 / 20	1017 / 948 / 25	1224 / 1153 / 20	1013 / 873 / 27	1279 / 1112 / 23	979 / 823 / 19	1188 / 1011 / 16	976 / 1015 / 20	1151 / 1210 / 16	1224 / 1168 / 20	1480 / 1422 / 17	1279 / 1128 / 23	1565 / 1388 / 19	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	5	1	776 / 635 / 25	952 / 796 / 21	769 / 769 / 29	920 / 936 / 24	955 / 887 / 32	1159 / 1089 / 26	987 / 847 / 34	1209 / 1048 / 28	808 / 665 / 24	979 / 823 / 19	822 / 826 / 28	976 / 997 / 23	1017 / 948 / 31	1224 / 1153 / 25	1013 / 873 / 31	1279 / 1112 / 26	979 / 823 / 19	1188 / 1011 / 16	976 / 1015 / 23	1151 / 1210 / 18	1224 / 1168 / 25	1480 / 1422 / 20	1279 / 1128 / 26	1565 / 1388 / 22	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	5	2	952 / 796 / 21	1171 / 995 / 17	920 / 953 / 24	1095 / 1149 / 19	1159 / 1103 / 26	1416 / 1358 / 22	1209 / 1064 / 28	1413 / 1252 / 22	979 / 823 / 19	1188 / 1011 / 16	976 / 1015 / 23	1151 / 1210 / 18	1224 / 1168 / 25	1480 / 1422 / 20	1279 / 1128 / 26	1565 / 1388 / 22	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	962 / 1229 / 14	1147 / 1479 / 12	1133 / 1167 / 17	1369 / 1421 / 14	1395 / 1320 / 18	1469 / 1283 / 20	10	1	776 / 635 / 30	952 / 796 / 25	769 / 769 / 37	920 / 936 / 30	955 / 887 / 42	1159 / 1089 / 34	987 / 847 / 41	1209 / 1048 / 34	808 / 665 / 28	979 / 823 / 23	822 / 826 / 36	976 / 997 / 29	1017 / 948 / 40	1224 / 1153 / 33	1013 / 873 / 38	1279 / 1112 / 32	979 / 823 / 23	1188 / 1011 / 19	976 / 1015 / 29	1151 / 1210 / 23	1224 / 1168 / 33	1480 / 1422 / 26	1279 / 1128 / 33	1565 / 1388 / 26	962 / 1229 / 17	1147 / 1479 / 14	1133 / 1167 / 20	1369 / 1421 / 16	1395 / 1320 / 22	1469 / 1283 / 23	962 / 1229 / 17	11																																																																																												

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95										100										105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge							
		15	1	536 / 327 / 56	592 / 434 / 48	554 / 447 / 82	581 / 550 / 66	581 / 504 / 89	708 / 636 / 74	587 / 475 / 82	703 / 587 / 66	555 / 354 / 55	603 / 458 / 46	554 / 465 / 78	603 / 577 / 63	605 / 529 / 85	732 / 661 / 70	612 / 500 / 78	727 / 609 / 63	563 / 374 / 53	613 / 479 / 44	563 / 489 / 75	623 / 600 / 60	641 / 565 / 83	752 / 682 / 66	635 / 522 / 75	768 / 647 / 61				
Wind Speed [mph]		110										115																			
15	1	570 / 393 / 51	632 / 499 / 42	571 / 512 / 72	640 / 621 / 58	661 / 587 / 79	790 / 720 / 64	655 / 542 / 72	785 / 664 / 58	588 / 419 / 50	665 / 529 / 41	577 / 533 / 69	672 / 656 / 56	679 / 606 / 76	827 / 757 / 62	673 / 559 / 68	823 / 698 / 56	ASCE Group Zone													
		Panal Angle		Mono Slope																											
		0 - 7.5		1 = 1																											
		7.5 - 15		2 = 2																											
		15 - 30		3 = 3																											
		30 - 45		1 = 1																											
				2 = 2																											
				3 = 3																											
Wind Speed [mph]		120										130																			
15	1	594 / 436 / 48	680 / 544 / 39	582 / 553 / 66	684 / 672 / 53	711 / 638 / 74	836 / 768 / 59	706 / 589 / 66	859 / 731 / 55	588 / 419 / 50	665 / 529 / 41	577 / 533 / 69	672 / 656 / 56	679 / 606 / 76	827 / 757 / 62	673 / 559 / 68	823 / 698 / 56														

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs																																											
Wind Speed [mph]		140																150																160																											
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45															
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																													
		15	1	598/452/46	710/572/38	596/569/63	713/704/52	723/652/70	869/800/57	738/618/65	893/762/53	622/489/43	748/609/36	631/611/59	744/741/47	782/711/66	927/859/53	777/656/60	957/820/50	671/534/41	800/657/34	660/646/55	790/793/44	810/741/61	977/909/49	831/705/56	1011/870/46	15	2	710/572/38	861/713/32	713/717/52	843/867/41	869/811/57	1033/978/46	893/773/53	1073/940/43	748/609/36	922/769/30	744/754/47	896/926/39	927/871/53	1134/1078/44	957/832/50	1131/994/39	800/657/34	976/819/28	790/807/44	938/974/36	977/921/49	1176/1121/40	1011/883/46	1229/1083/38								
	3	696/866/29	818/1036/23	806/809/44	957/977/36	997/928/49	1200/1129/40	1032/888/46	1254/1090/38	740/927/27	895/1139/22	860/869/41	1050/1077/34	1054/985/46	1310/1236/38	1094/945/43	1307/1138/34	777/979/25	924/1180/20	906/920/39	1089/1120/31	1147/1076/44	1339/1267/34	1144/991/39	1411/1231/33	20	1	648/452/53	710/572/44	629/569/75	713/704/61	723/652/86	869/800/70	738/618/75	893/762/62	663/489/49	748/609/41	643/611/70	744/741/56	782/711/82	927/859/65	777/656/70	957/820/58	691/534/47	800/657/38	660/646/65	790/793/52	810/741/75	977/909/61	831/705/66	1011/870/54										
	2	710/572/44	861/713/36	713/717/61	843/867/49	869/811/70	1033/978/56	893/773/62	1073/940/50	748/609/41	922/769/34	744/754/56	896/926/46	927/871/65	1134/1078/54	957/832/58	1131/994/46	800/657/38	976/819/32	790/807/52	938/974/42	977/921/61	1176/1121/49	1011/883/54	1229/1083/44	20	3	696/866/33	818/1036/26	806/809/52	957/977/42	997/928/61	1200/1129/49	1032/888/54	1254/1090/44	740/927/31	895/1139/25	860/869/49	1050/1077/40	1054/985/56	1310/1236/47	1094/945/50	1307/1138/40	777/979/28	924/1180/23	906/920/46	1089/1120/37	1147/1076/54	1339/1267/42	1144/991/46	1411/1231/38										
	1	648/452/53	710/572/44	629/569/75	713/704/61	723/652/86	869/800/70	738/618/75	893/762/62	663/489/49	748/609/41	643/611/70	744/741/56	782/711/82	927/859/65	777/656/70	957/820/58	691/534/47	800/657/38	660/646/65	790/793/52	810/741/75	977/909/61	831/705/66	1011/870/54	25	2	710/572/44	861/713/36	713/717/61	843/867/49	869/811/70	1033/978/56	893/773/62	1073/940/50	748/609/41	922/769/34	744/754/56	896/926/46	927/871/65	1134/1078/54	957/832/58	1131/994/46	800/657/38	976/819/32	790/807/52	938/974/42	977/921/61	1176/1121/49	1011/883/54	1229/1083/44										
	3	696/866/33	818/1036/26	806/809/52	957/977/42	997/928/61	1200/1129/49	1032/888/54	1254/1090/44	740/927/31	895/1139/25	860/869/49	1050/1077/40	1054/985/56	1310/1236/47	1094/945/50	1307/1138/40	777/979/28	924/1180/23	906/920/46	1089/1120/37	1147/1076/54	1339/1267/42	1144/991/46	1411/1231/38	25	1	648/452/53	710/572/44	629/569/75	713/704/61	723/652/86	869/800/70	738/618/75	893/762/62	663/489/49	748/609/41	643/611/70	744/741/56	782/711/82	927/859/65	777/656/70	957/820/58	691/534/47	800/657/38	660/646/65	790/793/52	810/741/75	977/909/61	831/705/66	1011/870/54										
	2	710/572/44	861/713/36	713/717/61	843/867/49	869/811/70	1033/978/56	893/773/62	1073/940/50	748/609/41	922/769/34	744/754/56	896/926/46	927/871/65	1134/1078/54	957/832/58	1131/994/46	800/657/38	976/819/32	790/807/52	938/974/42	977/921/61	1176/1121/49	1011/883/54	1229/1083/44	25	3	696/866/33	818/1036/26	806/809/52	957/977/42	997/928/61	1200/1129/49	1032/888/54	1254/1090/44	740/927/31	895/1139/25	860/869/49	1050/1077/40	1054/985/56	1310/1236/47	1094/945/50	1307/1138/40	777/979/28	924/1180/23	906/920/46	1089/1120/37	1147/1076/54	1339/1267/42	1144/991/46	1411/1231/38										
	3	696/866/33	818/1036/26	806/809/52	957/977/42	997/928/61	1200/1129/49	1032/888/54	1254/1090/44	740/927/31	895/1139/25	860/869/49	1050/1077/40	1054/985/56	1310/1236/47	1094/945/50	1307/1138/40	777/979/28	924/1180/23	906/920/46	1089/1120/37	1147/1076/54	1339/1267/42	1144/991/46	1411/1231/38	170	1	699/562/38	846/700/32	701/692/52	859/867/43	854/786/57	1058/988/47	878/749/53	1055/910/43	739/600/36	886/738/30	738/733/49	894/906/40	923/854/55	1089/1021/44	919/787/50	1133/981/41	15	2	846/700/32	1020/860/26	830/852/41	1012/1055/34	1058/1002/47	1262/1206/38	1055/924/43	1323/1168/36	886/738/30	1097/928/25	894/922/40	1083/1133/33	1089/1034/44	1343/1286/36	1133/995/41	1340/1185/33
	3	805/1018/23	989/1266/19	980/1000/37	1168/1205/30	1180/1110/40	1426/1352/32	1233/1071/38	1508/1317/31	860/1093/22	1048/1346/18	1009/1033/34	1242/1285/28	1258/1186/38	1503/1427/31	1318/1147/36	1595/1396/29	860/1093/22	1048/1346/18	1009/1033/34	1242/1285/28	1258/1186/38	1503/1427/31	1318/1147/36	1595/1396/29	20	1	699/562/44	846/700/36	701/692/61	859/867/51	854/786/70	1058/988/58	878/749/62	1055/910/50	739/600/42	886/738/34	738/733/58	894/906/47	923/854/68	1089/1021/54	919/787/58	1133/981/48																		
	2	846/700/36	1020/860/29	830/852/49	1012/1055/40	1058/1002/58	1262/1206/47	1055/924/50	1323/1168/42	886/738/34	1097/928/28	894/922/47	1083/1133/39	1089/1034/54	1343/1286/45	1133/995/48	1340/1185/38	886/738/34	1097/928/28	894/922/47	1083/1133/39	1089/1034/54	1343/1286/45	1133/995/48	1340/1185/38	20	3	805/1018/26	989/1266/22	980/1000/44	1168/1205/35	1180/1110/49	1426/1352/40	1233/1071/44	1508/1317/36	860/1093/25	1048/1346/21	1009/1033/40	1242/1285/33	1258/1186/47	1503/1427/38	1318/1147/42	1595/1396/34																		
	1	699/562/44	846/700/36	701/692/61	859/867/51	854/786/84	1058/988/70	878/749/72	1055/910/58	739/600/42	886/738/34	738/733/58	894/906/47	923/854/81	1089/1021/65	919/787/68	1133/981/56	739/600/42	886/738/34	738/733/58	894/906/47	923/854/81	1089/1021/65	919/787/68	1133/981/56	25	2	846/700/36	1020/860/29	830/852/49	1012/1055/40	1058/1002/58	1262/1206/47	1055/924/50	1323/1168/42	886/738/34	1097/928/28	894/922/47	1083/1133/39	1089/1034/54	1343/1286/45	1133/995/48	1340/1185/38																		
	3	805/1018/26	989/1266/22	980/1000/44	1168/1205/35	1180/1110/49	1426/1352/40	1233/1071/44	1508/1317/36	860/1093/25	1048/1346/21	1009/1033/40	1242/1285/33	1258/1186/47	1503/1427/38	1318/1147/42	1595/1396/34	860/1093/25	1048/1346/21	1009/1033/40	1242/1285/33	1258/1186/47	1503/1427/38	1318/1147/42	1595/1396/34	25	1	699/562/44	846/700/36	701/692/61	859/867/51	854/786/84	1058/988/70	878/749/72	1055/910/58	739/600/42	886/738/34	738/733/58	894/906/47	923/854/81	1089/1021/65	919/787/68	1133/981/56																		
	2	846/700/36	1020/860/29	830/852/49	1012/1055/40	1058/1002/58	1262/1206/47	1055/924/50	1323/1168/42	886/738/34	1097/928/28	894/922/47	1083/1133/39	1089/1034/54	1343/1286/45	1133/995/48	1340/1185/38	886/738/34	1097/928/28	894/922/47	1083/1133/39	1089/1034/54	1343/1286/45	1133/995/48	1340/1185/38	190	1	776/635/39	952/796/33	769/769/54	920/936/44	955/887/63	1159/1089/52	987/847/56	1209/1048/46	808/665/37	979/823/31	822/826/52	976/997/42	1017/948/61	1224/1153/49	1013/873/52	1279/1112/44																		
	2	952/796/33	1171/995/27	920/953/44	1095/1149/35	1159/1103/52	1416/1358/42	1209/1064/46	1413/1252/36	979/823/31	1188/1011/25	976/1015/42	1151/1210/33	1224/1168/49	1480/1422/40	1279/1128/44	1565/1388/36	979/823/31	1188/1011/25	976/1015/42	1151/1210/33	1224/1168/49	1480/1422/40	1279/1128/44	1565/1388/36	20	3	913/1164/24	1101/1417/19	1073/1102/39	1309/1357/32	1330/1257/45	1397/1218/40	1672/1464/32	962/1229/23	1147/1479/18	1133/1167/37	1369/1421/30	1395/1320/42	1469/1283/38																					
	1	776/635/39	952/796/33	769/769/54	920/936/44	955/887/63	1159/1089/52	987/847/56	1209/1048/46	808/665/37	979/823/31	822/826/52	976/997/42	1017/948/61	1224/1153/49	1013/873/52	1279/1112/44	808/665/37	979/823/31	822/826/52	976/997/42	1017/948/61	1224/1153/49	1013/873/52	1279/1112/44	25	2	952/796/33	1171/995/27	920/953/44	1095/1149/35	1159/1103/52	1416/1358/42	1209/1064/46	1413/1252/36	979/823/31	1188/1011/25	976/1015/42	1151/1210/33	1224/1168/49	1480/1422/40	1279/1128/44	1565/1388/36																		
	3	913/1164/24	1101/1417/19	1073/1102/39	1309/1357/32	1330/1257/45	1397/1218/40	1672/1464/32	962/1229/23	1147/1479/18	1133/1167/37	1369/1421/30	1395/1320/42	1469/1283/38	190	1	776/635/39	952/796/33	769/769/54	920/936/44	955/887/63	1159/1089/52	987/847/56	1209/1048/46	808/665/37	979/823/31	822/826/52	976/997/42	1017/948/61	1224/1153/49	1013/873/52	1279/1112/44	808/665/37	979/823/31	822/826/52	976/997/42	1017/948/61	1224/1153/49	1013/873/52	1279/1112/44																					
	2	952/796/33	1171/995/27	920/953/44																																																									

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	596 / 310 / 65	645 / 417 / 56	595 / 415 / 98	650 / 550 / 85	617 / 504 / 154	708 / 636 / 128	587 / 475 / 128	703 / 587 / 104	600 / 329 / 62	665 / 448 / 55	612 / 447 / 96	658 / 577 / 81	628 / 529 / 147	732 / 661 / 121	612 / 500 / 123	727 / 609 / 99	615 / 353 / 61	686 / 479 / 54	629 / 480 / 94	663 / 600 / 77	651 / 565 / 144	752 / 682 / 115	635 / 522 / 117	768 / 647 / 96
	2	645 / 417 / 56	709 / 542 / 48	636 / 548 / 83	683 / 681 / 68	708 / 644 / 128	833 / 775 / 102	703 / 595 / 104	855 / 738 / 85	665 / 448 / 55	735 / 580 / 47	642 / 573 / 79	700 / 705 / 64	732 / 670 / 121	879 / 821 / 98	727 / 618 / 99	904 / 783 / 83	686 / 479 / 54	741 / 600 / 44	663 / 611 / 77	738 / 746 / 62	752 / 691 / 115	923 / 865 / 95	768 / 656 / 96	919 / 798 / 77
	3	607 / 675 / 44	669 / 828 / 36	681 / 642 / 74	773 / 773 / 59	791 / 722 / 108	960 / 892 / 89	810 / 686 / 91	992 / 852 / 75	609 / 699 / 42	680 / 846 / 34	688 / 668 / 70	816 / 819 / 57	836 / 766 / 105	1009 / 940 / 85	832 / 707 / 85	1044 / 899 / 72	608 / 719 / 40	712 / 890 / 33	699 / 689 / 66	856 / 864 / 55	880 / 810 / 102	1055 / 985 / 82	875 / 746 / 83	1051 / 907 / 67
35	1	616 / 299 / 68	668 / 408 / 60	622 / 407 / 109	685 / 550 / 96	646 / 504 / 176	708 / 636 / 146	587 / 475 / 144	703 / 587 / 117	629 / 322 / 66	687 / 438 / 59	638 / 439 / 107	690 / 577 / 92	655 / 529 / 169	732 / 661 / 139	612 / 500 / 138	727 / 609 / 111	643 / 346 / 65	706 / 469 / 57	641 / 461 / 103	694 / 600 / 88	678 / 565 / 165	752 / 682 / 131	635 / 522 / 132	768 / 647 / 108
	2	668 / 408 / 60	742 / 542 / 52	670 / 548 / 94	711 / 681 / 77	708 / 644 / 146	833 / 775 / 116	703 / 595 / 117	855 / 738 / 96	687 / 438 / 59	767 / 580 / 51	674 / 573 / 90	714 / 705 / 73	732 / 670 / 139	879 / 821 / 113	727 / 618 / 111	904 / 783 / 93	706 / 469 / 57	771 / 600 / 48	694 / 611 / 88	738 / 746 / 71	752 / 691 / 131	923 / 865 / 109	768 / 656 / 108	919 / 798 / 87
	3	636 / 675 / 48	677 / 828 / 39	711 / 642 / 84	773 / 773 / 67	791 / 722 / 124	960 / 892 / 101	810 / 686 / 102	992 / 852 / 84	637 / 699 / 46	680 / 846 / 37	716 / 668 / 79	816 / 819 / 64	836 / 766 / 120	1009 / 940 / 98	832 / 707 / 96	1044 / 899 / 81	635 / 719 / 43	712 / 890 / 35	718 / 689 / 75	856 / 864 / 62	880 / 810 / 116	1055 / 985 / 94	875 / 746 / 93	1051 / 907 / 75
40	1	645 / 293 / 117	690 / 399 / 103	648 / 399 / 157	703 / 538 / 138	661 / 493 / 199	730 / 636 / 169	587 / 475 / 161	703 / 587 / 131	657 / 316 / 114	707 / 428 / 101	663 / 430 / 153	723 / 577 / 135	683 / 529 / 195	737 / 661 / 160	612 / 500 / 154	727 / 609 / 124	670 / 340 / 112	725 / 458 / 98	663 / 451 / 147	726 / 600 / 128	705 / 565 / 190	752 / 682 / 152	635 / 522 / 147	768 / 647 / 121
	2	690 / 399 / 103	774 / 542 / 92	703 / 548 / 138	738 / 681 / 113	730 / 644 / 169	833 / 775 / 134	703 / 595 / 131	855 / 738 / 107	707 / 428 / 101	798 / 580 / 89	706 / 573 / 132	740 / 705 / 107	737 / 670 / 160	879 / 821 / 130	727 / 618 / 124	904 / 783 / 104	725 / 458 / 98	800 / 600 / 85	726 / 611 / 128	762 / 746 / 104	752 / 691 / 152	923 / 865 / 126	768 / 656 / 121	919 / 798 / 97
	3	666 / 675 / 85	701 / 828 / 69	741 / 642 / 122	776 / 773 / 97	791 / 722 / 143	960 / 892 / 117	810 / 686 / 114	992 / 852 / 94	665 / 699 / 80	696 / 846 / 64	744 / 668 / 116	816 / 819 / 94	836 / 766 / 139	1009 / 940 / 113	832 / 707 / 107	1044 / 899 / 91	661 / 719 / 76	713 / 890 / 62	745 / 689 / 110	856 / 864 / 91	880 / 810 / 134	1055 / 985 / 108	875 / 746 / 104	1051 / 907 / 84
Wind Speed [mph]		110								115															
30	1	630 / 378 / 60	691 / 499 / 52	633 / 502 / 91	666 / 621 / 74	661 / 587 / 138	790 / 720 / 111	655 / 542 / 112	785 / 664 / 91	645 / 403 / 59	710 / 529 / 50	650 / 533 / 89	686 / 656 / 72	679 / 606 / 131	827 / 757 / 108	673 / 559 / 107	823 / 698 / 88								
	2	691 / 499 / 52	778 / 635 / 43	666 / 633 / 74	750 / 762 / 59	790 / 730 / 111	931 / 875 / 89	785 / 674 / 91	961 / 837 / 75	710 / 529 / 50	792 / 650 / 41	668 / 651 / 70	783 / 799 / 57	802 / 744 / 105	968 / 912 / 85	823 / 708 / 88	1001 / 874 / 72								
	3	625 / 758 / 38	742 / 931 / 31	734 / 728 / 64	863 / 874 / 51	891 / 823 / 95	1097 / 1027 / 79	918 / 785 / 80	1094 / 946 / 64	645 / 796 / 37	770 / 969 / 30	745 / 742 / 61	897 / 911 / 49	929 / 860 / 92	1136 / 1065 / 76	958 / 821 / 77	1133 / 981 / 62								
35	1	657 / 371 / 64	725 / 499 / 56	656 / 491 / 101	696 / 621 / 84	684 / 587 / 157	790 / 720 / 127	655 / 542 / 126	785 / 664 / 102	656 / 386 / 61	726 / 516 / 54	671 / 522 / 98	715 / 656 / 81	688 / 606 / 150	827 / 757 / 124	673 / 559 / 120	823 / 698 / 99								
	2	725 / 499 / 56	794 / 635 / 47	696 / 633 / 84	750 / 762 / 67	790 / 730 / 127	931 / 875 / 101	785 / 674 / 102	961 / 837 / 84	726 / 516 / 54	793 / 650 / 44	696 / 651 / 79	783 / 799 / 64	802 / 744 / 120	968 / 912 / 98	823 / 708 / 99	1001 / 874 / 81								
	3	650 / 758 / 42	742 / 931 / 34	739 / 728 / 73	863 / 874 / 58	891 / 823 / 109	1097 / 1027 / 90	918 / 785 / 90	1094 / 946 / 72	665 / 796 / 41	770 / 969 / 33	745 / 742 / 69	897 / 911 / 56	929 / 860 / 105	1136 / 1065 / 86	958 / 821 / 87	1133 / 981 / 69								
40	1	668 / 355 / 108	742 / 487 / 96	677 / 481 / 144	726 / 621 / 122	710 / 587 / 182	790 / 720 / 147	655 / 542 / 141	785 / 664 / 114	679 / 378 / 105	759 / 516 / 94	691 / 511 / 141	744 / 656 / 119	713 / 606 / 173	827 / 757 / 143	673 / 559 / 134	823 / 698 / 111								
	2	742 / 487 / 96	823 / 635 / 83	726 / 633 / 122	758 / 762 / 97	790 / 730 / 147	931 / 875 / 117	785 / 674 / 114	961 / 837 / 94	759 / 516 / 94	820 / 650 / 78	724 / 651 / 116	783 / 799 / 94	802 / 744 / 139	968 / 912 / 113	823 / 708 / 111	1001 / 874 / 91								
	3	676 / 758 / 73	742 / 931 / 60	765 / 728 / 107	863 / 874 / 85	891 / 823 / 126	1097 / 1027 / 104	918 / 785 / 101	1094 / 946 / 81	690 / 796 / 71	770 / 969 / 57	761 / 742 / 100	897 / 911 / 82	929 / 860 / 121	1136 / 1065 / 100	958 / 821 / 97	1133 / 981 / 77								
Wind Speed [mph]		120								130															
30	1	646 / 419 / 56	711 / 544 / 48	652 / 553 / 85	685 / 672 / 68	711 / 638 / 128	836 / 768 / 102	706 / 589 / 104	859 / 731 / 85	645 / 403 / 59	710 / 529 / 50	650 / 533 / 89	686 / 656 / 72	679 / 606 / 131	827 / 757 / 108	673 / 559 / 107	823 / 698 / 88								
	2	711 / 544 / 48	827 / 682 / 40	685 / 684 / 68	814 / 834 / 55	836 / 778 / 102	1002 / 947 / 82	859 / 741 / 85	1039 / 908 / 70	710 / 529 / 50	792 / 650 / 41	668 / 651 / 70	783 / 799 / 57	802 / 744 / 105	968 / 912 / 85	823 / 708 / 88	1001 / 874 / 72								
	3	671 / 832 / 36	795 / 1004 / 29	776 / 777 / 59	929 / 946 / 47	964 / 896 / 89	1170 / 1099 / 72	996 / 856 / 75	1220 / 1059 / 62	645 / 796 / 37	770 / 969 / 30	745 / 742 / 61	897 / 911 / 49	929 / 860 / 92	1136 / 1065 / 76	958 / 821 / 77	1133 / 981 / 62								
35	1	669 / 410 / 60	744 / 544 / 52	686 / 553 / 96	713 / 672 / 77	711 / 638 / 146	836 / 768 / 116	706 / 589 / 117	859 / 731 / 96	656 / 386 / 61	726 / 516 / 54	671 / 522 / 98	715 / 656 / 81	688 / 606 / 150	827 / 757 / 124	673 / 559 / 120	823 / 698 / 99								
	2	744 / 544 / 52	827 / 682 / 43	713 / 684 / 77	814 / 834 / 62	836 / 778 / 116	1002 / 947 / 94	859 / 741 / 96	1039 / 908 / 78	726 / 516 / 54	793 / 650 / 44	696 / 651 / 79	783 / 799 / 64	802 / 744 / 120	968 / 912 / 98	823 / 708 / 99	1001 / 874 / 81								
	3	679 / 832 / 39	795 / 1004 / 32	776 / 777 / 67	929 / 946 / 54	964 / 896 / 101	1170 / 1099 / 83	996 / 856 / 84	1220 / 1059 / 69	665 / 796 / 41	770 / 969 / 33	745 / 742 / 69	897 / 911 / 56	929 / 860 / 105	1136 / 1065 / 86	958 / 821 / 87	1133 / 981 / 69								
40	1	691 / 401 / 103	776 / 544 / 92	705 / 540 / 138	740 / 672 / 113	732 / 638 / 169	836 / 768 / 134	706 / 589 / 131	859 / 731 / 107	679 / 378 / 105	759 / 516 / 94	691 / 511 / 141	744 / 656 / 119	713 / 606 / 173	827 / 757 / 143	673 / 559 / 134	823 / 698 / 111								
	2	776 / 544 / 92	840 / 682 / 76	740 / 684 / 113	814 / 834 / 91	836 / 778 / 134	1002 / 947 / 108	859 / 741 / 107	1039 / 908 / 87	759 / 516 / 94	820 / 650 / 78	724 / 651 / 116	783 / 799 / 94	802 / 744 / 139	968 / 912 / 113	823 / 708 / 111	1001 / 874 / 91								
	3	703 / 832 / 69	795 / 1004 / 55	778 / 777 / 97	929 / 946 / 79	964 / 896 / 117	1170 / 1099 / 95	996 / 856 / 94	1220 / 1059 / 77	690 / 796 / 71	770 / 969 / 57	761 / 742 / 100	897 / 911 / 82	929 / 860 / 121	1136 / 1065 / 100	958 / 821 / 97	1133 / 981 / 77								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	$64''$ to $71''$	$48''$ to $63''$	$x \leq 47''$
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		30	1	661 / 442 / 55	729 / 572 / 47	653 / 569 / 81	713 / 704 / 66	723 / 652 / 121	869 / 800 / 98	738 / 618 / 101	893 / 762 / 83	688 / 489 / 53	748 / 609 / 43	665 / 611 / 76	744 / 741 / 61	782 / 711 / 115	927 / 859 / 92	777 / 656 / 93	957 / 820 / 77	715 / 534 / 50	800 / 657 / 41	672 / 646 / 70	790 / 793 / 57	810 / 741 / 105	977 / 909 / 85	831 / 705 / 88	1011 / 870 / 72	729 / 572 / 47	861 / 713 / 38	713 / 717 / 66	843 / 867 / 53	869 / 811 / 98	1033 / 978 / 79	893 / 773 / 83	1073 / 940 / 67	748 / 609 / 43	922 / 769 / 36	744 / 754 / 61	896 / 926 / 49	927 / 871 / 92	1134 / 1078 / 76	957 / 832 / 77	1131 / 994 / 62	800 / 657 / 41	976 / 819 / 34	790 / 807 / 57	938 / 974 / 46	977 / 921 / 85	1176 / 1121 / 69
30	2	696 / 866 / 35	818 / 1036 / 28	806 / 809 / 57	957 / 977 / 46	997 / 928 / 85	1200 / 1129 / 69	1032 / 888 / 72	1254 / 1090 / 59	740 / 927 / 33	895 / 1139 / 27	860 / 869 / 53	1050 / 1077 / 44	1054 / 985 / 79	1310 / 1236 / 66	1094 / 945 / 67	1307 / 1138 / 54	777 / 979 / 30	924 / 1180 / 24	906 / 920 / 49	1089 / 1120 / 40	1147 / 1076 / 76	1339 / 1267 / 59	1144 / 991 / 62	1411 / 1231 / 51	682 / 433 / 59	761 / 572 / 51	685 / 569 / 92	729 / 704 / 75	723 / 652 / 139	869 / 800 / 113	738 / 618 / 114	893 / 762 / 93	707 / 478 / 56	771 / 609 / 47	695 / 611 / 86	744 / 741 / 69	782 / 711 / 131	927 / 859 / 105	777 / 656 / 105	957 / 820 / 87	731 / 521 / 54	800 / 657 / 44	700 / 646 / 79	790 / 793 / 64	810 / 741 / 120	977 / 909 / 98	831 / 705 / 99	1011 / 870 / 81
30	3	729 / 572 / 47	861 / 713 / 38	713 / 717 / 66	843 / 867 / 53	869 / 811 / 98	1033 / 978 / 79	893 / 773 / 83	1073 / 940 / 67	748 / 609 / 43	922 / 769 / 36	744 / 754 / 61	896 / 926 / 49	927 / 871 / 92	1134 / 1078 / 76	957 / 832 / 77	1131 / 994 / 62	800 / 657 / 41	976 / 819 / 34	790 / 807 / 57	938 / 974 / 46	977 / 921 / 85	1176 / 1121 / 69	1011 / 883 / 72	1229 / 1083 / 59	696 / 866 / 35	818 / 1036 / 28	806 / 809 / 57	957 / 977 / 46	997 / 928 / 85	1200 / 1129 / 69	1032 / 888 / 72	1254 / 1090 / 59	740 / 927 / 33	895 / 1139 / 27	860 / 869 / 53	1050 / 1077 / 44	1054 / 985 / 79	1310 / 1236 / 66	1094 / 945 / 67	1307 / 1138 / 54	777 / 979 / 30	924 / 1180 / 24	906 / 920 / 49	1089 / 1120 / 40	1147 / 1076 / 76	1339 / 1267 / 59	1144 / 991 / 62	1411 / 1231 / 51
35	1	703 / 423 / 101	792 / 572 / 89	718 / 569 / 135	755 / 704 / 110	731 / 652 / 160	869 / 800 / 130	738 / 618 / 127	893 / 762 / 104	724 / 467 / 96	800 / 609 / 83	726 / 611 / 125	760 / 741 / 100	782 / 711 / 152	927 / 859 / 121	777 / 656 / 117	957 / 820 / 97	764 / 521 / 94	826 / 657 / 78	729 / 646 / 116	790 / 793 / 94	810 / 741 / 139	977 / 909 / 113	831 / 705 / 111	1011 / 870 / 91	792 / 572 / 89	861 / 713 / 73	755 / 717 / 110	843 / 867 / 88	869 / 811 / 130	1033 / 978 / 104	893 / 773 / 104	1073 / 940 / 84	800 / 609 / 83	922 / 769 / 69	760 / 754 / 100	896 / 926 / 82	927 / 871 / 121	1134 / 1078 / 100	957 / 832 / 97	1131 / 994 / 77	826 / 657 / 78	976 / 819 / 64	790 / 807 / 94	938 / 974 / 75	977 / 921 / 113	1176 / 1121 / 91	1011 / 883 / 91	1229 / 1083 / 74
35	2	729 / 572 / 47	861 / 713 / 38	713 / 717 / 66	843 / 867 / 53	869 / 811 / 98	1033 / 978 / 79	893 / 773 / 83	1073 / 940 / 67	748 / 609 / 43	922 / 769 / 36	744 / 754 / 61	896 / 926 / 49	927 / 871 / 92	1134 / 1078 / 76	957 / 832 / 77	1131 / 994 / 62	800 / 657 / 41	976 / 819 / 34	790 / 807 / 57	938 / 974 / 46	977 / 921 / 85	1176 / 1121 / 69	1011 / 883 / 72	1229 / 1083 / 59	703 / 423 / 101	792 / 572 / 89	718 / 569 / 135	755 / 704 / 110	731 / 652 / 160	869 / 800 / 130	738 / 618 / 127	893 / 762 / 104	724 / 467 / 96	800 / 609 / 83	726 / 611 / 125	760 / 741 / 100	782 / 711 / 152	927 / 859 / 121	777 / 656 / 117	957 / 820 / 97	764 / 521 / 94	826 / 657 / 78	729 / 646 / 116	790 / 793 / 94	810 / 741 / 139	977 / 909 / 113	831 / 705 / 111	1011 / 870 / 91
35	3	696 / 866 / 35	818 / 1036 / 28	806 / 809 / 57	957 / 977 / 46	997 / 928 / 85	1200 / 1129 / 69	1032 / 888 / 72	1254 / 1090 / 59	740 / 927 / 33	895 / 1139 / 27	860 / 869 / 53	1050 / 1077 / 44	1054 / 985 / 79	1310 / 1236 / 66	1094 / 945 / 67	1307 / 1138 / 54	777 / 979 / 30	924 / 1180 / 24	906 / 920 / 49	1089 / 1120 / 40	1147 / 1076 / 76	1339 / 1267 / 59	1144 / 991 / 62	1411 / 1231 / 51	703 / 423 / 101	792 / 572 / 89	718 / 569 / 135	755 / 704 / 110	731 / 652 / 160	869 / 800 / 130	738 / 618 / 127	893 / 762 / 104	724 / 467 / 96	800 / 609 / 83	726 / 611 / 125	760 / 741 / 100	782 / 711 / 152	927 / 859 / 121	777 / 656 / 117	957 / 820 / 97	764 / 521 / 94	826 / 657 / 78	729 / 646 / 116	790 / 793 / 94	810 / 741 / 139	977 / 909 / 113	831 / 705 / 111	1011 / 870 / 91
40	1	715 / 866 / 67	818 / 1036 / 53	806 / 809 / 94	957 / 977 / 75	997 / 928 / 113	1200 / 1129 / 91	1032 / 888 / 91	1254 / 1090 / 74	740 / 927 / 62	895 / 1139 / 51	860 / 869 / 88	1050 / 1077 / 72	1054 / 985 / 104	1310 / 1236 / 87	1094 / 945 / 84	1307 / 1138 / 67	777 / 979 / 57	924 / 1180 / 46	906 / 920 / 82	1089 / 1120 / 66	1147 / 1076 / 100	1339 / 1267 / 78	1144 / 991 / 77	1411 / 1231 / 64	715 / 866 / 67	818 / 1036 / 53	806 / 809 / 94	957 / 977 / 75	997 / 928 / 113	1200 / 1129 / 91	1032 / 888 / 91	1254 / 1090 / 74	740 / 927 / 62	895 / 1139 / 51	860 / 869 / 88	1050 / 1077 / 72	1054 / 985 / 104	1310 / 1236 / 87	1094 / 945 / 84	1307 / 1138 / 67	777 / 979 / 57	924 / 1180 / 46	906 / 920 / 82	1089 / 1120 / 66	1147 / 1076 / 100	1339 / 1267 / 78	1144 / 991 / 77	1411 / 1231 / 64
40	2	729 / 572 / 47	861 / 713 / 38	713 / 717 / 66	843 / 867 / 53	869 / 811 / 98	1033 / 978 / 79	893 / 773 / 83	1073 / 940 / 67	748 / 609 / 43	922 / 769 / 36	744 / 754 / 61	896 / 926 / 49	927 / 871 / 92	1134 / 1078 / 76	957 / 832 / 77	1131 / 994 / 62	800 / 657 / 41	976 / 819 / 34	790 / 807 / 57	938 / 974 / 46	977 / 921 / 85	1176 / 1121 / 69	1011 / 883 / 72	1229 / 1083 / 59	729 / 572 / 47	861 / 713 / 38	713 / 717 / 66	843 / 867 / 53	869 / 811 / 98	1033 / 978 / 79	893 / 773 / 83	1073 / 940 / 67	748 / 609 / 43	922 / 769 / 36	744 / 754 / 61	896 / 926 / 49	927 / 871 / 92	1134 / 1078 / 76	957 / 832 / 77	1131 / 994 / 62	800 / 657 / 41	976 / 819 / 34	790 / 807 / 57	938 / 974 / 46	977 / 921 / 85	1176 / 1121 / 69	1011 / 883 / 72	1229 / 1083 / 59
40	3	696 / 866 / 35	818 / 1036 / 28	806 / 809 / 57	957 / 977 / 46	997 / 928 / 85	1200 / 1129 / 69	1032 / 888 / 72	1254 / 1090 / 59	740 / 927 / 33	895 / 1139 / 27	860 / 869 / 53	1050 / 1077 / 44	1054 / 985 / 79	1310 / 1236 / 66	1094 / 945 / 67	1307 / 1138 / 54	777 / 979 / 30	924 / 1180 / 24	906 / 920 / 49	1089 / 1120 / 40	1147 / 1076 / 76	1339 / 1267 / 59	1144 / 991 / 62	1411 / 1231 / 51	729 / 572 / 47	861 / 713 / 38	713 / 717 / 66	843 / 867 / 53	869 / 811 / 98	1033 / 978 / 79	893 / 773 / 83	1073 / 940 / 67	748 / 609 / 43	922 / 769 / 36	744 / 754 / 61	896 / 926 / 49	927 / 871 / 92	1134 / 1078 / 76	957 / 832 / 77	1131 / 994 / 62	800 / 657 / 41	976 / 819 / 34	790 / 807 / 57	938 / 974 / 46	977 / 921 / 85	1176 / 1121 / 69	1011 / 883 / 72	1229 / 1083 / 59
40	3	715 / 866 / 67	818 / 1036 / 53	806 / 809 / 94	957 / 977 / 75	997 / 928 / 113	1200 / 1129 / 91	1032 / 888 / 91	1254 / 1090 / 74	740 / 927 / 62	895 / 1139 / 51	860 / 869 / 88	1050 / 1077 / 72	1054 / 985 / 104	1310 / 1236 / 87	1094 / 945 / 84	1307 / 1138 / 67	777 / 979 / 57	924 / 1180 / 46	906 / 920 / 82	1089 / 1120 / 66	1147 / 1076 / 100	1339 / 1267 / 78	1144 / 991 / 77	1411 / 1231 / 64	715 / 866 / 67	818 / 1036 / 53	806 / 809 / 94	957 / 977 / 75	997 / 928 / 113	1200 / 1129 / 91	1032 / 888 / 91	1254 / 1090 / 74	740 / 927 / 62	895 / 1139 / 51	860 / 869 / 88	1050 / 1077 / 72	1054 / 985 / 104	1310 / 1236 / 87	1094 / 945 / 84	1307 / 1138 / 67	777 / 979 / 57	924 / 1180 / 46	906 / 920 / 82	1089 / 1120 / 66	1147 / 1076 / 100	1339 / 1267 / 78	1144 / 991 / 77	1411 / 1231 / 64
40	3	805 / 1018 / 28	989 / 1266 / 23	980 / 1000 / 47	1168 / 1205 / 38	1180 / 1110 / 69	1426 / 1352 / 56	1233 / 1071 / 59	1508 / 1317 / 48	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	805 / 1018 / 28	989 / 1266 / 23	980 / 1000 / 47	1168 / 1205 / 38	1180 / 1110 / 69	1426 / 1352 / 56	1233 / 1071 / 59	1508 / 1317 / 48	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46
40	3	805 / 1018 / 28	989 / 1266 / 23	980 / 1000 / 47	1168 / 1205 / 38	1180 / 1110 / 69	1426 / 1352 / 56	1233 / 1071 / 59	1508 / 1317 / 48	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	805 / 1018 / 28	989 / 1266 / 23	980 / 1000 / 47	1168 / 1205 / 38	1180 / 1110 / 69	1426 / 1352 / 56	1233 / 1071 / 59	1508 / 1317 / 48	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46
40	3	805 / 1018 / 28	989 / 1266 / 23	980 / 1000 / 47	1168 / 1205 / 38	1180 / 1110 / 69	1426 / 1352 / 56	1233 / 1071 / 59	1508 / 1317 / 48	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	860 / 1093 / 27	1048 / 1346 / 22	1009 / 1033 / 44	1242 / 1285 / 36	1258 / 1186 / 66	1503 / 1427 / 53	1318 / 1147 / 56	1595 / 1396 / 46	805 / 1018 / 28	989 / 1266 /																						

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		45	1	672 / 287 / 125	710 / 390 / 110	673 / 391 / 169	720 / 526 / 148	689 / 493 / 219	754 / 636 / 186	587 / 475 / 177	703 / 587 / 144	669 / 304 / 120	726 / 419 / 108	686 / 421 / 165	738 / 563 / 145	695 / 517 / 210	760 / 661 / 176	612 / 500 / 170	727 / 609 / 136	680 / 326 / 118	742 / 447 / 105	684 / 442 / 158	757 / 600 / 141	715 / 552 / 205	763 / 682 / 167
Wind Speed [mph]		110								115															
45	1	690 / 348 / 115	757 / 475 / 103	697 / 471 / 155	756 / 621 / 134	735 / 587 / 200	790 / 720 / 162	655 / 542 / 155	785 / 664 / 125	701 / 370 / 113	773 / 503 / 100	709 / 499 / 151	772 / 656 / 131	737 / 606 / 191	827 / 757 / 157	673 / 559 / 148	823 / 698 / 122								
Wind Speed [mph]		120								130															
45	1	711 / 392 / 110	788 / 531 / 98	722 / 528 / 148	767 / 672 / 124	756 / 638 / 186	836 / 768 / 148	706 / 589 / 144	859 / 731 / 118	701 / 370 / 113	773 / 503 / 100	709 / 499 / 151	772 / 656 / 131	737 / 606 / 191	827 / 757 / 157	673 / 559 / 148	823 / 698 / 122								

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																																											
Wind Speed [mph]		140										150										160																											
Panal Angle		0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45														
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge													
		45	1	721 / 413 / 108	802 / 558 / 95	734 / 556 / 145	782 / 704 / 121	754 / 652 / 176	869 / 800 / 143	738 / 618 / 140	893 / 762 / 114	758 / 467 / 105	829 / 609 / 90	756 / 611 / 138	784 / 741 / 110	786 / 711 / 167	927 / 859 / 134	777 / 656 / 129	957 / 820 / 107	777 / 509 / 100	853 / 657 / 85	757 / 646 / 127	805 / 793 / 103	810 / 741 / 153	977 / 909 / 124	831 / 705 / 122	1011 / 870 / 100	721 / 413 / 108	802 / 558 / 95	734 / 556 / 145	782 / 704 / 121	754 / 652 / 176	869 / 800 / 143	738 / 618 / 140	893 / 762 / 114	758 / 467 / 105	829 / 609 / 90	756 / 611 / 138	784 / 741 / 110	786 / 711 / 167	927 / 859 / 134	777 / 656 / 129	957 / 820 / 107	777 / 509 / 100	853 / 657 / 85	757 / 646 / 127	805 / 793 / 103	810 / 741 / 153	977 / 909 / 124
60	1	786 / 394 / 129	847 / 528 / 114	790 / 530 / 175	862 / 704 / 153	822 / 652 / 226	878 / 800 / 183	738 / 618 / 179	893 / 762 / 146	819 / 445 / 126	890 / 592 / 110	827 / 596 / 170	858 / 741 / 140	850 / 711 / 214	927 / 859 / 171	777 / 656 / 165	957 / 820 / 137	830 / 483 / 120	908 / 638 / 104	841 / 646 / 162	873 / 793 / 131	849 / 741 / 195	977 / 909 / 159	831 / 705 / 155	1011 / 870 / 127	786 / 394 / 129	847 / 528 / 114	790 / 530 / 175	862 / 704 / 153	822 / 652 / 226	878 / 800 / 183	738 / 618 / 179	893 / 762 / 146	819 / 445 / 126	890 / 592 / 110	827 / 596 / 170	858 / 741 / 140	850 / 711 / 214	927 / 859 / 171	777 / 656 / 165	957 / 820 / 137	830 / 483 / 120	908 / 638 / 104	841 / 646 / 162	873 / 793 / 131	849 / 741 / 195	977 / 909 / 159	831 / 705 / 155	1011 / 870 / 127
75	1	843 / 635 / 88	952 / 796 / 73	796 / 769 / 107	920 / 936 / 86	955 / 887 / 129	1159 / 1089 / 105	987 / 847 / 103	1209 / 1048 / 85	851 / 665 / 83	979 / 823 / 68	829 / 826 / 103	976 / 997 / 83	1017 / 948 / 124	1224 / 1153 / 100	1013 / 873 / 96	1279 / 1112 / 81	843 / 635 / 88	952 / 796 / 73	796 / 769 / 107	920 / 936 / 86	955 / 887 / 129	1159 / 1089 / 105	987 / 847 / 103	1209 / 1048 / 85	851 / 665 / 83	979 / 823 / 68	829 / 826 / 103	976 / 997 / 83	1017 / 948 / 124	1224 / 1153 / 100	1013 / 873 / 96	1279 / 1112 / 81	843 / 635 / 88	952 / 796 / 73	796 / 769 / 107	920 / 936 / 86	955 / 887 / 129	1159 / 1089 / 105	987 / 847 / 103	1209 / 1048 / 85	851 / 665 / 83	979 / 823 / 68	829 / 826 / 103	976 / 997 / 83	1017 / 948 / 124	1224 / 1153 / 100	1013 / 873 / 96	1279 / 1112 / 81

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
70	1	769 / 253 / 158	826 / 364 / 147	772 / 351 / 219	822 / 489 / 199	758 / 450 / 296	828 / 603 / 261	619 / 475 / 259	703 / 587 / 210	772 / 272 / 154	836 / 390 / 143	778 / 377 / 214	834 / 523 / 194	773 / 482 / 289	850 / 643 / 254	630 / 500 / 248	727 / 609 / 199	795 / 298 / 154	845 / 415 / 140	785 / 403 / 209	846 / 557 / 189	788 / 514 / 282	871 / 682 / 247	640 / 522 / 237	768 / 647 / 194	
	2	826 / 364 / 147	870 / 488 / 129	822 / 498 / 199	878 / 662 / 175	828 / 611 / 261	897 / 775 / 219	703 / 595 / 210	855 / 738 / 173	836 / 390 / 143	885 / 520 / 126	834 / 533 / 194	895 / 705 / 170	850 / 651 / 254	922 / 821 / 212	727 / 618 / 199	904 / 783 / 167	845 / 415 / 140	899 / 552 / 122	846 / 567 / 189	912 / 746 / 165	871 / 691 / 247	947 / 865 / 205	768 / 656 / 194	919 / 798 / 156	
	3	844 / 675 / 133	845 / 828 / 108	872 / 609 / 184	917 / 773 / 155	883 / 722 / 233	960 / 892 / 190	810 / 686 / 183	992 / 852 / 151	834 / 699 / 126	831 / 846 / 101	889 / 650 / 180	938 / 819 / 150	908 / 766 / 226	1009 / 940 / 183	832 / 707 / 173	1044 / 899 / 146	820 / 719 / 118	843 / 890 / 97	905 / 689 / 175	958 / 864 / 145	932 / 810 / 219	1055 / 985 / 176	875 / 746 / 167	1051 / 907 / 135	
	80	1	820 / 247 / 173	848 / 346 / 157	801 / 336 / 235	861 / 477 / 219	790 / 439 / 328	850 / 587 / 288	644 / 475 / 291	703 / 587 / 237	822 / 266 / 169	855 / 370 / 153	824 / 369 / 235	871 / 510 / 213	803 / 470 / 320	869 / 625 / 280	654 / 500 / 279	727 / 609 / 225	824 / 284 / 165	885 / 405 / 153	829 / 394 / 230	881 / 542 / 207	816 / 501 / 312	887 / 662 / 272	663 / 522 / 267	768 / 647 / 219
		2	848 / 346 / 157	902 / 474 / 141	861 / 486 / 219	931 / 662 / 196	850 / 595 / 288	935 / 775 / 248	703 / 595 / 237	855 / 738 / 194	855 / 370 / 153	914 / 505 / 137	871 / 519 / 213	947 / 705 / 191	869 / 633 / 280	959 / 821 / 240	727 / 618 / 225	904 / 783 / 188	885 / 405 / 153	954 / 552 / 137	881 / 552 / 207	963 / 746 / 185	887 / 671 / 272	982 / 865 / 232	768 / 656 / 219	919 / 798 / 176
		3	904 / 675 / 149	894 / 828 / 121	903 / 593 / 202	965 / 773 / 174	923 / 722 / 264	990 / 892 / 216	810 / 686 / 206	992 / 852 / 170	890 / 699 / 141	876 / 846 / 113	917 / 632 / 196	984 / 819 / 168	947 / 766 / 256	1017 / 940 / 208	832 / 707 / 194	1044 / 899 / 164	873 / 719 / 133	887 / 890 / 109	931 / 669 / 191	1002 / 864 / 163	970 / 810 / 248	1055 / 985 / 200	875 / 746 / 188	1051 / 907 / 152
	90	1	848 / 236 / 182	888 / 337 / 169	844 / 328 / 255	897 / 465 / 236	820 / 429 / 357	894 / 587 / 322	654 / 466 / 317	713 / 587 / 263	847 / 253 / 178	892 / 360 / 165	846 / 351 / 249	904 / 496 / 230	831 / 458 / 349	912 / 625 / 313	663 / 489 / 304	727 / 609 / 250	868 / 277 / 178	921 / 394 / 165	869 / 384 / 249	912 / 527 / 224	842 / 488 / 340	929 / 662 / 304	685 / 522 / 297	768 / 647 / 243
		2	888 / 337 / 169	931 / 461 / 151	897 / 473 / 236	956 / 643 / 212	894 / 595 / 322	972 / 775 / 277	713 / 595 / 263	855 / 738 / 216	892 / 360 / 165	969 / 505 / 151	904 / 505 / 230	970 / 684 / 205	912 / 633 / 313	996 / 821 / 268	727 / 618 / 250	904 / 783 / 209	921 / 394 / 165	979 / 535 / 147	912 / 537 / 224	982 / 724 / 199	929 / 671 / 304	1018 / 865 / 259	768 / 656 / 243	919 / 798 / 196
		3	937 / 657 / 160	942 / 828 / 134	932 / 576 / 218	1012 / 773 / 193	963 / 722 / 295	1023 / 892 / 241	810 / 686 / 230	992 / 852 / 189	946 / 699 / 156	921 / 846 / 125	943 / 614 / 212	1030 / 819 / 187	986 / 766 / 286	1048 / 940 / 233	832 / 707 / 216	1044 / 899 / 182	926 / 719 / 147	930 / 890 / 120	954 / 650 / 205	1046 / 864 / 181	1008 / 810 / 277	1072 / 985 / 224	875 / 746 / 209	1051 / 907 / 169
70	1	799 / 318 / 151	854 / 441 / 136	791 / 429 / 204	858 / 590 / 184	802 / 545 / 275	891 / 720 / 240	655 / 542 / 226	785 / 664 / 183	803 / 337 / 147	863 / 466 / 133	817 / 465 / 204	869 / 622 / 180	817 / 575 / 268	910 / 757 / 233	673 / 559 / 216	823 / 698 / 178	ASCE Group Zone								
	2	854 / 441 / 136	941 / 600 / 122	858 / 600 / 184	900 / 762 / 155	891 / 730 / 240	935 / 875 / 190	785 / 674 / 183	961 / 837 / 151	863 / 466 / 133	955 / 631 / 118	869 / 633 / 180	914 / 799 / 150	882 / 744 / 226	968 / 912 / 183	823 / 708 / 178	1001 / 874 / 146	Panal Angle								
	3	830 / 758 / 115	854 / 931 / 93	921 / 728 / 170	941 / 874 / 135	923 / 823 / 205	1097 / 1027 / 169	918 / 785 / 162	1094 / 946 / 130	839 / 796 / 111	864 / 969 / 90	907 / 742 / 160	956 / 911 / 130	942 / 860 / 198	1136 / 1065 / 162	958 / 821 / 156	1133 / 981 / 124	Mono Slope								
	80	1	825 / 303 / 161	891 / 429 / 149	833 / 418 / 224	890 / 574 / 202	828 / 531 / 304	905 / 699 / 264	670 / 542 / 255	785 / 664 / 206	848 / 329 / 161	898 / 453 / 145	837 / 443 / 219	898 / 605 / 196	841 / 560 / 296	950 / 757 / 264	674 / 559 / 243	823 / 698 / 200	0 - 7.5							
		2	891 / 429 / 149	966 / 582 / 133	890 / 584 / 202	947 / 762 / 174	905 / 708 / 264	968 / 875 / 216	785 / 674 / 170	961 / 837 / 170	898 / 453 / 145	978 / 612 / 129	898 / 615 / 196	959 / 799 / 168	921 / 744 / 256	986 / 912 / 208	823 / 708 / 200	1001 / 874 / 164	7.5 - 15							
		3	882 / 758 / 129	896 / 931 / 105	944 / 706 / 185	982 / 874 / 151	958 / 823 / 232	1097 / 1027 / 192	918 / 785 / 182	1094 / 946 / 146	889 / 796 / 125	904 / 969 / 101	956 / 742 / 179	996 / 911 / 146	976 / 860 / 224	1136 / 1065 / 184	958 / 821 / 176	1133 / 981 / 140	15 - 30							
	90	1	867 / 295 / 173	925 / 418 / 160	872 / 408 / 243	918 / 558 / 218	852 / 517 / 331	945 / 699 / 295	691 / 542 / 230	785 / 664 / 230	889 / 321 / 173	929 / 441 / 156	873 / 431 / 236	924 / 587 / 212	862 / 545 / 322	961 / 734 / 286	695 / 559 / 270	823 / 698 / 223	30 - 45							
		2	925 / 418 / 160	988 / 565 / 142	918 / 568 / 218	994 / 762 / 193	945 / 708 / 295	1001 / 875 / 241	785 / 674 / 230	961 / 837 / 189	929 / 441 / 156	997 / 593 / 138	924 / 598 / 212	1005 / 799 / 187	961 / 744 / 286	1018 / 912 / 233	823 / 708 / 223	1001 / 874 / 182	1 = 1							
		3	933 / 758 / 142	938 / 931 / 116	964 / 685 / 199	1024 / 874 / 168	994 / 823 / 259	1097 / 1027 / 215	918 / 785 / 203	1094 / 946 / 162	939 / 796 / 138	944 / 969 / 111	1005 / 742 / 199	1035 / 911 / 162	1011 / 860 / 250	1136 / 1065 / 206	958 / 821 / 196	1133 / 981 / 155	2 = 2							
70	1	807 / 356 / 143	872 / 490 / 129	824 / 491 / 199	880 / 653 / 175	830 / 606 / 261	899 / 768 / 219	706 / 589 / 210	859 / 731 / 173	803 / 337 / 147	863 / 466 / 133	817 / 465 / 204	869 / 622 / 180	817 / 575 / 268	910 / 757 / 233	673 / 559 / 216	823 / 698 / 178	ASCE Group Zone								
	2	872 / 490 / 129	968 / 661 / 115	880 / 665 / 175	926 / 834 / 145	899 / 778 / 219	1002 / 947 / 176	859 / 741 / 173	1039 / 908 / 140	863 / 466 / 133	955 / 631 / 118	869 / 633 / 180	914 / 799 / 150	882 / 744 / 226	968 / 912 / 183	823 / 708 / 178	1001 / 874 / 146	Panal Angle								
	3	847 / 832 / 108	872 / 1004 / 86	920 / 777 / 155	969 / 946 / 125	964 / 896 / 190	1170 / 1099 / 155	996 / 856 / 151	1220 / 1059 / 124	839 / 796 / 111	864 / 969 / 90	907 / 742 / 160	956 / 911 / 130	942 / 860 / 198	1136 / 1065 / 162	958 / 821 / 156	1133 / 981 / 124	Mono Slope								
	80	1	850 / 347 / 157	904 / 476 / 141	863 / 479 / 219	933 / 653 / 196	852 / 589 / 288	937 / 768 / 248	706 / 589 / 237	859 / 731 / 194	848 / 329 / 161	898 / 453 / 145	837 / 443 / 219	898 / 605 / 196	841 / 560 / 296	950 / 757 / 264	674 / 559 / 243	823 / 698 / 200	0 - 7.5							
		2	904 / 476 / 141	988 / 641 / 125	933 / 665 / 196	970 / 834 / 163	937 / 778 / 248	1002 / 947 / 200	859 / 741 / 194	1039 / 908 / 158	898 / 453 / 145	978 / 612 / 129	898 / 615 / 196	959 / 799 / 168	921 / 744 / 256	986 / 912 / 208	823 / 708 / 200	1001 / 874 / 164	7.5 - 15							
		3	896 / 832 / 121	910 / 1004 / 97	967 / 777 / 174	1007 / 946 / 140	993 / 896 / 216	1170 / 1099 / 176	996 / 856 / 170	1220 / 1059 / 140	889 / 796 / 125	904 / 969 / 101	956 / 742 / 179	996 / 911 / 146	976 / 860 / 224	1136 / 1065 / 184	958 / 821 / 176	1133 / 981 / 140	15 - 30							
	90	1	889 / 338 / 169	932 / 463 / 151	898 / 467 / 236	958 / 635 / 212	896 / 589 / 322	975 / 768 / 277	715 / 589 / 263	859 / 731 / 216	889 / 321 / 173	929 / 441 / 156	873 / 431 / 236	924 / 587 / 212	862 / 545 / 322	961 / 734 / 286	695 / 559 / 270	823 / 698 / 223	30 - 45							
		2	932 / 463 / 151	1038 / 641 / 138	958 / 646 / 212	1015 / 834 / 181	975 / 778 / 277	1032 / 947 / 224	859 / 741 / 216	1039 / 908 / 176	929 / 441 / 156	997 / 593 / 138	924 / 598 / 212	1005 / 799 / 187	961 / 744 / 286	1018 / 912 / 233	823 / 708 / 223	1001 / 874 / 182	1 = 1							
		3	944 / 832 / 134	949 / 1004 / 107	1014 / 777 / 193	1045 / 946 / 156	1026 / 896 / 241	1170 / 1099 / 197	996 / 856 / 189	1220 / 1059 / 155	939 / 796 / 138	944 / 969 / 111	1005 / 742 / 199	1035 / 911 / 162	1011 / 860 / 250	1136 / 1065 / 206	958 / 821 / 196	1133 / 981 / 155	2 = 2							

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs									
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	891 / 230 / 195	924 / 328 / 181	885 / 320 / 273	930 / 452 / 253	847 / 418 / 385	912 / 570 / 346	664 / 456 / 342	732 / 587 / 290	889 / 247 / 190	926 / 351 / 176	884 / 342 / 267	935 / 483 / 246	856 / 447 / 375	928 / 607 / 336	686 / 489 / 334	740 / 609 / 275	909 / 270 / 190	954 / 383 / 176	884 / 365 / 260	940 / 513 / 239	865 / 475 / 366	942 / 643 / 326	708 / 522 / 327	768 / 647 / 268		
	2	924 / 328 / 181	985 / 461 / 166	930 / 461 / 253	978 / 624 / 226	912 / 578 / 346	1010 / 775 / 306	732 / 595 / 290	855 / 738 / 238	926 / 351 / 176	993 / 490 / 161	935 / 492 / 246	989 / 663 / 219	928 / 615 / 336	1033 / 821 / 296	740 / 618 / 275	904 / 783 / 231	954 / 383 / 176	1001 / 519 / 156	940 / 522 / 239	999 / 701 / 212	942 / 652 / 326	1053 / 865 / 287	768 / 656 / 268	919 / 798 / 216		
	3	967 / 638 / 171	990 / 828 / 146	957 / 560 / 233	1025 / 748 / 205	973 / 700 / 316	1056 / 892 / 267	810 / 686 / 253	992 / 852 / 208	974 / 679 / 166	966 / 846 / 137	966 / 595 / 226	1075 / 819 / 205	993 / 742 / 306	1080 / 940 / 257	832 / 707 / 238	1044 / 899 / 201	979 / 719 / 161	973 / 890 / 132	1004 / 650 / 226	1090 / 864 / 198	1012 / 784 / 296	1102 / 985 / 247	875 / 746 / 231	1051 / 907 / 186		
Wind Speed [mph]		110								115																	
100	1	906 / 287 / 185	956 / 406 / 171	907 / 397 / 260	944 / 542 / 233	897 / 517 / 366	956 / 678 / 316	713 / 542 / 312	785 / 664 / 253	903 / 304 / 181	957 / 428 / 166	907 / 420 / 253	976 / 587 / 233	906 / 545 / 356	969 / 711 / 306	715 / 559 / 297	823 / 698 / 245										
	2	956 / 406 / 171	1007 / 547 / 151	944 / 552 / 233	1042 / 762 / 212	956 / 687 / 316	1034 / 875 / 267	785 / 674 / 253	961 / 837 / 208	957 / 428 / 166	1047 / 593 / 151	976 / 598 / 233	1051 / 799 / 205	969 / 721 / 306	1049 / 912 / 257	823 / 708 / 245	1001 / 874 / 201										
	3	984 / 758 / 156	980 / 931 / 127	1013 / 685 / 219	1065 / 874 / 185	1029 / 823 / 287	1122 / 1027 / 237	918 / 785 / 223	1094 / 946 / 179	989 / 796 / 151	984 / 969 / 122	1021 / 719 / 212	1075 / 911 / 178	1045 / 860 / 277	1138 / 1065 / 227	958 / 821 / 216	1133 / 981 / 171										
Wind Speed [mph]		120								130																	
100	1	925 / 330 / 181	987 / 463 / 166	931 / 454 / 253	980 / 616 / 226	914 / 573 / 346	1013 / 768 / 306	735 / 589 / 290	859 / 731 / 238	903 / 304 / 181	957 / 428 / 166	907 / 420 / 253	976 / 587 / 233	906 / 545 / 356	969 / 711 / 306	715 / 559 / 297	823 / 698 / 245										
	2	987 / 463 / 166	1052 / 620 / 146	980 / 627 / 226	1059 / 834 / 198	1013 / 778 / 306	1063 / 947 / 247	859 / 741 / 238	1039 / 908 / 193	957 / 428 / 166	1047 / 593 / 151	976 / 598 / 233	1051 / 799 / 205	969 / 721 / 306	1049 / 912 / 257	823 / 708 / 245	1001 / 874 / 201										
	3	992 / 832 / 146	987 / 1004 / 117	1027 / 752 / 205	1083 / 946 / 171	1059 / 896 / 267	1170 / 1099 / 218	996 / 856 / 208	1220 / 1059 / 171	989 / 796 / 151	984 / 969 / 122	1021 / 719 / 212	1075 / 911 / 178	1045 / 860 / 277	1138 / 1065 / 227	958 / 821 / 216	1133 / 981 / 171										

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	922 / 346 / 176	988 / 484 / 161	931 / 477 / 246	983 / 644 / 219	922 / 600 / 336	1025 / 800 / 296	753 / 618 / 282	893 / 762 / 231	941 / 389 / 171	1020 / 542 / 156	955 / 535 / 239	1020 / 718 / 212	964 / 670 / 326	1044 / 859 / 277	777 / 656 / 260	957 / 820 / 216	961 / 432 / 166	1052 / 599 / 151	981 / 593 / 233	1056 / 793 / 205	974 / 718 / 306	1057 / 909 / 257	831 / 705 / 245	1011 / 870 / 201
	2	988 / 484 / 161	1057 / 646 / 142	983 / 655 / 219	1065 / 867 / 192	1025 / 811 / 296	1074 / 978 / 237	893 / 773 / 231	1073 / 940 / 186	1020 / 542 / 156	1101 / 718 / 137	1020 / 731 / 212	1074 / 926 / 178	1044 / 871 / 277	1137 / 1078 / 227	957 / 832 / 216	1131 / 994 / 171	1052 / 599 / 151	1145 / 789 / 132	1056 / 807 / 205	1075 / 974 / 164	1057 / 921 / 257	1176 / 1121 / 208	1011 / 883 / 201	1229 / 1083 / 164
	3	994 / 866 / 142	988 / 1036 / 112	1068 / 809 / 205	1089 / 977 / 164	1071 / 928 / 257	1200 / 1129 / 208	1032 / 888 / 201	1254 / 1090 / 164	995 / 927 / 132	1030 / 1139 / 108	1078 / 869 / 192	1143 / 1077 / 157	1089 / 985 / 237	1310 / 1236 / 198	1094 / 945 / 186	1307 / 1138 / 149	990 / 979 / 122	1019 / 1180 / 98	1081 / 920 / 178	1141 / 1120 / 144	1147 / 1076 / 227	1339 / 1267 / 178	1144 / 991 / 171	1411 / 1231 / 141
Wind Speed [mph]		170								180															
100	1	981 / 476 / 161	1084 / 656 / 146	975 / 632 / 219	1093 / 867 / 198	1014 / 786 / 296	1105 / 988 / 247	878 / 749 / 231	1055 / 910 / 186	1001 / 519 / 156	1076 / 689 / 137	999 / 689 / 212	1088 / 906 / 185	1053 / 854 / 287	1103 / 1021 / 227	919 / 787 / 216	1133 / 981 / 179	1001 / 519 / 156	1076 / 689 / 137	999 / 689 / 212	1088 / 906 / 185	1053 / 854 / 287	1103 / 1021 / 227	919 / 787 / 216	1133 / 981 / 179
	2	1084 / 656 / 146	1188 / 860 / 127	1055 / 852 / 192	1115 / 1055 / 157	1105 / 1002 / 247	1262 / 1206 / 198	1055 / 924 / 186	1323 / 1168 / 156	1076 / 689 / 137	1230 / 928 / 122	1088 / 922 / 185	1153 / 1133 / 151	1103 / 1034 / 227	1343 / 1286 / 188	1133 / 995 / 179	1340 / 1185 / 141	1076 / 689 / 137	1230 / 928 / 122	1088 / 922 / 185	1153 / 1133 / 151	1103 / 1034 / 227	1343 / 1286 / 188	1133 / 995 / 179	1340 / 1185 / 141
	3	978 / 1018 / 112	1051 / 1266 / 93	1122 / 1000 / 171	1185 / 1205 / 137	1180 / 1110 / 208	1426 / 1352 / 168	1233 / 1071 / 164	1508 / 1317 / 134	1004 / 1093 / 108	1079 / 1346 / 88	1112 / 1033 / 157	1242 / 1285 / 130	1258 / 1186 / 198	1503 / 1427 / 158	1318 / 1147 / 156	1595 / 1396 / 127	1004 / 1093 / 108	1079 / 1346 / 88	1112 / 1033 / 157	1242 / 1285 / 130	1258 / 1186 / 198	1503 / 1427 / 158	1318 / 1147 / 156	1595 / 1396 / 127
Wind Speed [mph]		190								200															
100	1	1020 / 562 / 151	1104 / 741 / 132	1022 / 744 / 205	1076 / 936 / 171	1052 / 887 / 267	1159 / 1089 / 218	987 / 847 / 208	1209 / 1048 / 171	1039 / 605 / 146	1174 / 823 / 132	1044 / 799 / 198	1103 / 997 / 164	1086 / 948 / 257	1224 / 1153 / 208	1013 / 873 / 193	1279 / 1112 / 164	1039 / 605 / 146	1174 / 823 / 132	1044 / 799 / 198	1103 / 997 / 164	1086 / 948 / 257	1224 / 1153 / 208	1013 / 873 / 193	1279 / 1112 / 164
	2	1104 / 741 / 132	1269 / 995 / 117	1076 / 953 / 171	1131 / 1149 / 137	1159 / 1103 / 218	1416 / 1358 / 178	1209 / 1064 / 171	1413 / 1252 / 134	1174 / 823 / 132	1249 / 1011 / 108	1103 / 1015 / 164	1157 / 1210 / 130	1224 / 1168 / 208	1480 / 1422 / 168	1279 / 1128 / 164	1565 / 1388 / 134	1174 / 823 / 132	1249 / 1011 / 108	1103 / 1015 / 164	1157 / 1210 / 130	1224 / 1168 / 208	1480 / 1422 / 168	1279 / 1128 / 164	1565 / 1388 / 134
	3	1027 / 1164 / 103	1103 / 1417 / 83	1145 / 1102 / 151	1309 / 1357 / 123	1330 / 1257 / 188	1397 / 1218 / 149	1672 / 1464 / 119	1047 / 1229 / 98	1147 / 1479 / 78	1175 / 1167 / 144	1369 / 1421 / 117	1395 / 1320 / 178	1469 / 1283 / 141				1047 / 1229 / 98	1147 / 1479 / 78	1175 / 1167 / 144	1369 / 1421 / 117	1395 / 1320 / 178	1469 / 1283 / 141		

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

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Notation (ACSE 7-22)

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 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs									
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
0	1	512 / 379 / 39	609 / 476 / 32	528 / 487 / 41	619 / 597 / 33	638 / 562 / 42	769 / 697 / 35	632 / 519 / 46	764 / 643 / 38	525 / 394 / 37	633 / 500 / 31	551 / 513 / 39	641 / 623 / 32	662 / 588 / 40	791 / 721 / 33	657 / 543 / 44	787 / 665 / 36	546 / 415 / 35	670 / 533 / 30	559 / 527 / 37	659 / 645 / 30	684 / 611 / 38	809 / 740 / 31	679 / 564 / 42	830 / 704 / 34		
	2	609 / 476 / 32	736 / 597 / 26	619 / 608 / 33	734 / 742 / 27	748 / 687 / 34	918 / 860 / 28	764 / 653 / 38	914 / 794 / 30	633 / 500 / 31	779 / 637 / 26	641 / 634 / 32	751 / 763 / 25	791 / 731 / 33	932 / 877 / 26	787 / 675 / 36	963 / 839 / 29	670 / 533 / 30	799 / 656 / 24	659 / 656 / 30	789 / 806 / 24	809 / 750 / 31	976 / 920 / 25	830 / 714 / 34	1010 / 882 / 28		
	3	604 / 737 / 24	708 / 885 / 19	695 / 685 / 28	852 / 859 / 24	875 / 805 / 30	1049 / 980 / 24	871 / 742 / 32	1046 / 902 / 26	619 / 760 / 23	743 / 933 / 19	735 / 729 / 28	865 / 875 / 22	893 / 824 / 28	1099 / 1029 / 23	919 / 786 / 31	1096 / 948 / 25	651 / 803 / 22	776 / 978 / 18	751 / 749 / 26	905 / 919 / 21	937 / 868 / 27	1145 / 1074 / 22	966 / 828 / 30	1142 / 990 / 24		
	1	512 / 379 / 39	609 / 476 / 32	528 / 487 / 48	619 / 597 / 38	638 / 562 / 50	769 / 697 / 41	632 / 519 / 51	764 / 643 / 42	525 / 394 / 37	633 / 500 / 31	551 / 513 / 46	641 / 623 / 36	662 / 588 / 48	791 / 721 / 39	657 / 543 / 49	787 / 665 / 40	546 / 415 / 35	670 / 533 / 30	559 / 527 / 43	659 / 645 / 35	684 / 611 / 46	809 / 740 / 37	679 / 564 / 47	830 / 704 / 39		
	2	609 / 476 / 32	736 / 597 / 26	619 / 608 / 38	734 / 742 / 31	748 / 687 / 40	918 / 860 / 33	764 / 653 / 42	914 / 794 / 34	633 / 500 / 31	779 / 637 / 26	641 / 634 / 36	751 / 763 / 29	791 / 731 / 39	932 / 877 / 31	787 / 675 / 40	963 / 839 / 33	670 / 533 / 30	799 / 656 / 24	659 / 656 / 35	789 / 806 / 28	809 / 750 / 37	976 / 920 / 30	830 / 714 / 39	1010 / 882 / 32		
	3	604 / 737 / 24	708 / 885 / 19	695 / 685 / 33	852 / 859 / 27	875 / 805 / 36	1049 / 980 / 29	871 / 742 / 36	1046 / 902 / 29	619 / 760 / 23	743 / 933 / 19	735 / 729 / 32	865 / 875 / 25	893 / 824 / 33	1099 / 1029 / 28	919 / 786 / 35	1096 / 948 / 28	651 / 803 / 22	776 / 978 / 18	751 / 749 / 30	905 / 919 / 24	937 / 868 / 32	1145 / 1074 / 27	966 / 828 / 34	1142 / 990 / 27		
	1	513 / 379 / 46	609 / 476 / 38	528 / 487 / 61	619 / 597 / 49	638 / 562 / 64	769 / 697 / 53	632 / 519 / 61	764 / 643 / 50	525 / 394 / 44	633 / 500 / 36	551 / 513 / 59	641 / 623 / 47	662 / 588 / 61	791 / 721 / 50	657 / 543 / 58	787 / 665 / 47	546 / 415 / 42	670 / 533 / 35	559 / 527 / 55	659 / 645 / 45	684 / 611 / 58	809 / 740 / 47	679 / 564 / 56	830 / 704 / 46		
	2	609 / 476 / 38	736 / 597 / 31	619 / 608 / 49	734 / 742 / 40	748 / 687 / 51	918 / 860 / 42	764 / 653 / 50	914 / 794 / 40	633 / 500 / 36	779 / 637 / 30	641 / 634 / 47	751 / 763 / 37	791 / 731 / 50	932 / 877 / 40	787 / 675 / 47	963 / 839 / 39	670 / 533 / 35	799 / 656 / 29	659 / 656 / 45	789 / 806 / 36	809 / 750 / 47	976 / 920 / 38	830 / 714 / 46	1010 / 882 / 38		
	3	604 / 737 / 29	708 / 885 / 23	695 / 685 / 42	852 / 859 / 35	875 / 805 / 45	1049 / 980 / 37	871 / 742 / 43	1046 / 902 / 35	619 / 760 / 27	743 / 933 / 22	735 / 729 / 41	865 / 875 / 33	893 / 824 / 42	1099 / 1029 / 35	919 / 786 / 42	1096 / 948 / 34	651 / 803 / 26	776 / 978 / 21	751 / 749 / 39	905 / 919 / 32	937 / 868 / 41	1145 / 1074 / 34	966 / 828 / 40	1142 / 990 / 32		
5	1	565 / 434 / 34	689 / 553 / 28	577 / 549 / 35	693 / 682 / 29	703 / 631 / 36	848 / 779 / 30	716 / 598 / 41	871 / 742 / 33	595 / 462 / 33	706 / 570 / 27	607 / 582 / 35	727 / 719 / 28	738 / 666 / 35	886 / 817 / 29	733 / 615 / 39	882 / 753 / 31	ASCE Group Zone	Panal Angle	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3			
	2	689 / 553 / 28	839 / 692 / 24	693 / 694 / 29	826 / 846 / 24	848 / 790 / 30	1017 / 961 / 24	871 / 753 / 33	1054 / 922 / 27	706 / 570 / 27	878 / 728 / 23	706 / 711 / 28	860 / 885 / 23	886 / 828 / 29	1054 / 999 / 23	882 / 764 / 31	1095 / 959 / 26					1 = 1	2 = 2	3 = 3			
	3	658 / 816 / 21	807 / 1019 / 17	787 / 788 / 25	942 / 960 / 20	978 / 909 / 26	1187 / 1116 / 21	975 / 838 / 28	1184 / 1028 / 23	685 / 854 / 20	835 / 1058 / 17	822 / 826 / 24	977 / 998 / 20	1017 / 948 / 25	1224 / 1153 / 20	1014 / 873 / 27	1280 / 1112 / 23					1 = 1	2 = 2	3 = 3			
	1	565 / 434 / 34	689 / 553 / 28	577 / 549 / 41	693 / 682 / 34	703 / 631 / 43	848 / 779 / 36	716 / 598 / 45	871 / 742 / 37	595 / 462 / 33	706 / 570 / 27	607 / 582 / 40	727 / 719 / 33	738 / 666 / 42	886 / 817 / 34	733 / 615 / 43	882 / 753 / 35				7.5 - 15	Panal Angle	Mono Slope	15 - 30	1 = 1	2 = 2	3 = 3
	2	689 / 553 / 28	839 / 692 / 24	693 / 694 / 34	826 / 846 / 27	848 / 790 / 36	1017 / 961 / 29	871 / 753 / 37	1054 / 922 / 30	706 / 570 / 27	878 / 728 / 23	706 / 711 / 32	860 / 885 / 26	886 / 828 / 34	1054 / 999 / 28	882 / 764 / 35	1095 / 959 / 29								1 = 1	2 = 2	3 = 3
	3	658 / 816 / 21	807 / 1019 / 17	787 / 788 / 29	942 / 960 / 24	978 / 909 / 31	1187 / 1116 / 25	975 / 838 / 32	1184 / 1028 / 26	685 / 854 / 20	835 / 1058 / 17	822 / 826 / 28	977 / 998 / 23	1017 / 948 / 30	1224 / 1153 / 24	1014 / 873 / 30	1280 / 1112 / 26								1 = 1	2 = 2	3 = 3
	1	565 / 434 / 40	689 / 553 / 34	577 / 549 / 53	693 / 682 / 43	703 / 631 / 55	848 / 779 / 45	716 / 598 / 54	871 / 742 / 45	595 / 462 / 40	706 / 570 / 32	607 / 582 / 52	727 / 719 / 42	738 / 666 / 54	886 / 817 / 44	733 / 615 / 52	882 / 753 / 42				30 - 45	Panal Angle	Mono Slope	30 - 45	1 = 1	2 = 2	3 = 3
	2	689 / 553 / 34	839 / 692 / 28	693 / 694 / 43	826 / 846 / 35	848 / 790 / 45	1017 / 961 / 37	871 / 753 / 45	1054 / 922 / 36	706 / 570 / 32	878 / 728 / 27	706 / 711 / 41	860 / 885 / 34	886 / 828 / 44	1054 / 999 / 35	882 / 764 / 42	1095 / 959 / 35								1 = 1	2 = 2	3 = 3
	3	658 / 816 / 25	807 / 1019 / 20	787 / 788 / 37	942 / 960 / 30	978 / 909 / 40	1187 / 1116 / 32	975 / 838 / 38	1184 / 1028 / 31	685 / 854 / 24	835 / 1058 / 20	822 / 826 / 36	977 / 998 / 29	1017 / 948 / 38	1224 / 1153 / 31	1014 / 873 / 36	1280 / 1112 / 31								1 = 1	2 = 2	3 = 3
10	1	612 / 478 / 32	739 / 600 / 26	622 / 600 / 33	737 / 732 / 27	751 / 681 / 34	922 / 853 / 28	767 / 646 / 38	918 / 786 / 30	595 / 462 / 33	706 / 570 / 27	607 / 582 / 35	727 / 719 / 28	738 / 666 / 35	886 / 817 / 29	733 / 615 / 39	882 / 753 / 31	ASCE Group Zone	Panal Angle	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3			
	2	739 / 600 / 26	885 / 737 / 21	737 / 745 / 27	893 / 921 / 22	922 / 864 / 28	1088 / 1033 / 22	918 / 797 / 30	1132 / 994 / 25	706 / 570 / 27	878 / 728 / 23	706 / 711 / 28	860 / 885 / 23	886 / 828 / 29	1054 / 999 / 23	882 / 764 / 31	1095 / 959 / 26					1 = 1	2 = 2	3 = 3			
	3	711 / 889 / 19	859 / 1092 / 16	855 / 863 / 24	1008 / 1032 / 19	1053 / 984 / 24	1256 / 1185 / 19	1050 / 906 / 26	1316 / 1145 / 22	685 / 854 / 20	835 / 1058 / 17	822 / 826 / 24	977 / 998 / 20	1017 / 948 / 25	1224 / 1153 / 20	1014 / 873 / 27	1280 / 1112 / 23					1 = 1	2 = 2	3 = 3			
	1	612 / 478 / 32	739 / 600 / 26	622 / 600 / 38	737 / 732 / 31	751 / 681 / 40	922 / 853 / 33	767 / 646 / 42	918 / 786 / 34	595 / 462 / 33	706 / 570 / 27	607 / 582 / 40	727 / 719 / 33	738 / 666 / 42	886 / 817 / 34	733 / 615 / 43	882 / 753 / 35				7.5 - 15	Panal Angle	Mono Slope	15 - 30	1 = 1	2 = 2	3 = 3
	2	739 / 600 / 26	885 / 737 / 21	737 / 745 / 31	893 / 921 / 25	922 / 864 / 33	1088 / 1033 / 27	918 / 797 / 34	1132 / 994 / 28	706 / 570 / 27	878 / 728 / 23	706 / 711 / 32	860 / 885 / 26	886 / 828 / 34	1054 / 999 / 28	882 / 764 / 35	1095 / 959 / 29								1 = 1	2 = 2	3 = 3
	3	711 / 889 / 19	859 / 1092 / 16	855 / 863 / 27	1008 / 1032 / 22	1053 / 984 / 29	1256 / 1185 / 23	1050 / 906 / 29	1316 / 1145 / 25	685 / 854 / 20	835 / 1058 / 17	822 / 826 / 28	977 / 998 / 23	1017 / 948 / 30	1224 / 1153 / 24	1014 / 873 / 30	1280 / 1112 / 26								1 = 1	2 = 2	3 = 3
	1	612 / 478 / 38	739 / 600 / 31	622 / 600 / 49	737 / 732 / 40	751 / 681 / 51	922 / 853 / 42	767 / 646 / 50	918 / 786 / 40	595 / 462 / 40	706 / 570 / 32	607 / 582 / 52	727 / 719 / 42	738 / 666 / 54	886 / 817 / 44	733 / 615 / 52	882 / 753 / 42				30 - 45	Panal Angle	Mono Slope	30 - 45	1 = 1	2 = 2	3 = 3
	2	739 / 600 / 31	885 / 737 / 25	737 / 745 / 40	893 / 921 / 33	922 / 864 / 42	1088 / 1033 / 34	918 / 797 / 40	1132 / 994 / 34	706 / 570 / 32	878 / 728 / 27	706 / 711 / 41	860 / 885 / 34	886 / 828 / 44	1054 / 999 / 35	882 / 764 / 42	1095 / 959 / 35								1 = 1	2 = 2	3 = 3
	3	711 / 889 / 19	859 / 1092 / 16	855 / 863 / 27	1008 / 1032 / 22	1053 / 984 / 29	1256 / 1185 / 23	1050 / 906 / 29	1316 / 1145 / 25	685 / 854 / 20	835 / 1058 / 17	822 / 826 / 28	977 / 998 / 23	1017 / 948 / 30	1224 / 1153 / 24	1014 / 873 / 30	1280 / 1112 / 26								1 = 1	2 = 2	3 = 3

Exposure Category : D

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				83in x 41.5in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
		0	1	640 / 505 / 31	770 / 629 / 26	634 / 615 / 32	766 / 765 / 26	782 / 712 / 33	956 / 886 / 27	800 / 676 / 37	952 / 817 / 29	680 / 543 / 29	807 / 664 / 24	685 / 672 / 30	821 / 825 / 24	842 / 772 / 31	1016 / 946 / 25	837 / 712 / 33	1012 / 872 / 27	712 / 575 / 27	858 / 712 / 22	713 / 705 / 28	869 / 878 / 23	895 / 825 / 29	1064 / 995 / 23	890 / 760 / 31	1105 / 955 / 26
	2	770 / 629 / 26	918 / 767 / 21	766 / 778 / 26	923 / 955 / 21	956 / 898 / 27	1118 / 1063 / 21	952 / 829 / 29	1166 / 1025 / 24	807 / 664 / 24	978 / 822 / 19	794 / 812 / 24	975 / 1014 / 20	1016 / 959 / 25	1223 / 1167 / 20	1012 / 885 / 27	1278 / 1127 / 23	858 / 712 / 22	1069 / 902 / 19	869 / 894 / 23	1014 / 1059 / 18	1064 / 1009 / 23	1257 / 1202 / 18	1105 / 969 / 26	1320 / 1166 / 21		
	3	735 / 921 / 19	881 / 1121 / 15	886 / 897 / 23	1035 / 1062 / 18	1086 / 1016 / 23	1283 / 1211 / 18	1083 / 936 / 25	1347 / 1174 / 21	775 / 978 / 17	960 / 1228 / 14	941 / 958 / 21	1132 / 1165 / 17	1140 / 1071 / 21	1393 / 1318 / 18	1189 / 1031 / 24	1468 / 1281 / 20	843 / 1068 / 17	981 / 1258 / 13	986 / 1008 / 20	1163 / 1201 / 16	1236 / 1164 / 20	1495 / 1417 / 17	1233 / 1072 / 22	1493 / 1305 / 18		
5	1	640 / 505 / 31	770 / 629 / 26	634 / 615 / 36	766 / 765 / 30	782 / 712 / 39	956 / 886 / 32	800 / 676 / 41	952 / 817 / 33	680 / 543 / 29	807 / 664 / 24	685 / 672 / 35	821 / 825 / 28	842 / 772 / 37	1016 / 946 / 30	837 / 712 / 37	1012 / 872 / 30	712 / 575 / 27	858 / 712 / 22	713 / 705 / 32	869 / 878 / 26	895 / 825 / 34	1064 / 995 / 28	890 / 760 / 35	1105 / 955 / 29		
	2	770 / 629 / 26	918 / 767 / 21	766 / 778 / 30	923 / 955 / 24	956 / 898 / 32	1118 / 1063 / 25	952 / 829 / 33	1166 / 1025 / 27	807 / 664 / 24	978 / 822 / 19	794 / 812 / 27	975 / 1014 / 23	1016 / 959 / 30	1223 / 1167 / 24	1012 / 885 / 30	1278 / 1127 / 26	858 / 712 / 22	1069 / 902 / 19	869 / 894 / 26	1014 / 1059 / 21	1064 / 1009 / 28	1257 / 1202 / 22	1105 / 969 / 29	1320 / 1166 / 24		
	3	735 / 921 / 19	881 / 1121 / 15	886 / 897 / 26	1035 / 1062 / 21	1086 / 1016 / 28	1283 / 1211 / 22	1083 / 936 / 28	1347 / 1174 / 24	775 / 978 / 17	960 / 1228 / 14	941 / 958 / 24	1132 / 1165 / 20	1140 / 1071 / 25	1393 / 1318 / 21	1189 / 1031 / 27	1468 / 1281 / 22	843 / 1068 / 17	981 / 1258 / 13	986 / 1008 / 23	1163 / 1201 / 18	1236 / 1164 / 24	1495 / 1417 / 20	1233 / 1072 / 25	1493 / 1305 / 20		
10	1	640 / 505 / 37	770 / 629 / 30	634 / 615 / 47	766 / 765 / 39	782 / 712 / 50	956 / 886 / 41	800 / 676 / 49	952 / 817 / 39	680 / 543 / 35	807 / 664 / 28	685 / 672 / 45	821 / 825 / 36	842 / 772 / 47	1016 / 946 / 38	837 / 712 / 45	1012 / 872 / 36	712 / 575 / 32	858 / 712 / 26	713 / 705 / 41	869 / 878 / 34	895 / 825 / 44	1064 / 995 / 35	890 / 760 / 42	1105 / 955 / 35		
	2	770 / 629 / 30	918 / 767 / 25	766 / 778 / 39	923 / 955 / 32	956 / 898 / 41	1118 / 1063 / 32	952 / 829 / 39	1166 / 1025 / 32	807 / 664 / 28	978 / 822 / 23	794 / 812 / 35	975 / 1014 / 29	1016 / 959 / 38	1223 / 1167 / 31	1012 / 885 / 36	1278 / 1127 / 31	858 / 712 / 26	1069 / 902 / 22	869 / 894 / 34	1014 / 1059 / 27	1064 / 1009 / 35	1257 / 1202 / 28	1105 / 969 / 35	1320 / 1166 / 28		
	3	735 / 921 / 22	881 / 1121 / 18	886 / 897 / 34	1035 / 1062 / 27	1086 / 1016 / 35	1283 / 1211 / 28	1083 / 936 / 34	1347 / 1174 / 28	775 / 978 / 20	960 / 1228 / 17	941 / 958 / 32	1132 / 1165 / 26	1140 / 1071 / 32	1393 / 1318 / 27	1189 / 1031 / 32	1468 / 1281 / 27	843 / 1068 / 20	981 / 1258 / 15	986 / 1008 / 29	1163 / 1201 / 23	1236 / 1164 / 31	1495 / 1417 / 25	1233 / 1072 / 29	1493 / 1305 / 24		
Wind Speed [mph]		170								180																	
0	1	758 / 618 / 26	934 / 780 / 21	754 / 751 / 26	908 / 922 / 21	940 / 871 / 27	1149 / 1078 / 22	969 / 831 / 30	1146 / 993 / 24	799 / 656 / 24	975 / 818 / 20	789 / 792 / 24	976 / 996 / 20	976 / 908 / 25	1174 / 1105 / 20	1010 / 869 / 28	1227 / 1066 / 23										
	2	934 / 780 / 21	1111 / 942 / 17	908 / 939 / 21	1091 / 1142 / 17	1149 / 1093 / 22	1342 / 1287 / 18	1146 / 1007 / 24	1414 / 1252 / 20	975 / 818 / 20	1191 / 1013 / 17	937 / 973 / 20	1163 / 1221 / 16	1174 / 1120 / 20	1420 / 1363 / 17	1227 / 1081 / 23	1501 / 1330 / 19										
	3	866 / 1102 / 15	1044 / 1343 / 12	1064 / 1091 / 19	1242 / 1286 / 15	1327 / 1253 / 19	1587 / 1507 / 16	1325 / 1154 / 21	1585 / 1387 / 17	923 / 1178 / 14	1100 / 1418 / 12	1087 / 1118 / 17	1313 / 1362 / 14	1338 / 1265 / 18	1409 / 1230 / 20												
5	1	758 / 618 / 26	934 / 780 / 21	754 / 751 / 30	908 / 922 / 24	940 / 871 / 32	1149 / 1078 / 27	969 / 831 / 34	1146 / 993 / 27	799 / 656 / 24	975 / 818 / 20	789 / 792 / 28	976 / 996 / 24	976 / 908 / 30	1174 / 1105 / 24	1010 / 869 / 32	1227 / 1066 / 26										
	2	934 / 780 / 21	1111 / 942 / 17	908 / 939 / 24	1091 / 1142 / 20	1149 / 1093 / 27	1342 / 1287 / 21	1146 / 1007 / 27	1414 / 1252 / 22	975 / 818 / 20	1191 / 1013 / 17	937 / 973 / 23	1163 / 1221 / 19	1174 / 1120 / 24	1420 / 1363 / 20	1227 / 1081 / 26	1501 / 1330 / 21										
	3	866 / 1102 / 15	1044 / 1343 / 12	1064 / 1091 / 22	1242 / 1286 / 17	1327 / 1253 / 23	1587 / 1507 / 19	1325 / 1154 / 24	1585 / 1387 / 19	923 / 1178 / 14	1100 / 1418 / 12	1087 / 1118 / 20	1313 / 1362 / 16	1338 / 1265 / 21	1409 / 1230 / 22												
10	1	758 / 618 / 30	934 / 780 / 25	754 / 751 / 39	908 / 922 / 32	940 / 871 / 41	1149 / 1078 / 34	969 / 831 / 40	1146 / 993 / 32	799 / 656 / 29	975 / 818 / 24	789 / 792 / 36	976 / 996 / 30	976 / 908 / 38	1174 / 1105 / 31	1010 / 869 / 38	1227 / 1066 / 31										
	2	934 / 780 / 25	1111 / 942 / 20	908 / 939 / 32	1091 / 1142 / 26	1149 / 1093 / 34	1342 / 1287 / 27	1146 / 1007 / 32	1414 / 1252 / 27	975 / 818 / 24	1191 / 1013 / 20	937 / 973 / 29	1163 / 1221 / 24	1174 / 1120 / 31	1420 / 1363 / 25	1227 / 1081 / 31	1501 / 1330 / 25										
	3	866 / 1102 / 18	1044 / 1343 / 15	1064 / 1091 / 28	1242 / 1286 / 22	1327 / 1253 / 29	1587 / 1507 / 24	1325 / 1154 / 28	1585 / 1387 / 23	923 / 1178 / 17	1100 / 1418 / 14	1087 / 1118 / 26	1313 / 1362 / 21	1338 / 1265 / 27	1409 / 1230 / 27												
Wind Speed [mph]		190								200																	
0	1	835 / 690 / 23	1006 / 847 / 19	847 / 854 / 24	998 / 1022 / 19	1043 / 974 / 24	1244 / 1173 / 19	1082 / 933 / 27	1304 / 1134 / 22	893 / 742 / 22	1069 / 904 / 18	872 / 883 / 22	1056 / 1084 / 18	1108 / 1037 / 23	1308 / 1236 / 18	1105 / 955 / 25	1375 / 1198 / 21										
	2	1006 / 847 / 19	1267 / 1081 / 16	998 / 1040 / 19	1229 / 1293 / 16	1244 / 1189 / 19	1487 / 1430 / 16	1304 / 1151 / 22	1578 / 1401 / 18	1069 / 904 / 18	1338 / 1145 / 15	1056 / 1103 / 18	1288 / 1359 / 15	1308 / 1252 / 18		1375 / 1215 / 21	1644 / 1461 / 17										
	3	975 / 1248 / 14		1152 / 1188 / 16	1375 / 1429 / 13	1406 / 1332 / 17		1486 / 1299 / 19		1022 / 1311 / 13		1211 / 1252 / 16		1557 / 1477 / 17		1554 / 1360 / 18											
5	1	835 / 690 / 23	1006 / 847 / 19	847 / 854 / 27	998 / 1022 / 22	1043 / 974 / 29	1244 / 1173 / 23	1082 / 933 / 30	1304 / 1134 / 25	893 / 742 / 22	1069 / 904 / 18	872 / 883 / 25	1056 / 1084 / 21	1108 / 1037 / 28	1308 / 1236 / 22	1105 / 955 / 28	1375 / 1198 / 24										
	2	1006 / 847 / 19	1267 / 1081 / 16	998 / 1040 / 22	1229 / 1293 / 18	1244 / 1189 / 23	1487 / 1430 / 19	1304 / 1151 / 25	1578 / 1401 / 20	1069 / 904 / 18	1338 / 1145 / 15	1056 / 1103 / 21	1288 / 1359 / 17	1308 / 1252 / 22		1375 / 1215 / 24	1644 / 1461 / 19										
	3	975 / 1248 / 14		1152 / 1188 / 19	1375 / 1429 / 15	1406 / 1332 / 20		1486 / 1299 / 21		1022 / 1311 / 13		1211 / 1252 / 18		1557 / 1477 / 20		1554 / 1360 / 20											
10	1	835 / 690 / 27	1006 / 847 / 22	847 / 854 / 35	998 / 1022 / 28	1043 / 974 / 37	1244 / 1173 / 29	1082 / 933 / 36	1304 / 1134 / 29	893 / 742 / 26	1069 / 904 / 21	872 / 883 / 33	1056 / 1084 / 27	1108 / 1037 / 35	1308 / 1236 / 28	1105 / 955 / 34	1375 / 1198 / 28										
	2	1006 / 847 / 22	1267 / 1081 / 19	998 / 1040 / 28	1229 / 1293 / 23	1244 / 1189 / 29	1487 / 1430 / 24	1304 / 1151 / 29	1578 / 1401 / 24	1069 / 904 / 21	1338 / 1145 / 18	1056 / 1103 / 27	1288 / 1359 / 22	1308 / 1252 / 28		1375 / 1215 / 28	1644 / 1461 / 23										
	3	975 / 1248 / 16		1152 / 1188 / 24	1375 / 1429 / 20	1406 / 1332 / 25		1486 / 1299 / 25		1022 / 1311 / 15		1211 / 1252 / 23		1557 / 1477 / 25		1554 / 1360 / 24											

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Exposure Category : D

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B = Horizontal dimension of building measured normal to wind direction, in ft (m).
 h = Mean roof height, in ft (m).
 θ = Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		15	1	561 / 372 / 53	610 / 476 / 44	561 / 487 / 75	619 / 597 / 60	638 / 562 / 78	769 / 697 / 64	632 / 519 / 71	764 / 643 / 58	571 / 394 / 51	633 / 500 / 42	571 / 513 / 72	641 / 623 / 58	662 / 588 / 74	791 / 721 / 60	657 / 543 / 68	787 / 665 / 55	580 / 415 / 49	670 / 533 / 41	568 / 527 / 68	659 / 645 / 55	684 / 611 / 71	809 / 740 / 57
2	610 / 476 / 44		736 / 597 / 36	619 / 608 / 60	734 / 742 / 49	748 / 687 / 62	918 / 860 / 52	764 / 653 / 58	914 / 794 / 47	633 / 500 / 42	779 / 637 / 36	641 / 634 / 58	751 / 763 / 46	791 / 731 / 60	932 / 877 / 48	787 / 675 / 55	963 / 839 / 45	670 / 533 / 41	799 / 656 / 34	659 / 656 / 55	789 / 806 / 44	809 / 750 / 57	976 / 920 / 46	830 / 714 / 53	1010 / 882 / 44
3	604 / 737 / 34		708 / 885 / 27	695 / 685 / 52	852 / 859 / 43	875 / 805 / 55	1049 / 980 / 45	871 / 742 / 50	1046 / 902 / 41	619 / 760 / 32	743 / 933 / 26	735 / 729 / 50	865 / 875 / 40	893 / 824 / 52	1099 / 1029 / 43	919 / 786 / 49	1096 / 948 / 39	651 / 803 / 31	776 / 978 / 25	751 / 749 / 47	905 / 919 / 39	937 / 868 / 50	1145 / 1074 / 41	966 / 828 / 47	1142 / 990 / 37
20	1	596 / 358 / 58	658 / 476 / 51	612 / 487 / 89	639 / 597 / 72	638 / 562 / 93	769 / 697 / 76	632 / 519 / 81	764 / 643 / 66	614 / 386 / 57	667 / 500 / 48	621 / 513 / 85	646 / 623 / 68	662 / 588 / 89	791 / 721 / 72	657 / 543 / 77	787 / 665 / 63	620 / 406 / 55	690 / 533 / 47	615 / 527 / 80	659 / 645 / 65	684 / 611 / 85	809 / 740 / 68	679 / 564 / 74	830 / 704 / 61
	2	658 / 476 / 51	736 / 597 / 42	639 / 608 / 72	734 / 742 / 58	748 / 687 / 74	918 / 860 / 62	764 / 653 / 66	914 / 794 / 54	667 / 500 / 48	779 / 637 / 41	646 / 634 / 68	751 / 763 / 54	791 / 731 / 72	932 / 877 / 57	787 / 675 / 63	963 / 839 / 52	690 / 533 / 47	799 / 656 / 38	659 / 656 / 65	789 / 806 / 52	809 / 750 / 68	976 / 920 / 55	830 / 714 / 61	1010 / 882 / 50
	3	605 / 737 / 38	708 / 885 / 31	695 / 685 / 61	852 / 859 / 51	875 / 805 / 66	1049 / 980 / 53	871 / 742 / 57	1046 / 902 / 46	619 / 760 / 36	743 / 933 / 29	735 / 729 / 59	865 / 875 / 47	893 / 824 / 62	1099 / 1029 / 51	919 / 786 / 55	1096 / 948 / 44	651 / 803 / 35	776 / 978 / 28	751 / 749 / 56	905 / 919 / 46	937 / 868 / 60	1145 / 1074 / 49	966 / 828 / 54	1142 / 990 / 43
25	1	596 / 358 / 58	658 / 476 / 51	612 / 487 / 89	639 / 597 / 72	638 / 562 / 112	769 / 697 / 92	632 / 519 / 94	764 / 643 / 77	614 / 386 / 57	667 / 500 / 48	621 / 513 / 85	646 / 623 / 68	662 / 588 / 107	791 / 721 / 86	657 / 543 / 90	787 / 665 / 73	620 / 406 / 55	690 / 533 / 47	615 / 527 / 80	659 / 645 / 65	684 / 611 / 102	809 / 740 / 81	679 / 564 / 85	830 / 704 / 71
	2	658 / 476 / 51	736 / 597 / 42	639 / 608 / 72	734 / 742 / 58	748 / 687 / 89	918 / 860 / 74	764 / 653 / 77	914 / 794 / 62	667 / 500 / 48	779 / 637 / 41	646 / 634 / 68	751 / 763 / 54	791 / 731 / 86	932 / 877 / 69	787 / 675 / 73	963 / 839 / 60	690 / 533 / 47	799 / 656 / 38	659 / 656 / 65	789 / 806 / 52	809 / 750 / 81	976 / 920 / 66	830 / 714 / 71	1010 / 882 / 58
	3	605 / 737 / 38	708 / 885 / 31	695 / 685 / 61	852 / 859 / 51	875 / 805 / 79	1049 / 980 / 64	871 / 742 / 66	1046 / 902 / 54	619 / 760 / 36	743 / 933 / 29	735 / 729 / 59	865 / 875 / 47	893 / 824 / 74	1099 / 1029 / 61	919 / 786 / 64	1096 / 948 / 51	651 / 803 / 35	776 / 978 / 28	751 / 749 / 56	905 / 919 / 46	937 / 868 / 71	1145 / 1074 / 59	966 / 828 / 62	1142 / 990 / 49
15	1	587 / 434 / 47	689 / 553 / 39	577 / 549 / 65	693 / 682 / 53	703 / 631 / 67	848 / 779 / 55	716 / 598 / 63	871 / 742 / 52	607 / 462 / 46	706 / 570 / 37	607 / 582 / 63	727 / 719 / 52	738 / 666 / 66	886 / 817 / 53	733 / 615 / 60	882 / 753 / 49	ASCE Group Zone	Panal Angle	Mono Slope					
	2	689 / 553 / 39	839 / 692 / 33	693 / 694 / 53	826 / 846 / 43	848 / 790 / 55	1017 / 961 / 45	871 / 753 / 52	1054 / 922 / 42	706 / 570 / 37	878 / 728 / 32	706 / 711 / 50	860 / 885 / 41	886 / 828 / 53	1054 / 999 / 43	882 / 764 / 49	1095 / 959 / 41								
	3	658 / 816 / 29	807 / 1019 / 24	787 / 788 / 46	942 / 960 / 37	978 / 909 / 48	1187 / 1116 / 39	975 / 838 / 44	1184 / 1028 / 36	685 / 854 / 28	835 / 1058 / 23	822 / 826 / 44	977 / 998 / 36	1017 / 948 / 46	1224 / 1153 / 37	1014 / 873 / 42	1280 / 1112 / 36								
20	1	638 / 434 / 54	696 / 553 / 45	620 / 549 / 77	693 / 682 / 63	703 / 631 / 81	848 / 779 / 66	716 / 598 / 72	871 / 742 / 59	657 / 462 / 53	706 / 570 / 43	638 / 582 / 75	727 / 719 / 61	738 / 666 / 79	886 / 817 / 64	733 / 615 / 68	882 / 753 / 55	ASCE Group Zone	Panal Angle	Mono Slope					
	2	696 / 553 / 45	839 / 692 / 37	693 / 694 / 63	826 / 846 / 51	848 / 790 / 66	1017 / 961 / 53	871 / 753 / 59	1054 / 922 / 48	706 / 570 / 43	878 / 728 / 36	706 / 711 / 59	860 / 885 / 49	886 / 828 / 64	1054 / 999 / 51	882 / 764 / 55	1095 / 959 / 46								
	3	658 / 816 / 33	807 / 1019 / 27	787 / 788 / 54	942 / 960 / 44	978 / 909 / 57	1187 / 1116 / 47	975 / 838 / 50	1184 / 1028 / 41	685 / 854 / 32	835 / 1058 / 26	822 / 826 / 52	977 / 998 / 42	1017 / 948 / 55	1224 / 1153 / 45	1014 / 873 / 48	1280 / 1112 / 41								
25	1	638 / 434 / 54	696 / 553 / 45	620 / 549 / 77	693 / 682 / 63	703 / 631 / 97	848 / 779 / 79	716 / 598 / 83	871 / 742 / 68	657 / 462 / 53	706 / 570 / 43	638 / 582 / 75	727 / 719 / 61	738 / 666 / 94	886 / 817 / 76	733 / 615 / 79	882 / 753 / 64	ASCE Group Zone	Panal Angle	Mono Slope					
	2	696 / 553 / 45	839 / 692 / 37	693 / 694 / 63	826 / 846 / 51	848 / 790 / 79	1017 / 961 / 64	871 / 753 / 68	1054 / 922 / 56	706 / 570 / 43	878 / 728 / 36	706 / 711 / 59	860 / 885 / 49	886 / 828 / 76	1054 / 999 / 61	882 / 764 / 64	1095 / 959 / 54								
	3	658 / 816 / 33	807 / 1019 / 27	787 / 788 / 54	942 / 960 / 44	978 / 909 / 57	1187 / 1116 / 47	975 / 838 / 50	1184 / 1028 / 41	685 / 854 / 32	835 / 1058 / 26	822 / 826 / 52	977 / 998 / 42	1017 / 948 / 55	1224 / 1153 / 45	1014 / 873 / 48	1280 / 1112 / 41								
15	1	612 / 478 / 44	739 / 600 / 36	622 / 600 / 60	737 / 732 / 49	751 / 681 / 62	922 / 853 / 52	767 / 646 / 58	918 / 786 / 47	607 / 462 / 46	706 / 570 / 37	607 / 582 / 63	727 / 719 / 52	738 / 666 / 66	886 / 817 / 53	733 / 615 / 60	882 / 753 / 49	ASCE Group Zone	Panal Angle	Mono Slope					
	2	739 / 600 / 36	885 / 737 / 30	737 / 745 / 49	893 / 921 / 40	922 / 864 / 52	1088 / 1033 / 41	918 / 797 / 47	1132 / 994 / 39	706 / 570 / 37	878 / 728 / 32	706 / 711 / 50	860 / 885 / 41	886 / 828 / 53	1054 / 999 / 43	882 / 764 / 49	1095 / 959 / 41								
	3	711 / 889 / 27	859 / 1092 / 22	855 / 863 / 43	1008 / 1032 / 34	1053 / 984 / 45	1256 / 1185 / 36	1050 / 906 / 41	1316 / 1145 / 34	685 / 854 / 28	835 / 1058 / 23	822 / 826 / 44	977 / 998 / 36	1017 / 948 / 46	1224 / 1153 / 37	1014 / 873 / 42	1280 / 1112 / 36								
20	1	660 / 478 / 51	739 / 600 / 42	640 / 600 / 72	737 / 732 / 58	751 / 681 / 74	922 / 853 / 62	767 / 646 / 66	918 / 786 / 54	657 / 462 / 53	706 / 570 / 43	638 / 582 / 75	727 / 719 / 61	738 / 666 / 79	886 / 817 / 64	733 / 615 / 68	882 / 753 / 55	ASCE Group Zone	Panal Angle	Mono Slope					
	2	739 / 600 / 42	885 / 737 / 34	737 / 745 / 58	893 / 921 / 47	922 / 864 / 62	1088 / 1033 / 49	918 / 797 / 54	1132 / 994 / 44	706 / 570 / 43	878 / 728 / 36	706 / 711 / 59	860 / 885 / 49	886 / 828 / 64	1054 / 999 / 51	882 / 764 / 55	1095 / 959 / 46								
	3	711 / 889 / 31	859 / 1092 / 25	855 / 863 / 51	1008 / 1032 / 40	1053 / 984 / 53	1256 / 1185 / 43	1050 / 906 / 46	1316 / 1145 / 39	685 / 854 / 32	835 / 1058 / 26	822 / 826 / 52	977 / 998 / 42	1017 / 948 / 55	1224 / 1153 / 45	1014 / 873 / 48	1280 / 1112 / 41								
25	1	660 / 478 / 51	739 / 600 / 42	640 / 600 / 72	737 / 732 / 58	751 / 681 / 89	922 / 853 / 74	767 / 646 / 77	918 / 786 / 62	657 / 462 / 53	706 / 570 / 43	638 / 582 / 75	727 / 719 / 61	738 / 666 / 94	886 / 817 / 76	733 / 615 / 79	882 / 753 / 64	ASCE Group Zone	Panal Angle	Mono Slope					
	2	739 / 600 / 42	885 / 737 / 34	737 / 745 / 58	893 / 921 / 47	922 / 864 / 74	1088 / 1033 / 59	918 / 797 / 62	1132 / 994 / 51	706 / 570 / 43	878 / 728 / 36	706 / 711 / 59	860 / 885 / 49	886 / 828 / 76	1054 / 999 / 61	882 / 764 / 64	1095 / 959 / 54								
	3	711 / 889 / 31	859 / 1092 / 25	855 / 863 / 51	1008 / 1032 / 40	1053 / 984 / 53	1256 / 1185 / 43	1050 / 906 / 46	1316 / 1145 / 39	685 / 854 / 32	835 / 1058 / 26	822 / 826 / 52	977 / 998 / 42	1017 / 948 / 55	1224 / 1153 / 45	1014 / 873 / 48	1280 / 1112 / 41								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	$64'' \text{ to } 71''$	$48'' \text{ to } 63''$	$x \leq 47''$
---------------	-------------------------	-------------------------	---------------

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																																			
Wind Speed [mph]		140										150										160																			
Panal Angle		0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45						
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
15	1	640 / 505 / 43	770 / 629 / 36	634 / 615 / 58	766 / 765 / 47	782 / 712 / 60	956 / 886 / 50	800 / 676 / 57	952 / 817 / 45	680 / 543 / 40	807 / 664 / 33	685 / 672 / 55	821 / 825 / 44	842 / 772 / 57	1016 / 946 / 46	837 / 712 / 52	1012 / 872 / 42	712 / 575 / 37	858 / 712 / 31	713 / 705 / 50	869 / 878 / 41	895 / 825 / 53	1064 / 995 / 43	890 / 760 / 49	1105 / 955 / 41	843 / 1068 / 31	981 / 1258 / 26	986 / 1008 / 41	1163 / 1201 / 33	1236 / 1164 / 43	1495 / 1417 / 34	1233 / 1072 / 41	1493 / 1305 / 33								
	2	770 / 629 / 36	918 / 767 / 29	766 / 778 / 47	923 / 955 / 39	956 / 898 / 50	1118 / 1063 / 39	952 / 829 / 45	1166 / 1025 / 37	807 / 664 / 33	978 / 822 / 27	794 / 812 / 43	975 / 1014 / 36	1016 / 959 / 46	1223 / 1167 / 37	1012 / 885 / 42	1278 / 1127 / 36	858 / 712 / 31	1069 / 902 / 26	869 / 894 / 41	1014 / 1059 / 33	1064 / 1009 / 43	1257 / 1202 / 34	1105 / 969 / 41	1320 / 1166 / 33	843 / 1068 / 26	981 / 1258 / 21	986 / 1008 / 42	1163 / 1201 / 33	1236 / 1164 / 45	1495 / 1417 / 36	1233 / 1072 / 39	1493 / 1305 / 32								
	3	735 / 921 / 26	881 / 1121 / 21	886 / 897 / 41	1035 / 1062 / 33	1086 / 1016 / 43	1283 / 1211 / 34	1083 / 936 / 39	1347 / 1174 / 33	775 / 978 / 24	960 / 1228 / 20	941 / 958 / 39	1132 / 1165 / 31	1140 / 1071 / 39	1393 / 1318 / 32	1189 / 1031 / 37	1468 / 1281 / 31	843 / 1068 / 23	981 / 1258 / 18	986 / 1008 / 36	1163 / 1201 / 28	1236 / 1164 / 37	1495 / 1417 / 30	1233 / 1072 / 34	1493 / 1305 / 28	843 / 1068 / 23	981 / 1258 / 18	986 / 1008 / 36	1163 / 1201 / 28	1236 / 1164 / 37	1495 / 1417 / 30	1233 / 1072 / 34	1493 / 1305 / 28								
	1	677 / 505 / 49	770 / 629 / 41	641 / 615 / 68	766 / 765 / 56	782 / 712 / 72	956 / 886 / 60	800 / 676 / 65	952 / 817 / 52	693 / 543 / 46	807 / 664 / 37	685 / 672 / 65	821 / 825 / 52	842 / 772 / 68	1016 / 946 / 55	837 / 712 / 59	1012 / 872 / 48	712 / 575 / 43	858 / 712 / 35	713 / 705 / 59	869 / 878 / 49	895 / 825 / 64	1064 / 995 / 51	890 / 760 / 55	1105 / 955 / 46	843 / 1068 / 35	981 / 1258 / 29	986 / 1008 / 49	1163 / 1201 / 39	1236 / 1164 / 51	1495 / 1417 / 41	1233 / 1072 / 46	1493 / 1305 / 37								
	2	770 / 629 / 41	918 / 767 / 33	766 / 778 / 56	923 / 955 / 46	956 / 898 / 60	1118 / 1063 / 47	952 / 829 / 52	1166 / 1025 / 43	807 / 664 / 37	978 / 822 / 31	794 / 812 / 51	975 / 1014 / 42	1016 / 959 / 55	1223 / 1167 / 45	1012 / 885 / 48	1278 / 1127 / 41	858 / 712 / 35	1069 / 902 / 29	869 / 894 / 49	1014 / 1059 / 39	1064 / 1009 / 51	1257 / 1202 / 41	1105 / 969 / 46	1320 / 1166 / 37	843 / 1068 / 26	981 / 1258 / 21	986 / 1008 / 42	1163 / 1201 / 33	1236 / 1164 / 45	1495 / 1417 / 36	1233 / 1072 / 39	1493 / 1305 / 32								
	3	735 / 921 / 29	881 / 1121 / 24	886 / 897 / 49	1035 / 1062 / 39	1086 / 1016 / 51	1283 / 1211 / 41	1083 / 936 / 44	1347 / 1174 / 37	775 / 978 / 27	960 / 1228 / 23	941 / 958 / 46	1132 / 1165 / 37	1140 / 1071 / 47	1393 / 1318 / 38	1189 / 1031 / 43	1468 / 1281 / 35	843 / 1068 / 26	981 / 1258 / 21	986 / 1008 / 42	1163 / 1201 / 33	1236 / 1164 / 45	1495 / 1417 / 36	1233 / 1072 / 39	1493 / 1305 / 32	843 / 1068 / 26	981 / 1258 / 21	986 / 1008 / 42	1163 / 1201 / 33	1236 / 1164 / 45	1495 / 1417 / 36	1233 / 1072 / 39	1493 / 1305 / 32								
	1	677 / 505 / 49	770 / 629 / 41	641 / 615 / 68	766 / 765 / 56	782 / 712 / 71	956 / 886 / 71	800 / 676 / 75	952 / 817 / 60	693 / 543 / 46	807 / 664 / 37	685 / 672 / 65	821 / 825 / 52	842 / 772 / 81	1016 / 946 / 66	837 / 712 / 68	1012 / 872 / 56	712 / 575 / 43	858 / 712 / 35	713 / 705 / 59	869 / 878 / 49	895 / 825 / 76	1064 / 995 / 61	890 / 760 / 64	1105 / 955 / 54	843 / 1068 / 35	981 / 1258 / 29	986 / 1008 / 49	1163 / 1201 / 39	1236 / 1164 / 51	1495 / 1417 / 41	1233 / 1072 / 46	1493 / 1305 / 37								
	2	770 / 629 / 41	918 / 767 / 33	766 / 778 / 56	923 / 955 / 46	956 / 898 / 71	1118 / 1063 / 56	952 / 829 / 60	1166 / 1025 / 49	807 / 664 / 37	978 / 822 / 31	794 / 812 / 51	975 / 1014 / 42	1016 / 959 / 66	1223 / 1167 / 54	1012 / 885 / 56	1278 / 1127 / 47	858 / 712 / 35	1069 / 902 / 29	869 / 894 / 49	1014 / 1059 / 39	1064 / 1009 / 76	1257 / 1202 / 61	1105 / 969 / 64	1320 / 1166 / 54	843 / 1068 / 26	981 / 1258 / 21	986 / 1008 / 42	1163 / 1201 / 33	1236 / 1164 / 45	1495 / 1417 / 36	1233 / 1072 / 39	1493 / 1305 / 32								
	3	735 / 921 / 29	881 / 1121 / 24	886 / 897 / 49	1035 / 1062 / 39	1086 / 1016 / 61	1283 / 1211 / 49	1083 / 936 / 51	1347 / 1174 / 43	775 / 978 / 27	960 / 1228 / 23	941 / 958 / 46	1132 / 1165 / 37	1140 / 1071 / 56	1393 / 1318 / 46	1189 / 1031 / 49	1468 / 1281 / 41	843 / 1068 / 26	981 / 1258 / 21	986 / 1008 / 42	1163 / 1201 / 33	1236 / 1164 / 45	1495 / 1417 / 36	1233 / 1072 / 39	1493 / 1305 / 32	843 / 1068 / 26	981 / 1258 / 21	986 / 1008 / 42	1163 / 1201 / 33	1236 / 1164 / 45	1495 / 1417 / 36	1233 / 1072 / 39	1493 / 1305 / 32								
20	1	758 / 618 / 36	934 / 780 / 30	754 / 751 / 47	908 / 922 / 39	940 / 871 / 50	1149 / 1078 / 41	969 / 831 / 47	1146 / 993 / 37	799 / 656 / 34	975 / 818 / 28	789 / 792 / 44	976 / 996 / 37	976 / 908 / 46	1174 / 1105 / 37	1010 / 869 / 44	1227 / 1066 / 36	799 / 656 / 34	975 / 818 / 28	789 / 792 / 44	976 / 996 / 37	976 / 908 / 46	1174 / 1105 / 37	1010 / 869 / 44	1227 / 1066 / 36	799 / 656 / 34	975 / 818 / 28	789 / 792 / 44	976 / 996 / 37	976 / 908 / 46	1174 / 1105 / 37	1010 / 869 / 44	1227 / 1066 / 36	799 / 656 / 34	975 / 818 / 28	789 / 792 / 44	976 / 996 / 37	976 / 908 / 46	1174 / 1105 / 37	1010 / 869 / 44	1227 / 1066 / 36
	2	934 / 780 / 30	1111 / 942 / 24	908 / 939 / 39	1091 / 1142 / 31	1149 / 1093 / 41	1342 / 1287 / 32	1146 / 1007 / 37	1414 / 1252 / 31	975 / 818 / 28	1191 / 1013 / 23	937 / 973 / 36	1163 / 1221 / 30	1174 / 1120 / 37	1420 / 1363 / 30	1227 / 1081 / 36	1501 / 1330 / 29	975 / 818 / 28	1191 / 1013 / 23	937 / 973 / 36	1163 / 1221 / 30	1174 / 1120 / 37	1420 / 1363 / 30	1227 / 1081 / 36	1501 / 1330 / 29	975 / 818 / 28	1191 / 1013 / 23	937 / 973 / 36	1163 / 1221 / 30	1174 / 1120 / 37	1420 / 1363 / 30	1227 / 1081 / 36	1501 / 1330 / 29	975 / 818 / 28	1191 / 1013 / 23	937 / 973 / 36	1163 / 1221 / 30	1174 / 1120 / 37	1420 / 1363 / 30	1227 / 1081 / 36	1501 / 1330 / 29
	3	866 / 1102 / 21	1044 / 1343 / 17	1064 / 1091 / 34	1242 / 1286 / 27	1327 / 1253 / 36	1587 / 1507 / 29	1325 / 1154 / 33	1585 / 1387 / 26	923 / 1178 / 20	1100 / 1418 / 16	1087 / 1118 / 31	1313 / 1362 / 25	1338 / 1265 / 32	1409 / 1230 / 31	923 / 1178 / 20	1100 / 1418 / 16	1087 / 1118 / 31	1313 / 1362 / 25	1338 / 1265 / 32	1409 / 1230 / 31	923 / 1178 / 20	1100 / 1418 / 16	1087 / 1118 / 31	1313 / 1362 / 25	1338 / 1265 / 32	1409 / 1230 / 31	923 / 1178 / 20	1100 / 1418 / 16	1087 / 1118 / 31	1313 / 1362 / 25	1338 / 1265 / 32	1409 / 1230 / 31	923 / 1178 / 20	1100 / 1418 / 16	1087 / 1118 / 31	1313 / 1362 / 25	1338 / 1265 / 32	1409 / 1230 / 31		
	1	758 / 618 / 41	934 / 780 / 34	754 / 751 / 56	908 / 922 / 46	940 / 871 / 60	1149 / 1078 / 49	969 / 831 / 54	1146 / 993 / 43	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 55	1174 / 1105 / 45	1010 / 869 / 50	1227 / 1066 / 41	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 55	1174 / 1105 / 45	1010 / 869 / 50	1227 / 1066 / 41	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 55	1174 / 1105 / 45	1010 / 869 / 50	1227 / 1066 / 41	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 55	1174 / 1105 / 45	1010 / 869 / 50	1227 / 1066 / 41
	2	934 / 780 / 34	1111 / 942 / 27	908 / 939 / 46	1091 / 1142 / 37	1149 / 1093 / 49	1342 / 1287 / 38	1146 / 1007 / 43	1414 / 1252 / 35	975 / 818 / 32	1191 / 1013 / 26	937 / 973 / 42	1163 / 1221 / 35	1174 / 1120 / 45	1420 / 1363 / 36	1227 / 1081 / 41	1501 / 1330 / 33	975 / 818 / 32	1191 / 1013 / 26	937 / 973 / 42	1163 / 1221 / 35	1174 / 1120 / 45	1420 / 1363 / 36	1227 / 1081 / 41	1501 / 1330 / 33	975 / 818 / 32	1191 / 1013 / 26	937 / 973 / 42	1163 / 1221 / 35	1174 / 1120 / 45	1420 / 1363 / 36	1227 / 1081 / 41	1501 / 1330 / 33	975 / 818 / 32	1191 / 1013 / 26	937 / 973 / 42	1163 / 1221 / 35	1174 / 1120 / 45	1420 / 1363 / 36	1227 / 1081 / 41	1501 / 1330 / 33
	3	866 / 1102 / 24	1044 / 1343 / 19	1064 / 1091 / 40	1242 / 1286 / 32	1327 / 1253 / 43	1587 / 1507 / 34	1325 / 1154 / 37	1585 / 1387 / 30	923 / 1178 / 23	1100 / 1418 / 18	1087 / 1118 / 37	1313 / 1362 / 30	1338 / 1265 / 38	1409 / 1230 / 35	923 / 1178 / 23	1100 / 1418 / 18	1087 / 1118 / 37	1313 / 1362 / 30	1338 / 1265 / 38	1409 / 1230 / 35	923 / 1178 / 23	1100 / 1418 / 18	1087 / 1118 / 37	1313 / 1362 / 30	1338 / 1265 / 38	1409 / 1230 / 35	923 / 1178 / 23	1100 / 1418 / 18	1087 / 1118 / 37	1313 / 1362 / 30	1338 / 1265 / 38	1409 / 1230 / 35	923 / 1178 / 23	1100 / 1418 / 18	1087 / 1118 / 37	1313 / 1362 / 30	1338 / 1265 / 38	1409 / 1230 / 35		
	1	758 / 618 / 41	934 / 780 / 34	754 / 751 / 56	908 / 922 / 46	940 / 871 / 71	1149 / 1078 / 59	969 / 831 / 62	1146 / 993 / 49	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 66	1174 / 1105 / 54	1010 / 869 / 58	1227 / 1066 / 47	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 66	1174 / 1105 / 54	1010 / 869 / 58	1227 / 1066 / 47	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 66	1174 / 1105 / 54	1010 / 869 / 58	1227 / 1066 / 47	799 / 656 / 38	975 / 818 / 32	789 / 792 / 52	976 / 996 / 44	976 / 908 / 66	1174 / 1105 / 54	1010 / 869 / 58	1227 / 1066 / 47
	2	934 / 780 / 34	1111 / 942 / 27	908 / 939 / 46	1091 / 1142 / 37	1149 / 1093 / 59	1342 / 1287 / 46	1146 / 1007 / 49	1414 / 1252 / 41	975 / 818 / 32	1191 / 1013 / 26	937 / 973 / 42	1163 / 1221 / 35	1174 / 1120 / 54	1420 / 1363 / 43	1227 / 1081 / 47	1501 / 1330 / 39	975 / 818 / 32	1191 / 1013 / 26	937 / 973 / 42	1163 / 1221 / 35	1174 / 1120 / 54	1420 / 1363 / 43	1227 / 1081 / 47	1501 / 1330 / 39	975 / 818 / 32	1191 / 1013 / 26	937 / 973 / 42	1163 / 1221 / 35	1174 / 1120 / 54	1420 / 13										

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	597 / 358 / 59	660 / 476 / 51	614 / 487 / 89	640 / 597 / 72	638 / 562 / 130	769 / 697 / 107	632 / 519 / 107	764 / 643 / 88	616 / 386 / 57	668 / 500 / 49	622 / 513 / 86	647 / 623 / 68	662 / 588 / 124	791 / 721 / 101	657 / 543 / 102	787 / 665 / 83	622 / 406 / 55	692 / 533 / 47	616 / 527 / 81	659 / 645 / 65	684 / 611 / 118	809 / 740 / 95	679 / 564 / 98	830 / 704 / 81
	2	660 / 476 / 51	736 / 597 / 42	640 / 608 / 72	734 / 742 / 58	748 / 687 / 104	918 / 860 / 86	764 / 653 / 88	914 / 794 / 71	668 / 500 / 49	779 / 637 / 41	647 / 634 / 68	751 / 763 / 54	791 / 731 / 101	932 / 877 / 80	787 / 675 / 83	963 / 839 / 68	692 / 533 / 47	799 / 656 / 38	659 / 656 / 65	789 / 806 / 53	809 / 750 / 95	976 / 920 / 77	830 / 714 / 81	1010 / 882 / 66
	3	606 / 737 / 38	708 / 885 / 31	695 / 685 / 61	852 / 859 / 51	875 / 805 / 92	1049 / 980 / 74	871 / 742 / 76	1046 / 902 / 61	619 / 760 / 36	743 / 933 / 30	735 / 729 / 60	865 / 875 / 48	893 / 824 / 86	1099 / 1029 / 71	919 / 786 / 73	1096 / 948 / 59	651 / 803 / 35	776 / 978 / 28	751 / 749 / 56	905 / 919 / 46	937 / 868 / 83	1145 / 1074 / 68	966 / 828 / 71	1142 / 990 / 56
	1	622 / 351 / 62	692 / 476 / 55	623 / 468 / 95	668 / 597 / 79	654 / 562 / 149	769 / 697 / 122	632 / 519 / 121	764 / 643 / 99	627 / 371 / 60	699 / 500 / 53	642 / 503 / 93	674 / 623 / 76	665 / 588 / 142	791 / 721 / 115	657 / 543 / 115	787 / 665 / 93	644 / 398 / 59	722 / 533 / 51	647 / 527 / 89	678 / 645 / 72	684 / 611 / 135	809 / 740 / 108	679 / 564 / 110	830 / 704 / 91
	2	692 / 476 / 55	745 / 597 / 45	668 / 608 / 79	734 / 742 / 64	748 / 687 / 118	918 / 860 / 98	764 / 653 / 99	914 / 794 / 80	699 / 500 / 53	779 / 637 / 44	674 / 634 / 76	751 / 763 / 60	791 / 731 / 115	932 / 877 / 91	787 / 675 / 93	963 / 839 / 77	722 / 533 / 51	799 / 656 / 42	678 / 656 / 72	789 / 806 / 58	809 / 750 / 108	976 / 920 / 88	830 / 714 / 91	1010 / 882 / 74
	3	630 / 737 / 42	708 / 885 / 33	695 / 685 / 68	852 / 859 / 56	875 / 805 / 105	1049 / 980 / 85	871 / 742 / 85	1046 / 902 / 69	631 / 760 / 39	743 / 933 / 32	735 / 729 / 66	865 / 875 / 52	893 / 824 / 98	1099 / 1029 / 81	919 / 786 / 82	1096 / 948 / 66	651 / 803 / 38	776 / 978 / 31	751 / 749 / 62	905 / 919 / 51	937 / 868 / 95	1145 / 1074 / 78	966 / 828 / 80	1142 / 990 / 63
	1	646 / 344 / 66	708 / 466 / 58	643 / 458 / 104	695 / 597 / 89	678 / 562 / 167	769 / 697 / 137	632 / 519 / 134	764 / 643 / 110	648 / 364 / 63	713 / 488 / 55	661 / 492 / 102	700 / 623 / 85	688 / 588 / 160	791 / 721 / 129	657 / 543 / 128	787 / 665 / 104	664 / 390 / 62	734 / 521 / 54	679 / 527 / 100	703 / 645 / 80	695 / 611 / 152	809 / 740 / 122	679 / 564 / 122	830 / 704 / 101
	2	708 / 466 / 58	771 / 597 / 49	695 / 608 / 89	736 / 742 / 72	748 / 687 / 133	918 / 860 / 110	764 / 653 / 110	914 / 794 / 88	713 / 488 / 55	798 / 637 / 47	700 / 634 / 85	751 / 763 / 67	791 / 731 / 129	932 / 877 / 103	787 / 675 / 104	963 / 839 / 85	734 / 521 / 54	801 / 656 / 45	703 / 656 / 80	789 / 806 / 65	809 / 750 / 122	976 / 920 / 99	830 / 714 / 101	1010 / 882 / 82
	3	655 / 737 / 45	708 / 885 / 36	719 / 685 / 76	852 / 859 / 63	875 / 805 / 118	1049 / 980 / 95	871 / 742 / 94	1046 / 902 / 76	654 / 760 / 42	743 / 933 / 34	743 / 729 / 74	865 / 875 / 59	893 / 824 / 110	1099 / 1029 / 91	919 / 786 / 91	1096 / 948 / 73	672 / 803 / 41	776 / 978 / 33	751 / 749 / 70	905 / 919 / 57	937 / 868 / 107	1145 / 1074 / 88	966 / 828 / 88	1142 / 990 / 70
Wind Speed [mph]		110								115															
30	1	640 / 434 / 54	697 / 553 / 45	621 / 549 / 77	693 / 682 / 63	703 / 631 / 113	848 / 779 / 92	716 / 598 / 95	871 / 742 / 78	658 / 462 / 53	706 / 570 / 43	639 / 582 / 75	727 / 719 / 61	738 / 666 / 110	886 / 817 / 89	733 / 615 / 90	882 / 753 / 73	ASCE Group Zone							
	2	697 / 553 / 45	839 / 692 / 37	693 / 694 / 63	826 / 846 / 51	848 / 790 / 92	1017 / 961 / 74	871 / 753 / 78	1054 / 922 / 64	706 / 570 / 43	878 / 728 / 36	706 / 711 / 60	860 / 885 / 49	886 / 828 / 89	1054 / 999 / 71	882 / 764 / 73	1095 / 959 / 61	Panal Angle							
	3	658 / 816 / 33	807 / 1019 / 27	787 / 788 / 54	942 / 960 / 44	978 / 909 / 80	1187 / 1116 / 65	975 / 838 / 66	1184 / 1028 / 54	685 / 854 / 32	835 / 1058 / 26	822 / 826 / 53	977 / 998 / 42	1017 / 948 / 77	1224 / 1153 / 62	1014 / 873 / 64	1280 / 1112 / 54	Mono Slope							
	1	660 / 425 / 57	726 / 553 / 49	651 / 549 / 85	698 / 682 / 70	703 / 631 / 128	848 / 779 / 105	716 / 598 / 107	871 / 742 / 88	677 / 452 / 56	728 / 570 / 47	669 / 582 / 83	727 / 719 / 68	738 / 666 / 125	886 / 817 / 102	733 / 615 / 101	882 / 753 / 82	0 - 7.5							
	2	726 / 553 / 49	839 / 692 / 40	698 / 694 / 70	826 / 846 / 56	848 / 790 / 105	1017 / 961 / 85	871 / 753 / 88	1054 / 922 / 71	728 / 570 / 47	878 / 728 / 39	706 / 711 / 66	860 / 885 / 54	886 / 828 / 102	1054 / 999 / 81	882 / 764 / 82	1095 / 959 / 69	7.5 - 15							
	3	658 / 816 / 36	807 / 1019 / 30	787 / 788 / 60	942 / 960 / 49	978 / 909 / 91	1187 / 1116 / 75	975 / 838 / 74	1184 / 1028 / 61	685 / 854 / 34	835 / 1058 / 28	822 / 826 / 58	977 / 998 / 47	1017 / 948 / 88	1224 / 1153 / 71	1014 / 873 / 71	1280 / 1112 / 61	15 - 30							
	1	679 / 416 / 61	754 / 553 / 53	681 / 549 / 96	723 / 682 / 78	703 / 631 / 144	848 / 779 / 118	716 / 598 / 119	871 / 742 / 98	694 / 442 / 59	755 / 570 / 50	698 / 582 / 93	742 / 719 / 76	738 / 666 / 141	886 / 817 / 114	733 / 615 / 113	882 / 753 / 91	30 - 45							
	2	754 / 553 / 53	839 / 692 / 44	723 / 694 / 78	826 / 846 / 63	848 / 790 / 118	1017 / 961 / 95	871 / 753 / 98	1054 / 922 / 79	755 / 570 / 50	878 / 728 / 42	721 / 711 / 74	860 / 885 / 61	886 / 828 / 114	1054 / 999 / 91	882 / 764 / 91	1095 / 959 / 76	1 = 1							
	3	666 / 816 / 38	807 / 1019 / 32	787 / 788 / 67	942 / 960 / 55	978 / 909 / 103	1187 / 1116 / 84	975 / 838 / 82	1184 / 1028 / 67	685 / 854 / 37	835 / 1058 / 31	822 / 826 / 65	977 / 998 / 52	1017 / 948 / 99	1224 / 1153 / 80	1014 / 873 / 79	1280 / 1112 / 67	2 = 2							
Wind Speed [mph]		120								130															
30	1	661 / 478 / 51	739 / 600 / 42	642 / 600 / 72	737 / 732 / 58	751 / 681 / 104	922 / 853 / 86	767 / 646 / 88	918 / 786 / 71	658 / 462 / 53	706 / 570 / 43	639 / 582 / 75	727 / 719 / 61	738 / 666 / 110	886 / 817 / 89	733 / 615 / 90	882 / 753 / 73	2 = 2							
	2	739 / 600 / 42	885 / 737 / 34	737 / 745 / 58	893 / 921 / 48	922 / 864 / 86	1088 / 1033 / 68	918 / 797 / 71	1132 / 994 / 59	706 / 570 / 43	878 / 728 / 36	706 / 711 / 60	860 / 885 / 49	886 / 828 / 89	1054 / 999 / 71	882 / 764 / 73	1095 / 959 / 61	3 = 3							
	3	711 / 889 / 31	859 / 1092 / 25	855 / 863 / 51	1008 / 1032 / 41	1053 / 984 / 74	1256 / 1185 / 59	1050 / 906 / 61	1316 / 1145 / 51	685 / 854 / 32	835 / 1058 / 26	822 / 826 / 53	977 / 998 / 42	1017 / 948 / 77	1224 / 1153 / 62	1014 / 873 / 64	1280 / 1112 / 54	1 = 1							
	1	693 / 478 / 55	747 / 600 / 45	670 / 600 / 79	737 / 732 / 64	751 / 681 / 118	922 / 853 / 98	767 / 646 / 99	918 / 786 / 80	677 / 452 / 56	728 / 570 / 47	669 / 582 / 83	727 / 719 / 68	738 / 666 / 125	886 / 817 / 102	733 / 615 / 101	882 / 753 / 82	2 = 2							
	2	747 / 600 / 45	885 / 737 / 37	737 / 745 / 64	893 / 921 / 52	922 / 864 / 98	1088 / 1033 / 78	918 / 797 / 80	1132 / 994 / 66	728 / 570 / 47	878 / 728 / 39	706 / 711 / 66	860 / 885 / 54	886 / 828 / 102	1054 / 999 / 81	882 / 764 / 82	1095 / 959 / 69	3 = 3							
	3	711 / 889 / 33	859 / 1092 / 27	855 / 863 / 56	1008 / 1032 / 45	1053 / 984 / 85	1256 / 1185 / 68	1050 / 906 / 69	1316 / 1145 / 58	685 / 854 / 34	835 / 1058 / 28	822 / 826 / 58	977 / 998 / 47	1017 / 948 / 88	1224 / 1153 / 71	1014 / 873 / 71	1280 / 1112 / 61	2 = 2							
	1	710 / 468 / 58	773 / 600 / 49	697 / 600 / 89	739 / 732 / 72	751 / 681 / 133	922 / 853 / 110	767 / 646 / 110	918 / 786 / 88	694 / 442 / 59	755 / 570 / 50	698 / 582 / 93	742 / 719 / 76	738 / 666 / 141	886 / 817 / 114	733 / 615 / 113	882 / 753 / 91	3 = 3							
	2	773 / 600 / 49	885 / 737 / 40	739 / 745 / 72	893 / 921 / 59	922 / 864 / 110	1088 / 1033 / 88	918 / 797 / 88	1132 / 994 / 73	755 / 570 / 50	878 / 728 / 42	721 / 711 / 74	860 / 885 / 61	886 / 828 / 114	1054 / 999 / 91	882 / 764 / 91	1095 / 959 / 76	1 = 1							
	3	711 / 889 / 36	859 / 1092 / 29	855 / 863 / 63	1008 / 1032 / 50	1053 / 984 / 95	1256 / 1185 / 76	1050 / 906 / 76	1316 / 1145 / 64	685 / 854 / 37	835 / 1058 / 31	822 / 826 / 65	977 / 998 / 52	1017 / 948 / 99	1224 / 1153 / 80	1014 / 873 / 79	1280 / 1112 / 67	2 = 2							

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]			140								150								160							
Panal Angle			0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
																										30
35	1	694 / 493 / 53	770 / 629 / 44	668 / 615 / 76	766 / 765 / 62	782 / 712 / 115	956 / 886 / 95	800 / 676 / 96	952 / 817 / 77	724 / 543 / 50	807 / 664 / 40	697 / 672 / 72	821 / 825 / 58	842 / 772 / 108	1016 / 946 / 88	837 / 712 / 88	1012 / 872 / 71	732 / 575 / 47	858 / 712 / 38	713 / 705 / 66	869 / 878 / 54	895 / 825 / 102	1064 / 995 / 81	890 / 760 / 82	1105 / 955 / 69	
	40	1	724 / 493 / 57	791 / 629 / 47	695 / 615 / 85	766 / 765 / 70	782 / 712 / 129	956 / 886 / 107	800 / 676 / 107	952 / 817 / 85	753 / 543 / 54	807 / 664 / 44	723 / 672 / 80	821 / 825 / 65	842 / 772 / 122	1016 / 946 / 99	837 / 712 / 98	1012 / 872 / 79	760 / 575 / 50	858 / 712 / 41	726 / 705 / 74	869 / 878 / 61	895 / 825 / 114	1064 / 995 / 91	890 / 760 / 91	
		30	1	758 / 618 / 41	934 / 780 / 34	754 / 751 / 56	908 / 922 / 46	940 / 871 / 83	1149 / 1078 / 68	969 / 831 / 71	1146 / 993 / 56	799 / 656 / 38	975 / 818 / 32	789 / 792 / 53	976 / 996 / 44	976 / 908 / 77	1174 / 1105 / 62	1010 / 869 / 66	1227 / 1066 / 54	799 / 656 / 38	975 / 818 / 32	789 / 792 / 53	976 / 996 / 44	976 / 908 / 77	1174 / 1105 / 62	1010 / 869 / 66
35			1	758 / 618 / 44	934 / 780 / 37	754 / 751 / 62	908 / 922 / 51	940 / 871 / 95	1149 / 1078 / 78	969 / 831 / 80	1146 / 993 / 63	799 / 656 / 42	975 / 818 / 34	789 / 792 / 58	976 / 996 / 49	976 / 908 / 88	1174 / 1105 / 71	1010 / 869 / 74	1227 / 1066 / 61	799 / 656 / 42	975 / 818 / 34	789 / 792 / 58	976 / 996 / 49	976 / 908 / 88	1174 / 1105 / 71	1010 / 869 / 74
	40		1	782 / 618 / 47	934 / 780 / 40	754 / 751 / 70	908 / 922 / 57	940 / 871 / 107	1149 / 1078 / 88	969 / 831 / 88	1146 / 993 / 70	801 / 656 / 45	975 / 818 / 37	789 / 792 / 65	976 / 996 / 55	976 / 908 / 99	1174 / 1105 / 80	1010 / 869 / 82	1227 / 1066 / 67	801 / 656 / 45	975 / 818 / 37	789 / 792 / 65	976 / 996 / 55	976 / 908 / 99	1174 / 1105 / 80	1010 / 869 / 82
		30	1	835 / 690 / 36	1006 / 847 / 30	847 / 854 / 51	998 / 1022 / 41	1043 / 974 / 74	1244 / 1173 / 59	1082 / 933 / 64	1304 / 1134 / 51	893 / 742 / 35	1069 / 904 / 28	872 / 883 / 48	1056 / 1084 / 39	1108 / 1037 / 71	1308 / 1236 / 57	1105 / 955 / 59	1375 / 1198 / 49	893 / 742 / 35	1069 / 904 / 28	872 / 883 / 48	1056 / 1084 / 39	1108 / 1037 / 71	1308 / 1236 / 57	1105 / 955 / 59
35			1	835 / 690 / 39	1006 / 847 / 32	847 / 854 / 56	998 / 1022 / 45	1043 / 974 / 85	1244 / 1173 / 68	1082 / 933 / 71	1304 / 1134 / 58	893 / 742 / 38	1069 / 904 / 31	872 / 883 / 52	1056 / 1084 / 43	1108 / 1037 / 81	1308 / 1236 / 64	1105 / 955 / 66	1375 / 1198 / 55	893 / 742 / 38	1069 / 904 / 31	872 / 883 / 52	1056 / 1084 / 43	1108 / 1037 / 81	1308 / 1236 / 64	1105 / 955 / 66
	40		1	835 / 690 / 42	1006 / 847 / 34	847 / 854 / 63	998 / 1022 / 50	1043 / 974 / 95	1244 / 1173 / 76	1082 / 933 / 79	1304 / 1134 / 64	893 / 742 / 41	1069 / 904 / 33	872 / 883 / 59	1056 / 1084 / 48	1108 / 1037 / 91	1308 / 1236 / 72	1105 / 955 / 73	1375 / 1198 / 61	893 / 742 / 41	1069 / 904 / 33	872 / 883 / 59	1056 / 1084 / 48	1108 / 1037 / 91	1308 / 1236 / 72	1105 / 955 / 73

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs									
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
45	1	668 / 338 / 112	722 / 455 / 98	661 / 449 / 147	723 / 597 / 128	702 / 562 / 190	769 / 697 / 156	632 / 519 / 147	764 / 643 / 121	668 / 356 / 108	743 / 488 / 96	678 / 482 / 144	727 / 623 / 122	711 / 588 / 182	791 / 721 / 147	657 / 543 / 141	787 / 665 / 114	682 / 382 / 105	763 / 521 / 94	694 / 515 / 141	728 / 645 / 116	717 / 611 / 173	809 / 740 / 139	679 / 564 / 134	830 / 704 / 111		
	2	722 / 455 / 98	798 / 597 / 85	723 / 608 / 128	759 / 742 / 104	748 / 687 / 152	918 / 860 / 126	764 / 653 / 121	914 / 794 / 97	743 / 488 / 96	824 / 637 / 83	727 / 634 / 122	759 / 763 / 97	791 / 731 / 147	932 / 877 / 117	787 / 675 / 114	963 / 839 / 94	763 / 521 / 94	825 / 656 / 78	728 / 656 / 116	789 / 806 / 94	809 / 750 / 139	976 / 920 / 113	830 / 714 / 111	1010 / 882 / 91		
	3	679 / 737 / 78	710 / 885 / 62	742 / 685 / 110	852 / 859 / 91	875 / 805 / 134	1049 / 980 / 108	871 / 742 / 104	1046 / 902 / 84	677 / 760 / 73	743 / 933 / 60	766 / 729 / 107	865 / 875 / 85	893 / 824 / 126	1099 / 1029 / 104	919 / 786 / 101	1096 / 948 / 81	694 / 803 / 71	776 / 978 / 57	765 / 749 / 100	905 / 919 / 82	937 / 868 / 121	1145 / 1074 / 100	966 / 828 / 97	1142 / 990 / 77		
	1	689 / 331 / 119	736 / 445 / 104	693 / 449 / 160	751 / 597 / 140	710 / 549 / 203	780 / 697 / 170	632 / 519 / 161	764 / 643 / 131	687 / 349 / 114	754 / 476 / 102	694 / 471 / 153	753 / 623 / 133	733 / 588 / 198	791 / 721 / 161	657 / 543 / 153	787 / 665 / 124	700 / 373 / 112	773 / 508 / 99	709 / 504 / 150	753 / 645 / 126	739 / 611 / 189	809 / 740 / 151	679 / 564 / 146	830 / 704 / 121		
	2	736 / 445 / 104	824 / 597 / 92	751 / 608 / 140	781 / 742 / 113	758 / 687 / 165	918 / 860 / 137	764 / 653 / 131	914 / 794 / 106	754 / 476 / 102	849 / 637 / 89	753 / 634 / 133	780 / 763 / 106	791 / 731 / 161	932 / 877 / 128	787 / 675 / 124	963 / 839 / 102	773 / 508 / 99	849 / 656 / 84	753 / 656 / 126	802 / 806 / 102	809 / 750 / 151	976 / 920 / 123	830 / 714 / 121	1010 / 882 / 99		
	3	703 / 737 / 84	730 / 885 / 67	766 / 685 / 119	852 / 859 / 99	875 / 805 / 146	1049 / 980 / 118	871 / 742 / 113	1046 / 902 / 91	700 / 760 / 80	749 / 933 / 65	789 / 729 / 116	865 / 875 / 92	893 / 824 / 137	1099 / 1029 / 113	919 / 786 / 110	1096 / 948 / 88	716 / 803 / 77	776 / 978 / 62	787 / 749 / 109	905 / 919 / 89	937 / 868 / 132	1145 / 1074 / 109	966 / 828 / 106	1142 / 990 / 84		
	1	726 / 317 / 132	777 / 434 / 117	725 / 430 / 178	787 / 583 / 158	739 / 536 / 231	819 / 697 / 198	632 / 519 / 187	764 / 643 / 153	736 / 341 / 129	793 / 465 / 115	738 / 461 / 174	806 / 623 / 154	761 / 574 / 225	822 / 721 / 187	657 / 543 / 179	787 / 665 / 145	747 / 365 / 126	809 / 495 / 112	751 / 492 / 170	803 / 645 / 146	782 / 611 / 220	822 / 740 / 176	679 / 564 / 170	830 / 704 / 141		
	2	777 / 434 / 117	853 / 581 / 103	787 / 593 / 158	826 / 742 / 131	796 / 687 / 192	918 / 860 / 160	764 / 653 / 153	914 / 794 / 124	793 / 465 / 115	876 / 619 / 100	806 / 634 / 154	822 / 763 / 123	822 / 731 / 187	932 / 877 / 149	787 / 675 / 145	963 / 839 / 119	809 / 495 / 112	898 / 656 / 98	803 / 656 / 146	842 / 806 / 119	822 / 750 / 176	976 / 920 / 143	830 / 714 / 141	1010 / 882 / 115		
	3	752 / 737 / 98	768 / 885 / 78	813 / 685 / 139	881 / 859 / 115	875 / 805 / 171	1049 / 980 / 138	871 / 742 / 132	1046 / 902 / 107	745 / 760 / 92	786 / 933 / 75	835 / 729 / 135	874 / 875 / 107	893 / 824 / 160	1099 / 1029 / 132	919 / 786 / 128	1096 / 948 / 102	760 / 803 / 89	802 / 978 / 72	830 / 749 / 127	905 / 919 / 103	937 / 868 / 154	1145 / 1074 / 127	966 / 828 / 124	1142 / 990 / 98		
Wind Speed [mph]		110								115																	
45	1	696 / 407 / 103	763 / 539 / 89	711 / 549 / 138	747 / 682 / 113	721 / 631 / 165	848 / 779 / 134	716 / 598 / 131	871 / 742 / 107	710 / 432 / 101	782 / 570 / 87	727 / 582 / 135	766 / 719 / 110	742 / 666 / 160	886 / 817 / 130	733 / 615 / 124	882 / 753 / 101										
	2	763 / 539 / 89	848 / 692 / 76	747 / 694 / 113	826 / 846 / 91	848 / 790 / 134	1017 / 961 / 108	871 / 753 / 107	1054 / 922 / 87	782 / 570 / 87	878 / 728 / 73	744 / 711 / 107	860 / 885 / 88	886 / 828 / 130	1054 / 999 / 104	882 / 764 / 101	1095 / 959 / 84										
	3	686 / 816 / 67	807 / 1019 / 55	787 / 788 / 97	942 / 960 / 79	978 / 909 / 117	1187 / 1116 / 95	975 / 838 / 91	1184 / 1028 / 74	700 / 854 / 64	835 / 1058 / 53	822 / 826 / 94	977 / 998 / 75	1017 / 948 / 113	1224 / 1153 / 91	1014 / 873 / 87	1280 / 1112 / 74										
	1	712 / 398 / 109	791 / 539 / 97	724 / 536 / 147	772 / 682 / 123	741 / 631 / 179	848 / 779 / 146	716 / 598 / 142	871 / 742 / 117	725 / 422 / 107	809 / 570 / 94	738 / 568 / 143	790 / 719 / 119	762 / 666 / 175	886 / 817 / 142	733 / 615 / 135	882 / 753 / 110										
	2	791 / 539 / 97	872 / 692 / 82	772 / 694 / 123	826 / 846 / 99	848 / 790 / 146	1017 / 961 / 118	871 / 753 / 117	1054 / 922 / 95	809 / 570 / 94	894 / 728 / 80	767 / 711 / 116	860 / 885 / 96	886 / 828 / 142	1054 / 999 / 113	882 / 764 / 110	1095 / 959 / 91										
	3	707 / 816 / 72	807 / 1019 / 60	807 / 788 / 106	942 / 960 / 85	978 / 909 / 128	1187 / 1116 / 104	975 / 838 / 99	1184 / 1028 / 81	720 / 854 / 70	835 / 1058 / 57	826 / 826 / 102	977 / 998 / 82	1017 / 948 / 123	1224 / 1153 / 99	1014 / 873 / 95	1280 / 1112 / 81										
	1	758 / 389 / 123	825 / 525 / 109	764 / 524 / 166	820 / 682 / 142	783 / 631 / 209	848 / 779 / 171	716 / 598 / 166	871 / 742 / 136	768 / 413 / 120	840 / 555 / 106	776 / 555 / 162	837 / 719 / 139	802 / 666 / 203	886 / 817 / 165	733 / 615 / 157	882 / 753 / 128										
	2	825 / 525 / 109	919 / 692 / 95	820 / 694 / 142	861 / 846 / 115	848 / 790 / 171	1017 / 961 / 138	871 / 753 / 136	1054 / 922 / 111	840 / 555 / 106	939 / 728 / 92	813 / 711 / 135	879 / 885 / 111	886 / 828 / 165	1054 / 999 / 132	882 / 764 / 128	1095 / 959 / 107										
	3	748 / 816 / 83	816 / 1019 / 69	849 / 788 / 123	942 / 960 / 99	978 / 909 / 149	1187 / 1116 / 121	975 / 838 / 115	1184 / 1028 / 94	760 / 854 / 80	835 / 1058 / 66	867 / 826 / 119	977 / 998 / 95	1017 / 948 / 143	1224 / 1153 / 116	1014 / 873 / 111	1280 / 1112 / 94										
Wind Speed [mph]		120								130																	
45	1	724 / 457 / 98	800 / 600 / 85	725 / 600 / 128	761 / 732 / 104	751 / 681 / 152	922 / 853 / 126	767 / 646 / 121	918 / 786 / 97	710 / 432 / 101	782 / 570 / 87	727 / 582 / 135	766 / 719 / 110	742 / 666 / 160	886 / 817 / 130	733 / 615 / 124	882 / 753 / 101										
	2	800 / 600 / 85	885 / 737 / 69	761 / 745 / 104	893 / 921 / 85	922 / 864 / 126	1088 / 1033 / 100	918 / 797 / 97	1132 / 994 / 81	782 / 570 / 87	878 / 728 / 73	744 / 711 / 107	860 / 885 / 88	886 / 828 / 130	1054 / 999 / 104	882 / 764 / 101	1095 / 959 / 84										
	3	713 / 889 / 62	859 / 1092 / 51	855 / 863 / 91	1008 / 1032 / 72	1053 / 984 / 108	1256 / 1185 / 87	1050 / 906 / 84	1316 / 1145 / 71	700 / 854 / 64	835 / 1058 / 53	822 / 826 / 94	977 / 998 / 75	1017 / 948 / 113	1224 / 1153 / 91	1014 / 873 / 87	1280 / 1112 / 74										
	1	737 / 447 / 104	826 / 600 / 92	753 / 600 / 140	783 / 732 / 113	760 / 681 / 165	922 / 853 / 137	767 / 646 / 131	918 / 786 / 106	725 / 422 / 107	809 / 570 / 94	738 / 568 / 143	790 / 719 / 119	762 / 666 / 175	886 / 817 / 142	733 / 615 / 135	882 / 753 / 110										
	2	826 / 600 / 92	885 / 737 / 75	783 / 745 / 113	893 / 921 / 92	922 / 864 / 137	1088 / 1033 / 109	918 / 797 / 106	1132 / 994 / 88	809 / 570 / 94	894 / 728 / 80	767 / 711 / 116	860 / 885 / 96	886 / 828 / 142	1054 / 999 / 113	882 / 764 / 110	1095 / 959 / 91										
	3	732 / 889 / 67	859 / 1092 / 55	855 / 863 / 99	1008 / 1032 / 79	1053 / 984 / 118	1256 / 1185 / 95	1050 / 906 / 91	1316 / 1145 / 77	720 / 854 / 70	835 / 1058 / 57	826 / 826 / 102	977 / 998 / 82	1017 / 948 / 123	1224 / 1153 / 99	1014 / 873 / 95	1280 / 1112 / 81										
	1	778 / 436 / 117	855 / 583 / 103	789 / 585 / 158	828 / 732 / 131	798 / 681 / 192	922 / 853 / 160	767 / 646 / 153	918 / 786 / 124	768 / 413 / 120	840 / 555 / 106	776 / 555 / 162	837 / 719 / 139	802 / 666 / 203	886 / 817 / 165	733 / 615 / 157	882 / 753 / 128										
	2	855 / 583 / 103	928 / 737 / 86	828 / 745 / 131	895 / 921 / 107	922 / 864 / 160	1088 / 1033 / 127	918 / 797 / 124	1132 / 994 / 102	840 / 555 / 106	939 / 728 / 92	813 / 711 / 135	879 / 885 / 111	886 / 828 / 165	1054 / 999 / 132	882 / 764 / 128	1095 / 959 / 107										
	3	770 / 889 / 78	859 / 1092 / 63	883 / 863 / 115	1008 / 1032 / 91	1053 / 984 / 138	1256 / 1185 / 110	1050 / 906 / 107	1316 / 1145 / 90	760 / 854 / 80	835 / 1058 / 66	867 / 826 / 119	977 / 998 / 95	1017 / 948 / 143	1224 / 1153 / 116	1014 / 873 / 111	1280 / 1112 / 94										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs																																																																																																																																																																																																							
Wind Speed [mph]		140																150																160																																																																																																																																																																																							
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																																																																																																																																																																											
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																																																																																																																																																									
		45	1	738/482/96	817/629/83	721/615/122	777/765/100	782/712/147	956/886/121	800/676/117	952/817/94	763/530/92	824/664/76	748/672/116	821/825/94	842/772/139	1016/946/113	837/712/107	1012/872/87	787/575/87	858/712/71	749/705/107	869/878/88	895/825/130	1064/995/104	890/760/101	1105/955/84	817/629/83	918/767/67	777/778/100	923/955/82	956/898/121	1118/1063/95	952/829/94	1166/1025/77	824/664/76	978/822/62	794/812/91	975/1014/75	1016/959/113	1223/1167/91	1012/885/87	1278/1127/74	858/712/71	1069/902/60	869/894/88	1014/1059/69	1064/1009/104	1257/1202/83	1105/969/84	1320/1166/67	735/921/60	881/1121/48	886/897/88	1035/1062/69	1086/1016/104	1283/1211/83	1083/936/81	1347/1174/67	775/978/55	960/1228/46	941/958/82	1132/1165/66	1140/1071/95	1393/1318/78	1189/1031/77	1468/1281/64	843/1068/53	981/1258/42	986/1008/75	1163/1201/60	1236/1164/91	1495/1417/74	1233/1072/71	1493/1305/57	749/470/102	843/629/89	798/778/133	923/955/109	956/898/161	1118/1063/132	952/829/128	1166/1025/102	848/664/97	978/822/82	798/812/126	975/1014/102	1016/959/151	1223/1167/123	1012/885/117	1278/1127/95	872/712/94	1069/902/77	869/894/116	1014/1059/96	1064/1009/142	1257/1202/113	1105/969/110	1320/1166/91	843/629/89	918/767/72	798/778/109	923/955/89	956/898/132	1118/1063/104	952/829/102	1166/1025/84	848/664/82	978/822/67	798/812/99	975/1014/82	1016/959/123	1223/1167/99	1012/885/95	1278/1127/81	872/712/77	1069/902/65	869/894/96	1014/1059/75	1064/1009/113	1257/1202/90	1105/969/91	1320/1166/73	742/921/65	881/1121/52	886/897/96	1035/1062/75	1086/1016/113	1283/1211/90	1083/936/88	1347/1174/73	775/978/60	960/1228/50	941/958/89	1132/1165/72	1140/1071/104	1393/1318/85	1189/1031/84	1468/1281/70	843/1068/57	981/1258/45	986/1008/82	1163/1201/65	1236/1164/99	1495/1417/81	1233/1072/77	1493/1305/62	788/459/115	869/611/100	801/615/154	842/765/127	815/712/187	956/886/154	800/676/149	952/817/119	806/503/109	895/664/95	823/672/146	866/825/119	846/772/176	1016/946/143	837/712/136	1012/872/111	845/560/106	916/712/89	818/705/135	885/878/111	895/825/165	1064/995/132	890/760/128	1105/955/107	869/611/100	944/767/83	842/778/127	923/955/103	956/898/154	1118/1063/121	952/829/119	1166/1025/98	895/664/95	978/822/78	837/812/115	975/1014/95	1016/959/143	1223/1167/116	1012/885/111	1278/1127/94	916/712/89	1069/902/75	885/894/111	1014/1059/87	1064/1009/132	1257/1202/105	1105/969/107	1320/1166/85	779/921/75	881/1121/60	898/897/111	1035/1062/87	1086/1016/132	1283/1211/105	1083/936/102	1347/1174/85	792/978/69	960/1228/58	941/958/103	1132/1165/83	1140/1071/121	1393/1318/99	1189/1031/98	1468/1281/81	843/1068/66	981/1258/52	986/1008/95	1163/1201/75	1236/1164/116	1495/1417/94
Wind Speed [mph]		170																180																																																																																																																																																																																																							
45	1	808/618/83	934/780/69	767/751/100	908/922/82	940/871/121	1149/1078/100	969/831/97	1146/993/77	825/656/78	975/818/64	789/792/94	976/996/79	976/908/113	1174/1105/91	1010/869/91	1227/1066/74	934/780/69	1111/942/55	908/939/82	1091/1142/66	1149/1093/100	1342/1287/78	1146/1007/77	1414/1252/64	866/1102/48	1044/1343/39	1064/1091/72	1242/1286/57	1327/1253/87	1587/1507/70	1325/1154/67	1585/1387/54	923/1178/46	1100/1418/37	1087/1118/66	1313/1362/54	1338/1265/78	1409/1230/64	833/618/89	934/780/75	789/751/109	908/922/89	940/871/132	1149/1078/109	969/831/106	1146/993/84	849/656/84	975/818/70	802/792/102	976/996/85	976/908/123	1174/1105/99	1010/869/99	1227/1066/81	934/780/75	1111/942/60	908/939/89	1091/1142/72	1149/1093/109	1342/1287/85	1146/1007/84	1414/1252/70	975/818/70	1191/1013/57	937/973/82	1163/1221/68	1174/1120/99	1420/1363/81	1227/1081/81	1501/1330/66	866/1102/52	1044/1343/42	1064/1091/79	1242/1286/62	1327/1253/95	1587/1507/76	1325/1154/73	1585/1387/59	923/1178/50	1100/1418/40	1087/1118/72	1313/1362/58	1338/1265/85	1409/1230/70	860/601/100	964/780/86	832/751/127	908/922/103	940/871/154	1149/1078/127	969/831/124	1146/993/98	898/656/98	977/818/80	842/792/119	976/996/99	976/908/143	1174/1105/116	1010/869/115	1227/1066/94	964/780/86	1111/942/69	908/939/103	1091/1142/83	1149/1093/127	1342/1287/99	1146/1007/98	1414/1252/81	977/818/80	1191/1013/66	937/973/95	1163/1221/79	1174/1120/116	1420/1363/94	1227/1081/94	1501/1330/77	866/1102/60	1044/1343/49	1064/1091/91	1242/1286/71	1327/1253/110	1587/1507/88	1325/1154/85	1585/1387/68	923/1178/58	1100/1418/46	1087/1118/83	1313/1362/68	1338/1265/99	1409/1230/81																																																																																						
Wind Speed [mph]		190																200																																																																																																																																																																																																							
45	1	839/690/73	1006/847/60	847/854/91	998/1022/72	1043/974/108	1244/1173/87	1082/933/87	1304/1134/71	893/742/71	1069/904/57	872/883/85	1056/1084/69	1108/1037/104	1308/1236/83	1105/955/81	1375/1198/67	1006/847/60	1267/1081/51	998/1040/72	1229/1293/60	1244/1189/87	1487/1430/70	1304/1151/71	1578/1401/57	1069/904/57	1338/1145/48	1056/1103/69	1288/1359/57	1308/1252/83	1375/1215/67	1644/1461/54	975/1248/44	1152/1188/63	1375/1429/50	1406/1332/74	1486/1299/61	1022/1311/42	1211/1252/60	1557/1477/74	1554/1360/57	861/690/80	1006/847/65	847/854/99	998/1022/79	1043/974/118	1244/1173/95	1082/933/95	1304/1134/77	898/742/77	1069/904/62	872/883/92	1056/1084/75	1108/1037/113	1308/1236/90	1105/955/88	1375/1198/73	1006/847/65	1267/1081/55	998/1040/79	1229/1293/65	1244/1189/95	1487/1430/76	1304/1151/77	1578/1401/62	1069/904/62	1338/1145/52	1056/1103/75	1288/1359/62	1308/1252/90	1375/1215/73	1644/1461/59	975/1248/47	1152/1188/68	1375/1429/55	1406/1332/81	1486/1299/66	1022/1311/45	1211/1252/65	1557/1477/81	1554/1360/62	907/690/92	1006/847/75	877/854/115	998/1022/91	1043/974/138	1244/1173/110	1082/933/111	1304/1134/90	942/742/89	1069/904/72	879/883/107	1056/1084/87	1108/1037/132	1308/1236/105	1105/955/102	1375/1198/85	1006/847/75	1267/1081/63	998/1040/91	1229/1293/75	1244/1189/110	1487/1430/88	1304/1151/90	1578/1401/73	1069/904/72	1338/1145/60	1056/1103/87	1288/1359/71	1308/1252/105	1375/1215/85	1644/1461/68	975/1248/55	1152/1188/79	1375/1429/64	1406/1332/94	1486/1299/77	1022/1311/52	1211/1252/75	1557/1477/94	1554/1360/73																																																																																																

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		70	1	757 / 303 / 143	815 / 424 / 130	751 / 410 / 194	820 / 568 / 176	766 / 523 / 259	858 / 697 / 227	632 / 519 / 214	764 / 643 / 175	765 / 326 / 140	829 / 453 / 127	761 / 440 / 189	837 / 607 / 171	786 / 560 / 253	859 / 721 / 215	657 / 543 / 204	787 / 665 / 165	773 / 348 / 136	843 / 483 / 123	790 / 481 / 189	853 / 645 / 167	805 / 596 / 246	857 / 740 / 202
	2	815 / 424 / 130	879 / 565 / 114	820 / 578 / 176	870 / 742 / 149	834 / 687 / 221	918 / 860 / 183	764 / 653 / 175	914 / 794 / 141	829 / 453 / 127	899 / 601 / 111	837 / 618 / 171	864 / 763 / 140	859 / 731 / 215	932 / 877 / 171	787 / 675 / 165	963 / 839 / 136	843 / 483 / 123	919 / 637 / 107	853 / 656 / 167	883 / 806 / 135	857 / 750 / 202	976 / 920 / 164	830 / 714 / 160	1010 / 882 / 131
	3	800 / 737 / 111	807 / 885 / 88	861 / 685 / 158	920 / 859 / 131	899 / 805 / 196	1049 / 980 / 158	871 / 742 / 151	1046 / 902 / 122	791 / 760 / 104	823 / 933 / 85	881 / 729 / 153	910 / 875 / 122	896 / 824 / 183	1099 / 1029 / 152	919 / 786 / 146	1096 / 948 / 117	805 / 803 / 101	837 / 978 / 81	874 / 749 / 144	931 / 919 / 117	937 / 868 / 177	1145 / 1074 / 145	966 / 828 / 141	1142 / 990 / 112
	1	801 / 296 / 156	850 / 413 / 142	790 / 401 / 212	851 / 553 / 192	791 / 511 / 286	872 / 678 / 250	640 / 519 / 240	764 / 643 / 197	807 / 318 / 153	862 / 442 / 138	799 / 430 / 207	865 / 591 / 187	809 / 546 / 279	896 / 721 / 243	657 / 543 / 230	787 / 665 / 186	813 / 340 / 149	873 / 470 / 134	807 / 458 / 202	879 / 627 / 182	826 / 581 / 272	892 / 740 / 229	679 / 564 / 219	830 / 704 / 180
	2	850 / 413 / 142	903 / 549 / 124	851 / 563 / 192	915 / 742 / 167	872 / 687 / 250	947 / 860 / 208	764 / 653 / 197	914 / 794 / 159	862 / 442 / 138	920 / 584 / 120	865 / 601 / 187	906 / 763 / 157	896 / 731 / 243	940 / 877 / 193	787 / 675 / 186	963 / 839 / 153	873 / 470 / 134	966 / 637 / 120	879 / 639 / 182	924 / 806 / 152	892 / 750 / 229	976 / 920 / 186	830 / 714 / 180	1010 / 882 / 148
	3	849 / 737 / 124	845 / 885 / 98	908 / 685 / 177	959 / 859 / 147	932 / 805 / 222	1049 / 980 / 179	871 / 742 / 170	1046 / 902 / 137	837 / 760 / 116	860 / 933 / 95	927 / 729 / 172	947 / 875 / 137	928 / 824 / 208	1099 / 1029 / 172	919 / 786 / 164	1096 / 948 / 131	849 / 803 / 113	873 / 978 / 91	917 / 749 / 162	966 / 919 / 132	952 / 868 / 200	1145 / 1074 / 165	966 / 828 / 159	1142 / 990 / 126
	1	822 / 283 / 165	883 / 402 / 153	827 / 391 / 230	878 / 539 / 207	814 / 498 / 312	885 / 659 / 272	660 / 519 / 267	764 / 643 / 219	826 / 303 / 161	892 / 430 / 149	833 / 419 / 224	890 / 575 / 202	829 / 532 / 304	906 / 700 / 264	671 / 543 / 255	787 / 665 / 206	850 / 332 / 161	901 / 457 / 145	840 / 447 / 219	902 / 610 / 196	844 / 565 / 296	926 / 740 / 256	679 / 564 / 243	830 / 704 / 200
	2	883 / 402 / 153	951 / 549 / 137	878 / 549 / 207	960 / 742 / 185	885 / 668 / 272	979 / 860 / 232	764 / 653 / 219	914 / 794 / 176	892 / 430 / 149	967 / 584 / 133	890 / 585 / 202	948 / 763 / 174	906 / 710 / 264	969 / 877 / 216	787 / 675 / 206	963 / 839 / 170	901 / 457 / 145	982 / 618 / 129	902 / 621 / 196	964 / 806 / 168	926 / 750 / 256	992 / 920 / 208	830 / 714 / 200	1010 / 882 / 164
	3	897 / 737 / 137	884 / 885 / 109	928 / 666 / 191	999 / 859 / 163	966 / 805 / 248	1049 / 980 / 200	871 / 742 / 188	1046 / 902 / 152	882 / 760 / 129	897 / 933 / 105	945 / 708 / 185	984 / 875 / 151	959 / 824 / 232	1099 / 1029 / 192	919 / 786 / 182	1096 / 948 / 146	893 / 803 / 125	909 / 978 / 101	961 / 749 / 179	1001 / 919 / 146	982 / 868 / 224	1145 / 1074 / 184	966 / 828 / 176	1142 / 990 / 140
Wind Speed [mph]		110								115															
70	1	781 / 371 / 133	856 / 511 / 120	801 / 511 / 185	869 / 682 / 162	824 / 631 / 240	878 / 779 / 196	716 / 598 / 190	871 / 742 / 156	808 / 403 / 133	869 / 540 / 117	812 / 541 / 180	885 / 719 / 158	843 / 666 / 234	899 / 817 / 190	733 / 615 / 180	882 / 753 / 146								
	2	856 / 511 / 120	937 / 671 / 104	869 / 694 / 162	901 / 846 / 131	878 / 790 / 196	1017 / 961 / 158	871 / 753 / 156	1054 / 922 / 127	869 / 540 / 117	954 / 705 / 101	859 / 711 / 153	917 / 885 / 126	899 / 828 / 190	1054 / 999 / 152	882 / 764 / 146	1095 / 959 / 122								
	3	790 / 816 / 94	850 / 1019 / 78	891 / 788 / 140	949 / 960 / 113	978 / 909 / 171	1187 / 1116 / 139	975 / 838 / 131	1184 / 1028 / 107	800 / 854 / 91	861 / 1058 / 75	908 / 826 / 135	977 / 998 / 108	1017 / 948 / 164	1224 / 1153 / 133	1014 / 873 / 127	1280 / 1112 / 107								
80	1	819 / 362 / 145	884 / 498 / 131	815 / 486 / 197	893 / 663 / 177	843 / 615 / 265	912 / 779 / 222	716 / 598 / 213	871 / 742 / 175	825 / 383 / 142	895 / 525 / 127	844 / 528 / 197	905 / 698 / 172	859 / 648 / 258	932 / 817 / 215	733 / 615 / 202	882 / 753 / 164								
	2	884 / 498 / 131	983 / 671 / 116	893 / 675 / 177	940 / 846 / 147	912 / 790 / 222	1017 / 961 / 179	871 / 753 / 175	1054 / 922 / 137	895 / 525 / 127	999 / 705 / 119	905 / 711 / 172	955 / 885 / 142	932 / 828 / 215	1054 / 999 / 172	882 / 764 / 164	1095 / 959 / 137								
	3	831 / 816 / 105	884 / 1019 / 87	933 / 788 / 157	983 / 960 / 127	978 / 909 / 193	1187 / 1116 / 158	975 / 838 / 148	1184 / 1028 / 120	840 / 854 / 102	894 / 1058 / 84	948 / 826 / 152	998 / 998 / 121	1017 / 948 / 186	1224 / 1153 / 150	1014 / 873 / 142	1280 / 1112 / 120								
90	1	854 / 353 / 157	910 / 484 / 141	846 / 474 / 213	913 / 644 / 191	859 / 598 / 288	946 / 779 / 248	716 / 598 / 237	871 / 742 / 194	858 / 373 / 153	918 / 510 / 288	874 / 514 / 213	951 / 698 / 191	873 / 630 / 280	964 / 817 / 240	733 / 615 / 225	882 / 753 / 182								
	2	910 / 484 / 141	996 / 651 / 125	913 / 656 / 191	979 / 846 / 163	946 / 790 / 248	1017 / 961 / 200	871 / 753 / 194	1054 / 922 / 158	918 / 510 / 137	1009 / 682 / 121	951 / 711 / 191	993 / 885 / 157	964 / 828 / 240	1054 / 999 / 192	882 / 764 / 182	1095 / 959 / 152								
	3	873 / 816 / 117	919 / 1019 / 97	975 / 788 / 174	1017 / 960 / 140	1004 / 909 / 216	1187 / 1116 / 176	975 / 838 / 164	1184 / 1028 / 134	880 / 854 / 113	927 / 1058 / 93	989 / 826 / 168	1030 / 998 / 135	1023 / 948 / 208	1224 / 1153 / 168	1014 / 873 / 158	1280 / 1112 / 134								
Wind Speed [mph]		120								130															
70	1	816 / 425 / 130	881 / 567 / 114	822 / 570 / 176	873 / 732 / 149	837 / 681 / 221	922 / 853 / 183	767 / 646 / 175	918 / 786 / 141	808 / 403 / 133	869 / 540 / 117	812 / 541 / 180	885 / 719 / 158	843 / 666 / 234	899 / 817 / 190	733 / 615 / 180	882 / 753 / 146								
	2	881 / 567 / 114	970 / 737 / 98	873 / 745 / 149	932 / 921 / 122	922 / 864 / 183	1088 / 1033 / 145	918 / 797 / 141	1132 / 994 / 117	869 / 540 / 117	954 / 705 / 101	859 / 711 / 153	917 / 885 / 126	899 / 828 / 190	1054 / 999 / 152	882 / 764 / 146	1095 / 959 / 122								
	3	809 / 889 / 88	869 / 1092 / 72	923 / 863 / 131	1008 / 1032 / 104	1053 / 984 / 158	1256 / 1185 / 127	1050 / 906 / 122	1316 / 1145 / 102	800 / 854 / 91	861 / 1058 / 75	908 / 826 / 135	977 / 998 / 108	1017 / 948 / 164	1224 / 1153 / 133	1014 / 873 / 127	1280 / 1112 / 107								
80	1	852 / 415 / 142	905 / 551 / 124	852 / 556 / 192	917 / 732 / 167	875 / 681 / 250	950 / 853 / 208	767 / 646 / 197	918 / 786 / 159	825 / 383 / 142	895 / 525 / 127	844 / 528 / 197	905 / 698 / 172	859 / 648 / 258	932 / 817 / 215	733 / 615 / 202	882 / 753 / 164								
	2	905 / 551 / 124	1013 / 737 / 109	917 / 745 / 167	968 / 921 / 137	950 / 864 / 208	1088 / 1033 / 165	918 / 797 / 159	1132 / 994 / 131	895 / 525 / 127	999 / 705 / 113	905 / 711 / 172	955 / 885 / 142	932 / 828 / 215	1054 / 999 / 172	882 / 764 / 164	1095 / 959 / 137								
	3	848 / 889 / 98	901 / 1092 / 80	962 / 863 / 147	1010 / 1032 / 116	1053 / 984 / 179	1256 / 1185 / 143	1050 / 906 / 137	1316 / 1145 / 115	840 / 854 / 102	894 / 1058 / 84	948 / 826 / 152	998 / 998 / 121	1017 / 948 / 186	1224 / 1153 / 150	1014 / 873 / 142	1280 / 1112 / 120								
90	1	884 / 404 / 153	953 / 551 / 137	880 / 541 / 207	962 / 732 / 185	887 / 661 / 272	981 / 853 / 232	767 / 646 / 219	918 / 786 / 176	858 / 373 / 153	918 / 510 / 137	874 / 514 / 213	951 / 698 / 191	873 / 630 / 280	964 / 817 / 240	733 / 615 / 225	882 / 753 / 182								
	2	953 / 551 / 137	1021 / 712 / 117	962 / 745 / 185	1005 / 921 / 151	981 / 864 / 232	1088 / 1033 / 184	918 / 797 / 176	1132 / 994 / 146	918 / 510 / 137	1009 / 682 / 121	951 / 711 / 191	993 / 885 / 157	964 / 828 / 240	1054 / 999 / 192	882 / 764 / 182	1095 / 959 / 152								
	3	886 / 889 / 109	932 / 1092 / 89	1001 / 863 / 163	1041 / 1032 / 129	1053 / 984 / 200	1256 / 1185 / 160	1050 / 906 / 152	1316 / 1145 / 128	880 / 854 / 113	927 / 1058 / 93	989 / 826 / 168	1030 / 998 / 135	1023 / 948 / 208	1224 / 1153 / 168	1014 / 873 / 158	1280 / 1112 / 134								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
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	2 = 2
30 - 45	1 = 1
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	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								83in x 41.5in								Load: Up / Down / Side , lbs																											
Wind Speed [mph]		140								150								160																											
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																					
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																				
70	1	824 / 448 / 127	893 / 594 / 111	832 / 599 / 171	885 / 765 / 144	852 / 712 / 215	956 / 886 / 177	800 / 676 / 170	952 / 817 / 136	838 / 490 / 120	942 / 664 / 107	849 / 654 / 162	907 / 825 / 135	881 / 772 / 202	1016 / 946 / 164	837 / 712 / 156	1012 / 872 / 127	874 / 545 / 117	960 / 712 / 101	864 / 705 / 153	923 / 878 / 126	905 / 825 / 190	1064 / 995 / 152	890 / 760 / 146	1105 / 955 / 122																				
	2	893 / 594 / 111	985 / 767 / 94	885 / 778 / 144	944 / 955 / 117	956 / 898 / 177	1118 / 1063 / 139	952 / 829 / 136	1166 / 1025 / 112	942 / 664 / 107	1009 / 822 / 88	877 / 812 / 131	975 / 1014 / 108	1016 / 959 / 164	1223 / 1167 / 133	1012 / 885 / 127	1278 / 1127 / 107	960 / 712 / 101	1069 / 902 / 85	923 / 894 / 126	1014 / 1059 / 99	1064 / 1009 / 152	1257 / 1202 / 120	1105 / 969 / 122	1320 / 1166 / 97																				
	3	816 / 921 / 85	881 / 1121 / 68	936 / 897 / 126	1035 / 1062 / 99	1086 / 1016 / 152	1283 / 1211 / 120	1083 / 936 / 117	1347 / 1174 / 97	827 / 978 / 78	960 / 1228 / 65	958 / 958 / 117	1132 / 1165 / 95	1140 / 1071 / 139	1393 / 1318 / 114	1189 / 1031 / 112	1468 / 1281 / 93	867 / 1068 / 75	981 / 1258 / 59	986 / 1008 / 108	1163 / 1201 / 86	1236 / 1164 / 133	1495 / 1417 / 108	1233 / 1072 / 102	1493 / 1305 / 83																				
80	1	857 / 436 / 138	942 / 594 / 124	860 / 583 / 187	929 / 765 / 162	889 / 712 / 243	966 / 886 / 200	800 / 676 / 191	952 / 817 / 153	867 / 477 / 131	959 / 644 / 116	898 / 654 / 182	947 / 825 / 152	916 / 772 / 229	1016 / 946 / 186	837 / 712 / 175	1012 / 872 / 142	900 / 530 / 127	1005 / 712 / 113	910 / 705 / 172	961 / 878 / 142	938 / 825 / 215	1064 / 995 / 172	890 / 760 / 164	1105 / 955 / 137																				
	2	942 / 594 / 124	1026 / 767 / 105	929 / 778 / 162	980 / 955 / 132	966 / 898 / 200	1118 / 1063 / 158	952 / 829 / 153	1166 / 1025 / 126	959 / 644 / 116	1048 / 822 / 98	916 / 812 / 147	997 / 1014 / 121	1016 / 959 / 186	1223 / 1167 / 150	1012 / 885 / 142	1278 / 1127 / 120	1005 / 712 / 113	1104 / 902 / 95	961 / 894 / 142	1014 / 1059 / 111	1064 / 1009 / 172	1257 / 1202 / 136	1105 / 969 / 137	1320 / 1166 / 110																				
	3	854 / 921 / 95	905 / 1121 / 77	974 / 897 / 142	1035 / 1062 / 111	1086 / 1016 / 172	1283 / 1211 / 136	1083 / 936 / 131	1347 / 1174 / 110	861 / 978 / 87	960 / 1228 / 73	993 / 958 / 132	1132 / 1165 / 106	1140 / 1071 / 158	1393 / 1318 / 129	1189 / 1031 / 126	1468 / 1281 / 104	900 / 1068 / 84	981 / 1258 / 66	1005 / 1008 / 121	1163 / 1201 / 96	1236 / 1164 / 150	1495 / 1417 / 122	1233 / 1072 / 115	1493 / 1305 / 93																				
90	1	887 / 425 / 149	961 / 576 / 133	885 / 568 / 202	972 / 765 / 179	926 / 712 / 272	997 / 886 / 224	800 / 676 / 213	952 / 817 / 170	918 / 477 / 145	973 / 624 / 125	921 / 636 / 196	988 / 825 / 168	951 / 772 / 256	1022 / 946 / 208	837 / 712 / 194	1012 / 872 / 158	922 / 515 / 137	1015 / 689 / 121	928 / 685 / 185	999 / 878 / 157	971 / 825 / 240	1064 / 995 / 192	890 / 760 / 182	1105 / 955 / 152																				
	2	961 / 576 / 133	1068 / 767 / 117	972 / 778 / 179	1015 / 955 / 146	997 / 898 / 224	1118 / 1063 / 176	952 / 829 / 170	1166 / 1025 / 140	973 / 624 / 125	1087 / 822 / 109	955 / 812 / 163	1029 / 1014 / 135	1022 / 959 / 208	1223 / 1167 / 168	1012 / 885 / 158	1278 / 1127 / 134	1015 / 689 / 121	1141 / 902 / 105	999 / 894 / 157	1034 / 1059 / 123	1064 / 1009 / 192	1257 / 1202 / 152	1105 / 969 / 152	1320 / 1166 / 122																				
	3	891 / 921 / 105	935 / 1121 / 85	1012 / 897 / 157	1049 / 1062 / 123	1086 / 1016 / 192	1283 / 1211 / 152	1083 / 936 / 146	1347 / 1174 / 122	895 / 978 / 97	982 / 1228 / 81	1029 / 958 / 146	1132 / 1165 / 118	1140 / 1071 / 176	1393 / 1318 / 144	1189 / 1031 / 140	1468 / 1281 / 116	933 / 1068 / 93	981 / 1258 / 73	1037 / 1008 / 135	1163 / 1201 / 107	1236 / 1164 / 168	1495 / 1417 / 136	1233 / 1072 / 128	1493 / 1305 / 103																				
70	1	910 / 601 / 114	1007 / 780 / 98	876 / 751 / 144	933 / 922 / 117	940 / 871 / 177	1149 / 1078 / 145	969 / 831 / 141	1146 / 993 / 112	919 / 637 / 107	1017 / 818 / 91	883 / 792 / 135	976 / 996 / 113	976 / 908 / 164	1174 / 1105 / 133	1010 / 869 / 131	1227 / 1066 / 107	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td rowspan="3">0 - 7.5</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">7.5 - 15</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">15 - 30</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> <tr> <td rowspan="3">30 - 45</td> <td>1 = 1</td> </tr> <tr> <td>2 = 2</td> </tr> <tr> <td>3 = 3</td> </tr> </tbody> </table>								ASCE Group Zone		Panal Angle	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3	7.5 - 15	1 = 1	2 = 2	3 = 3	15 - 30	1 = 1	2 = 2	3 = 3	30 - 45	1 = 1	2 = 2	3 = 3
	ASCE Group Zone																																												
	Panal Angle	Mono Slope																																											
0 - 7.5	1 = 1																																												
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2	1007 / 780 / 98	1111 / 942 / 78	933 / 939 / 117	1091 / 1142 / 95	1149 / 1093 / 145	1342 / 1287 / 114	1146 / 1007 / 112	1414 / 1252 / 93	1017 / 818 / 91	1191 / 1013 / 75	937 / 973 / 108	1163 / 1221 / 90	1174 / 1120 / 133	1420 / 1363 / 108	1227 / 1081 / 107	1501 / 1330 / 88																													
3	866 / 1102 / 68	1044 / 1343 / 56	1064 / 1091 / 104	1242 / 1286 / 81	1327 / 1253 / 101	1587 / 1507 / 97	1325 / 1154 / 78	1585 / 1387 / 88	923 / 1178 / 65	1100 / 1418 / 52	1087 / 1118 / 95	1313 / 1362 / 77	1338 / 1265 / 114	1409 / 1230 / 93																															
80	1	933 / 583 / 124	1015 / 754 / 105	919 / 751 / 162	968 / 922 / 132	954 / 871 / 200	1149 / 1078 / 165	969 / 831 / 159	1146 / 993 / 126	966 / 637 / 120	1057 / 818 / 102	924 / 792 / 152	1008 / 996 / 127	976 / 908 / 186	1174 / 1105 / 150	1010 / 869 / 148	1227 / 1066 / 120																												
	2	1015 / 754 / 105	1113 / 942 / 87	968 / 939 / 132	1091 / 1142 / 106	1149 / 1093 / 165	1342 / 1287 / 129	1146 / 1007 / 126	1414 / 1252 / 104	1057 / 818 / 102	1191 / 1013 / 84	968 / 973 / 121	1163 / 1221 / 101	1174 / 1120 / 150	1420 / 1363 / 122	1227 / 1081 / 120	1501 / 1330 / 99																												
	3	894 / 1102 / 77	1044 / 1343 / 62	1064 / 1091 / 116	1242 / 1286 / 91	1327 / 1253 / 143	1587 / 1507 / 115	1325 / 1154 / 110	1585 / 1387 / 88	925 / 1178 / 73	1100 / 1418 / 58	1087 / 1118 / 106	1313 / 1362 / 86	1338 / 1265 / 129	1409 / 1230 / 104																														
90	1	952 / 566 / 133	1056 / 754 / 117	962 / 751 / 179	1003 / 922 / 146	985 / 871 / 224	1149 / 1078 / 184	969 / 831 / 176	1146 / 993 / 140	982 / 618 / 129	1097 / 818 / 113	964 / 792 / 168	1042 / 996 / 140	992 / 908 / 208	1174 / 1105 / 168	1010 / 869 / 164	1227 / 1066 / 134																												
	2	1056 / 754 / 117	1147 / 942 / 97	1003 / 939 / 146	1091 / 1142 / 118	1149 / 1093 / 184	1342 / 1287 / 144	1146 / 1007 / 140	1414 / 1252 / 116	1097 / 818 / 113	1194 / 1013 / 93	1001 / 973 / 135	1163 / 1221 / 112	1174 / 1120 / 168	1420 / 1363 / 136	1227 / 1081 / 134	1501 / 1330 / 110																												
	3	924 / 1102 / 85	1044 / 1343 / 69	1084 / 1091 / 129	1242 / 1286 / 101	1327 / 1253 / 160	1587 / 1507 / 128	1325 / 1154 / 122	1585 / 1387 / 97	953 / 1178 / 81	1100 / 1418 / 65	1087 / 1118 / 118	1313 / 1362 / 96	1338 / 1265 / 144	1409 / 1230 / 116																														
70	1	953 / 690 / 104	1020 / 847 / 85	917 / 854 / 131	998 / 1022 / 104	1043 / 974 / 158	1244 / 1173 / 127	1082 / 933 / 127	1304 / 1134 / 102	986 / 742 / 101	1069 / 904 / 81	916 / 883 / 122	1056 / 1084 / 99	1108 / 1037 / 152	1308 / 1236 / 120	1105 / 955 / 117	1375 / 1198 / 97																												
	2	1020 / 847 / 85	1267 / 1081 / 72	998 / 1040 / 104	1229 / 1293 / 86	1244 / 1189 / 127	1487 / 1430 / 101	1304 / 1151 / 102	1578 / 1401 / 83	1069 / 904 / 81	1338 / 1145 / 68	1056 / 1103 / 99	1288 / 1359 / 81	1308 / 1252 / 120	1375 / 1215 / 97	1644 / 1461 / 78																													
	3	975 / 1248 / 62	1152 / 1188 / 90	1375 / 1429 / 72	1406 / 1332 / 108	1486 / 1299 / 88	1022 / 1311 / 59	1211 / 1252 / 86	1557 / 1477 / 108	1554 / 1360 / 83																																			
80	1	967 / 668 / 113	1057 / 847 / 95	956 / 854 / 147	1003 / 1022 / 116	1043 / 974 / 179	1244 / 1173 / 143	1082 / 933 / 142	1304 / 1134 / 115	997 / 718 / 109	1093 / 904 / 91	952 / 883 / 137	1056 / 1084 / 111	1108 / 1037 / 172	1308 / 1236 / 136	1105 / 955 / 131	1375 / 1198 / 110																												
	2	1057 / 847 / 95	1267 / 1081 / 80	1003 / 1040 / 116	1229 / 1293 / 96	1244 / 1189 / 143	1487 / 1430 / 115	1304 / 1151 / 115	1578 / 1401 / 93	1093 / 904 / 91	1338 / 1145 / 77	1056 / 1103 / 111	1288 / 1359 / 91	1308 / 1252 / 136	1375 / 1215 / 110	1644 / 1461 / 88																													
	3	975 / 1248 / 69	1152 / 1188 / 101	1375 / 1429 / 81	1406 / 1332 / 122	1486 / 1299 / 99	1022 / 1311 / 66	1211 / 1252 / 96	1557 / 1477 / 122	1554 / 1360 / 93																																			
90	1	1012 / 668 / 125	1094 / 847 / 105	995 / 854 / 163	1034 / 1022 / 129	1043 / 974 / 200	1244 / 1173 / 160	1082 / 933 / 158	1304 / 1134 / 128	1040 / 718 / 121	1129 / 904 / 101	989 / 883 / 151	1065 / 1084 / 123	1108 / 1037 / 192	1308 / 1236 / 152	1105 / 955 / 146	1375 / 1198 / 122																												
	2	1094 / 847 / 105	1267 / 1081 / 89	1034 / 1040 / 129	1229 / 1293 / 107	1244 / 1189 / 160	1487 / 1430 / 128	1304 / 1151 / 103	1578 / 1401 / 103	1129 / 904 / 101	1338 / 1145 / 85	1065 / 1103 / 123	1288 / 1359 / 101	1308 / 1252 / 152	1375 / 1215 / 122	1644 / 1461 / 97																													
	3	979 / 1248 / 77	1152 / 1188 / 112	1375 / 1429 / 90	1406 / 1332 / 136	1486 / 1299 / 110	1022 / 1311 / 73	1211 / 1252 / 107	1557 / 1477 / 136	1554 / 1360 / 103																																			

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	859 / 276 / 176	912 / 392 / 163	861 / 382 / 246	903 / 524 / 221	834 / 485 / 336	922 / 659 / 300	680 / 519 / 294	764 / 643 / 240	861 / 296 / 172	919 / 418 / 158	866 / 409 / 240	913 / 559 / 215	848 / 518 / 327	942 / 700 / 292	690 / 543 / 280	787 / 665 / 227	885 / 324 / 172	926 / 444 / 154	870 / 435 / 234	922 / 592 / 209	861 / 550 / 318	961 / 740 / 283	697 / 564 / 267	830 / 704 / 220		
	2	912 / 392 / 163	971 / 533 / 145	903 / 534 / 221	974 / 720 / 197	922 / 668 / 300	1010 / 860 / 256	764 / 653 / 240	914 / 794 / 194	919 / 418 / 158	984 / 566 / 141	913 / 569 / 215	990 / 763 / 191	942 / 710 / 292	999 / 877 / 239	787 / 675 / 227	963 / 839 / 187	926 / 444 / 154	996 / 598 / 136	922 / 603 / 209	1005 / 806 / 185	961 / 750 / 283	1020 / 920 / 230	830 / 714 / 220	1010 / 882 / 180		
	3	946 / 737 / 150	922 / 885 / 119	946 / 646 / 203	1038 / 859 / 179	1000 / 805 / 274	1064 / 980 / 221	871 / 742 / 207	1046 / 902 / 167	928 / 760 / 141	934 / 933 / 115	960 / 686 / 197	1020 / 875 / 166	991 / 824 / 256	1099 / 1029 / 212	919 / 786 / 200	1096 / 948 / 160	937 / 803 / 136	945 / 978 / 110	1004 / 749 / 197	1036 / 919 / 160	1013 / 868 / 247	1145 / 1074 / 203	966 / 828 / 194	1142 / 990 / 154		
Wind Speed [mph]		110								115																	
100	1	887 / 344 / 167	932 / 470 / 150	873 / 461 / 228	959 / 644 / 209	898 / 598 / 318	980 / 779 / 274	720 / 598 / 260	871 / 742 / 214	888 / 364 / 163	967 / 510 / 150	901 / 501 / 228	968 / 678 / 203	911 / 630 / 309	997 / 817 / 265	733 / 615 / 247	882 / 753 / 200										
	2	932 / 470 / 150	1040 / 651 / 136	959 / 656 / 209	1018 / 846 / 179	980 / 790 / 274	1040 / 961 / 221	871 / 753 / 214	1054 / 922 / 174	967 / 510 / 150	1052 / 682 / 132	968 / 690 / 203	1031 / 885 / 172	997 / 828 / 265	1057 / 999 / 212	882 / 764 / 200	1095 / 959 / 167										
	3	914 / 816 / 128	953 / 1019 / 106	1017 / 788 / 191	1051 / 960 / 154	1033 / 909 / 239	1187 / 1116 / 195	975 / 838 / 180	1184 / 1028 / 147	920 / 854 / 123	959 / 1058 / 101	1030 / 826 / 185	1063 / 998 / 148	1051 / 948 / 230	1224 / 1153 / 186	1014 / 873 / 174	1280 / 1112 / 147										
Wind Speed [mph]		120								130																	
100	1	914 / 394 / 163	972 / 535 / 145	905 / 527 / 221	976 / 710 / 197	924 / 661 / 300	1013 / 853 / 256	767 / 646 / 240	918 / 786 / 194	888 / 364 / 163	967 / 510 / 150	901 / 501 / 228	968 / 678 / 203	911 / 630 / 309	997 / 817 / 265	733 / 615 / 247	882 / 753 / 200										
	2	972 / 535 / 145	1062 / 712 / 128	976 / 723 / 197	1041 / 921 / 166	1013 / 864 / 256	1088 / 1033 / 203	918 / 797 / 194	1132 / 994 / 160	967 / 510 / 150	1052 / 682 / 132	968 / 690 / 203	1031 / 885 / 172	997 / 828 / 265	1057 / 999 / 212	882 / 764 / 200	1095 / 959 / 167										
	3	925 / 889 / 119	963 / 1092 / 97	1041 / 863 / 179	1072 / 1032 / 142	1067 / 984 / 221	1256 / 1185 / 177	1050 / 906 / 167	1316 / 1145 / 140	920 / 854 / 123	959 / 1058 / 101	1030 / 826 / 185	1063 / 998 / 148	1051 / 948 / 230	1224 / 1153 / 186	1014 / 873 / 174	1280 / 1112 / 147										

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

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h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		83in x 41.5in		Load: Up / Down / Side , lbs																											
Wind Speed [mph]		140										150										160											
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
100	1	915 / 413 / 158	978 / 559 / 141	908 / 552 / 215	984 / 741 / 191	935 / 691 / 292	1027 / 886 / 247	800 / 676 / 234	952 / 817 / 187	943 / 464 / 154	1018 / 624 / 136	940 / 618 / 209	1029 / 825 / 185	955 / 748 / 274	1050 / 946 / 230	837 / 712 / 214	1012 / 872 / 174	971 / 515 / 150	1058 / 689 / 132	973 / 685 / 203	1037 / 878 / 172	1003 / 825 / 265	1064 / 995 / 212	890 / 760 / 200	1105 / 955 / 167								
	2	978 / 559 / 141	1071 / 741 / 123	984 / 754 / 191	1050 / 955 / 160	1027 / 898 / 247	1118 / 1063 / 195	952 / 829 / 187	1166 / 1025 / 154	1018 / 624 / 136	1125 / 822 / 119	994 / 812 / 179	1062 / 1014 / 148	1050 / 959 / 230	1223 / 1167 / 186	1012 / 885 / 174	1278 / 1127 / 147	1058 / 689 / 132	1178 / 902 / 115	1037 / 894 / 172	1064 / 1059 / 136	1064 / 1009 / 212	1257 / 1202 / 168	1105 / 969 / 167	1320 / 1166 / 134								
	3	928 / 921 / 115	965 / 1121 / 93	1050 / 897 / 172	1079 / 1062 / 136	1086 / 1016 / 212	1283 / 1211 / 168	1083 / 936 / 160	1347 / 1174 / 134	929 / 978 / 106	1010 / 1228 / 88	1064 / 958 / 160	1138 / 1165 / 129	1140 / 1071 / 195	1393 / 1318 / 159	1189 / 1031 / 154	1468 / 1281 / 127	965 / 1068 / 101	997 / 1258 / 79	1070 / 1008 / 148	1163 / 1201 / 117	1236 / 1164 / 186	1495 / 1417 / 150	1233 / 1072 / 140	1493 / 1305 / 114								
Wind Speed [mph]		170										180																					
100	1	969 / 549 / 141	1060 / 728 / 123	1006 / 751 / 197	1039 / 922 / 160	1015 / 871 / 247	1149 / 1078 / 203	969 / 831 / 194	1146 / 993 / 154	996 / 598 / 136	1096 / 788 / 119	1005 / 792 / 185	1076 / 996 / 154	1020 / 908 / 230	1174 / 1105 / 186	1010 / 869 / 180	1227 / 1066 / 147	969 / 549 / 141	1060 / 728 / 123	1006 / 751 / 197	1039 / 922 / 160	1015 / 871 / 247	1149 / 1078 / 203	969 / 831 / 194	1146 / 993 / 154	996 / 598 / 136	1096 / 788 / 119	1005 / 792 / 185	1076 / 996 / 154	1020 / 908 / 230	1174 / 1105 / 186	1010 / 869 / 180	1227 / 1066 / 147
	2	1060 / 728 / 123	1181 / 942 / 106	1039 / 939 / 160	1107 / 1142 / 129	1149 / 1093 / 203	1342 / 1287 / 159	1146 / 1007 / 154	1414 / 1252 / 127	1096 / 788 / 119	1227 / 1013 / 101	1033 / 973 / 148	1163 / 1221 / 123	1174 / 1120 / 186	1420 / 1363 / 150	1227 / 1081 / 147	1501 / 1330 / 120	1060 / 728 / 123	1181 / 942 / 106	1039 / 939 / 160	1107 / 1142 / 129	1149 / 1093 / 203	1342 / 1287 / 159	1146 / 1007 / 154	1414 / 1252 / 127	1096 / 788 / 119	1227 / 1013 / 101	1033 / 973 / 148	1163 / 1221 / 123	1174 / 1120 / 186	1420 / 1363 / 150	1227 / 1081 / 147	1501 / 1330 / 120
	3	954 / 1102 / 93	1044 / 1343 / 75	1115 / 1091 / 142	1242 / 1286 / 111	1327 / 1253 / 177	1587 / 1507 / 142	1325 / 1154 / 134	1585 / 1387 / 107	982 / 1178 / 88	1100 / 1418 / 71	1104 / 1118 / 129	1313 / 1362 / 105	1338 / 1265 / 159		1409 / 1230 / 127		954 / 1102 / 93	1044 / 1343 / 75	1115 / 1091 / 142	1242 / 1286 / 111	1327 / 1253 / 177	1587 / 1507 / 142	1325 / 1154 / 134	1585 / 1387 / 107	982 / 1178 / 88	1100 / 1418 / 71	1104 / 1118 / 129	1313 / 1362 / 105	1338 / 1265 / 159		1409 / 1230 / 127	
Wind Speed [mph]		190										200																					
100	1	1022 / 647 / 132	1131 / 847 / 115	1035 / 854 / 179	1065 / 1022 / 142	1060 / 974 / 221	1244 / 1173 / 177	1082 / 933 / 174	1304 / 1134 / 140	1047 / 694 / 128	1165 / 904 / 110	1025 / 883 / 166	1095 / 1084 / 136	1108 / 1037 / 212	1308 / 1236 / 168	1105 / 955 / 160	1375 / 1198 / 134	1022 / 647 / 132	1131 / 847 / 115	1035 / 854 / 179	1065 / 1022 / 142	1060 / 974 / 221	1244 / 1173 / 177	1082 / 933 / 174	1304 / 1134 / 140	1047 / 694 / 128	1165 / 904 / 110	1025 / 883 / 166	1095 / 1084 / 136	1108 / 1037 / 212	1308 / 1236 / 168	1105 / 955 / 160	1375 / 1198 / 134
	2	1131 / 847 / 115	1269 / 1081 / 97	1065 / 1040 / 142	1229 / 1293 / 117	1244 / 1189 / 177	1487 / 1430 / 142	1304 / 1151 / 140	1578 / 1401 / 114	1165 / 904 / 110	1338 / 1145 / 93	1095 / 1103 / 136	1288 / 1359 / 111	1308 / 1252 / 168		1375 / 1215 / 134	1644 / 1461 / 107	1131 / 847 / 115	1269 / 1081 / 97	1065 / 1040 / 142	1229 / 1293 / 117	1244 / 1189 / 177	1487 / 1430 / 142	1304 / 1151 / 140	1578 / 1401 / 114	1165 / 904 / 110	1338 / 1145 / 93	1095 / 1103 / 136	1288 / 1359 / 111	1308 / 1252 / 168		1375 / 1215 / 134	1644 / 1461 / 107
	3	1007 / 1248 / 84		1152 / 1188 / 123	1375 / 1429 / 99	1406 / 1332 / 150		1486 / 1299 / 120		1027 / 1311 / 79		1211 / 1252 / 117		1557 / 1477 / 150		1554 / 1360 / 114		1007 / 1248 / 84		1152 / 1188 / 123	1375 / 1429 / 99	1406 / 1332 / 150		1486 / 1299 / 120		1027 / 1311 / 79		1211 / 1252 / 117		1557 / 1477 / 150		1554 / 1360 / 114	

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h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	438 / 305 / 44	528 / 396 / 37	469 / 412 / 48	542 / 506 / 38	552 / 471 / 48	666 / 591 / 40	545 / 436 / 53	660 / 546 / 44	458 / 325 / 42	551 / 419 / 35	482 / 430 / 46	564 / 532 / 37	564 / 487 / 46	690 / 617 / 38	569 / 459 / 51	685 / 570 / 42	478 / 345 / 41	572 / 440 / 34	502 / 454 / 44	584 / 556 / 35	598 / 521 / 45	711 / 640 / 36	592 / 481 / 49	706 / 590 / 39
	2	528 / 396 / 37	636 / 503 / 30	542 / 515 / 38	644 / 637 / 31	650 / 585 / 39	796 / 735 / 32	660 / 554 / 44	791 / 679 / 35	551 / 419 / 35	660 / 526 / 29	564 / 542 / 37	665 / 663 / 30	690 / 625 / 38	816 / 758 / 31	685 / 578 / 42	837 / 721 / 34	572 / 440 / 34	698 / 560 / 28	584 / 566 / 35	683 / 684 / 28	711 / 648 / 36	859 / 800 / 30	706 / 599 / 39	855 / 739 / 32
	3	517 / 614 / 28	622 / 764 / 23	621 / 597 / 34	739 / 733 / 27	752 / 681 / 34	898 / 829 / 28	747 / 628 / 37	924 / 791 / 31	547 / 656 / 27	656 / 811 / 22	643 / 623 / 32	758 / 756 / 26	774 / 704 / 32	945 / 876 / 27	792 / 669 / 36	941 / 807 / 29	562 / 678 / 25	666 / 827 / 21	662 / 646 / 31	797 / 799 / 25	816 / 746 / 32	991 / 921 / 26	811 / 688 / 34	987 / 849 / 28
5	1	438 / 305 / 44	528 / 396 / 37	469 / 412 / 56	542 / 506 / 45	552 / 471 / 60	666 / 591 / 50	545 / 436 / 61	660 / 546 / 50	458 / 325 / 42	551 / 419 / 35	482 / 430 / 53	564 / 532 / 43	564 / 487 / 57	690 / 617 / 47	569 / 459 / 58	685 / 570 / 48	478 / 345 / 41	572 / 440 / 34	502 / 454 / 51	584 / 556 / 41	598 / 521 / 55	711 / 640 / 45	592 / 481 / 56	706 / 590 / 45
	2	528 / 396 / 37	636 / 503 / 30	542 / 515 / 45	644 / 637 / 36	650 / 585 / 48	796 / 735 / 40	660 / 554 / 50	791 / 679 / 41	551 / 419 / 35	660 / 526 / 29	564 / 542 / 43	665 / 663 / 34	690 / 625 / 47	816 / 758 / 38	685 / 578 / 48	837 / 721 / 39	572 / 440 / 34	698 / 560 / 28	584 / 566 / 41	683 / 684 / 33	711 / 648 / 45	859 / 800 / 37	706 / 599 / 45	855 / 739 / 37
	3	517 / 614 / 28	622 / 764 / 23	621 / 597 / 39	739 / 733 / 32	752 / 681 / 43	898 / 829 / 34	747 / 628 / 43	924 / 791 / 36	547 / 656 / 27	656 / 811 / 22	643 / 623 / 37	758 / 756 / 30	774 / 704 / 40	945 / 876 / 33	792 / 669 / 42	941 / 807 / 33	562 / 678 / 25	666 / 827 / 21	662 / 646 / 35	797 / 799 / 29	816 / 746 / 39	991 / 921 / 32	811 / 688 / 39	987 / 849 / 32
10	1	473 / 305 / 52	528 / 396 / 44	485 / 412 / 72	542 / 506 / 58	552 / 471 / 78	666 / 591 / 64	545 / 436 / 74	660 / 546 / 61	484 / 325 / 50	551 / 419 / 42	489 / 430 / 68	564 / 532 / 55	564 / 487 / 73	690 / 617 / 61	569 / 459 / 71	685 / 570 / 58	494 / 345 / 49	572 / 440 / 40	502 / 454 / 66	584 / 556 / 53	598 / 521 / 72	711 / 640 / 58	592 / 481 / 68	706 / 590 / 55
	2	528 / 396 / 44	636 / 503 / 36	542 / 515 / 58	644 / 637 / 47	650 / 585 / 63	796 / 735 / 52	660 / 554 / 61	791 / 679 / 49	551 / 419 / 42	660 / 526 / 34	564 / 542 / 55	665 / 663 / 44	690 / 625 / 61	816 / 758 / 49	685 / 578 / 58	837 / 721 / 48	572 / 440 / 40	698 / 560 / 34	584 / 566 / 53	683 / 684 / 42	711 / 648 / 58	859 / 800 / 48	706 / 599 / 55	855 / 739 / 45
	3	517 / 614 / 33	622 / 764 / 27	621 / 597 / 50	739 / 733 / 41	752 / 681 / 55	898 / 829 / 45	747 / 628 / 52	924 / 791 / 43	547 / 656 / 32	656 / 811 / 26	643 / 623 / 48	758 / 756 / 39	774 / 704 / 52	945 / 876 / 43	792 / 669 / 51	941 / 807 / 41	562 / 678 / 30	666 / 827 / 25	662 / 646 / 46	797 / 799 / 37	816 / 746 / 51	991 / 921 / 42	811 / 688 / 48	987 / 849 / 39
0	1	496 / 363 / 39	592 / 460 / 32	512 / 468 / 42	602 / 578 / 34	619 / 542 / 43	749 / 677 / 35	613 / 501 / 47	744 / 625 / 38	514 / 381 / 38	623 / 488 / 32	529 / 489 / 40	633 / 612 / 33	637 / 562 / 41	764 / 694 / 33	631 / 519 / 45	781 / 659 / 37	623 / 488 / 32	752 / 611 / 26	618 / 607 / 32	750 / 760 / 27	764 / 704 / 33	907 / 851 / 27	781 / 668 / 37	935 / 813 / 30
	2	592 / 460 / 32	717 / 579 / 27	602 / 588 / 34	717 / 723 / 27	729 / 668 / 34	870 / 814 / 28	744 / 634 / 38	896 / 777 / 31	623 / 488 / 32	752 / 611 / 26	618 / 607 / 32	750 / 760 / 27	764 / 704 / 33	907 / 851 / 27	781 / 668 / 37	935 / 813 / 30	600 / 733 / 23	724 / 906 / 19	711 / 702 / 28	841 / 849 / 23	866 / 798 / 29	1073 / 1003 / 24	891 / 760 / 32	1070 / 924 / 26
	3	590 / 717 / 25	696 / 868 / 20	678 / 666 / 29	807 / 812 / 23	856 / 786 / 31	1033 / 963 / 25	852 / 724 / 33	1030 / 887 / 27	600 / 733 / 23	724 / 906 / 19	711 / 702 / 28	841 / 849 / 23	866 / 798 / 29	1073 / 1003 / 24	891 / 760 / 32	1070 / 924 / 26	514 / 381 / 38	623 / 488 / 32	529 / 489 / 46	633 / 612 / 38	637 / 562 / 51	764 / 694 / 41	631 / 519 / 51	781 / 659 / 43
5	1	496 / 363 / 39	592 / 460 / 32	512 / 468 / 48	602 / 578 / 39	619 / 542 / 53	749 / 677 / 44	613 / 501 / 53	744 / 625 / 44	514 / 381 / 38	623 / 488 / 32	529 / 489 / 46	633 / 612 / 38	637 / 562 / 51	764 / 694 / 41	631 / 519 / 51	781 / 659 / 43	623 / 488 / 32	752 / 611 / 26	618 / 607 / 37	750 / 760 / 31	764 / 704 / 41	907 / 851 / 33	781 / 668 / 43	935 / 813 / 35
	2	592 / 460 / 32	717 / 579 / 27	602 / 588 / 39	717 / 723 / 32	729 / 668 / 34	870 / 814 / 34	744 / 634 / 44	896 / 777 / 36	623 / 488 / 32	752 / 611 / 26	618 / 607 / 37	750 / 760 / 31	764 / 704 / 41	907 / 851 / 33	781 / 668 / 43	935 / 813 / 35	600 / 733 / 23	724 / 906 / 19	711 / 702 / 33	841 / 849 / 26	866 / 798 / 30	1073 / 1003 / 37	891 / 760 / 37	1070 / 924 / 30
	3	590 / 717 / 25	696 / 868 / 20	678 / 666 / 34	807 / 812 / 27	856 / 786 / 38	1033 / 963 / 31	852 / 724 / 38	1030 / 887 / 31	600 / 733 / 23	724 / 906 / 19	711 / 702 / 33	841 / 849 / 26	866 / 798 / 36	1073 / 1003 / 30	891 / 760 / 37	1070 / 924 / 30	514 / 381 / 45	623 / 488 / 38	529 / 489 / 60	633 / 612 / 49	637 / 562 / 66	764 / 694 / 54	631 / 519 / 62	781 / 659 / 52
10	1	503 / 363 / 47	592 / 460 / 39	512 / 468 / 62	602 / 578 / 50	619 / 542 / 69	749 / 677 / 57	613 / 501 / 65	744 / 625 / 54	514 / 381 / 45	623 / 488 / 38	529 / 489 / 60	633 / 612 / 49	637 / 562 / 66	764 / 694 / 54	631 / 519 / 62	781 / 659 / 52	623 / 488 / 38	752 / 611 / 31	618 / 607 / 48	750 / 760 / 40	764 / 704 / 54	907 / 851 / 43	781 / 668 / 52	935 / 813 / 42
	2	592 / 460 / 39	717 / 579 / 32	602 / 588 / 50	717 / 723 / 41	729 / 668 / 55	870 / 814 / 45	744 / 634 / 54	896 / 777 / 43	623 / 488 / 38	752 / 611 / 31	618 / 607 / 48	750 / 760 / 40	764 / 704 / 54	907 / 851 / 43	781 / 668 / 52	935 / 813 / 42	600 / 733 / 28	724 / 906 / 23	711 / 702 / 42	841 / 849 / 34	866 / 798 / 46	1073 / 1003 / 39	891 / 760 / 45	1070 / 924 / 36
	3	590 / 717 / 29	696 / 868 / 24	678 / 666 / 43	807 / 812 / 35	856 / 786 / 49	1033 / 963 / 40	852 / 724 / 46	1030 / 887 / 38	600 / 733 / 28	724 / 906 / 23	711 / 702 / 42	841 / 849 / 34	866 / 798 / 46	1073 / 1003 / 39	891 / 760 / 45	1070 / 924 / 36	514 / 381 / 45	623 / 488 / 38	529 / 489 / 60	633 / 612 / 49	637 / 562 / 66	764 / 694 / 54	631 / 519 / 62	781 / 659 / 52
0	1	530 / 398 / 37	639 / 505 / 30	544 / 508 / 38	647 / 629 / 31	668 / 594 / 40	799 / 728 / 32	663 / 548 / 44	794 / 672 / 35	514 / 381 / 38	623 / 488 / 32	529 / 489 / 40	633 / 612 / 33	637 / 562 / 41	764 / 694 / 33	631 / 519 / 45	781 / 659 / 37	623 / 488 / 32	752 / 611 / 26	618 / 607 / 32	750 / 760 / 27	764 / 704 / 33	907 / 851 / 27	781 / 668 / 37	935 / 813 / 30
	2	639 / 505 / 30	765 / 625 / 25	647 / 640 / 31	758 / 771 / 25	799 / 738 / 32	941 / 885 / 26	794 / 682 / 35	972 / 847 / 29	623 / 488 / 32	752 / 611 / 26	618 / 607 / 32	750 / 760 / 27	764 / 704 / 33	907 / 851 / 27	781 / 668 / 37	935 / 813 / 30	600 / 733 / 23	724 / 906 / 19	711 / 702 / 27	841 / 849 / 27	866 / 798 / 33	1073 / 1003 / 27	891 / 760 / 37	1070 / 924 / 30
	3	625 / 767 / 23	750 / 942 / 19	742 / 737 / 27	873 / 884 / 22	901 / 833 / 28	1110 / 1039 / 23	928 / 794 / 31	1106 / 957 / 25	600 / 733 / 23	724 / 906 / 19	711 / 702 / 28	841 / 849 / 23	866 / 798 / 29	1073 / 1003 / 24	891 / 760 / 32	1070 / 924 / 26	514 / 381 / 45	623 / 488 / 38	529 / 489 / 60	633 / 612 / 49	637 / 562 / 66	764 / 694 / 54	631 / 519 / 62	781 / 659 / 52
5	1	530 / 398 / 37	639 / 505 / 30	544 / 508 / 45	647 / 629 / 36	668 / 594 / 50	799 / 728 / 40	663 / 548 / 50	794 / 672 / 41	514 / 381 / 38	623 / 488 / 32	529 / 489 / 46	633 / 612 / 38	637 / 562 / 51	764 / 694 / 41	631 / 519 / 51	781 / 659 / 43	623 / 488 / 32	752 / 611 / 26	618 / 607 / 37	750 / 760 / 31	764 / 704 / 41	907 / 851 / 33	781 / 668 / 43	935 / 813 / 35
	2	639 / 505 / 30	765 / 625 / 25	647 / 640 / 36	758 / 771 / 29	799 / 738 / 40	941 / 885 / 32	794 / 682 / 41	972 / 847 / 33	623 / 488 / 32	752 / 611 / 26	618 / 607 / 37	750 / 760 / 31	764 / 704 / 41	907 / 851 / 33	781 / 668 / 43	935 / 813 / 35	600 / 733 / 23	724 / 906 / 19	711 / 702 / 33	841 / 849 / 26	866 / 798 / 36	1073 / 1003 / 37	891 / 760 / 37	1070 / 924 / 30
	3	625 / 767 / 23	750 / 942 / 19	742 / 737 / 32	873 / 884 / 25	901 / 833 / 34	1110 / 1039 / 29	928 / 794 / 36	1106 / 957 / 29	600 / 733 / 23	724 / 906 / 19	711 / 702 / 33	841 / 849 / 26	866 / 798 / 36	1073 / 1003 / 30	891 / 760 / 37	1070 / 924 / 30	514 / 381 / 45	623 / 488 / 38	529 / 489 / 60	633 / 612 / 49	637 / 562 / 66	764 / 694 / 54	631 / 519 / 62	781 / 659 / 52
10	1	530 / 398 / 44	639 / 505 / 36	544 / 508 / 58	647 / 629 / 47	668 / 594 / 64	799 / 728 / 52	663 / 548 / 61	794 / 672 / 49	514 / 381 / 45	623 / 488 / 38	529 / 489 / 60	633 / 612 / 49	637 / 562 / 66	764 / 694 / 54	631 / 519 / 62	781 / 659 / 52	623 / 488 / 38	752 / 611 / 31	618 / 607 / 48	750 / 760 / 40	764 / 704 / 54	907 / 851 / 43	781 / 668 / 52	935 / 813 / 42
	2	639 / 505 / 36	765 / 625 / 29	647 / 640 / 47	758 / 771 / 37	799 / 738 / 52	941 / 885 / 42	794 / 682 / 49	972 / 847 / 41	623 / 488 / 38	752 / 611 / 31	618 / 607 / 48	750 / 760 / 40	764 / 704 / 54	907 / 851 / 43	781 / 668 / 52	935 / 813 / 42	600 / 733 / 28	724 / 906 / 23	711 / 702 / 42	841 / 849 / 34	866 / 798 / 46	1073 / 1003 / 39	891 / 760 / 45	

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	545 / 414 / 35	668 / 532 / 30	558 / 525 / 37	675 / 660 / 31	682 / 609 / 38	832 / 761 / 32	677 / 563 / 42	827 / 702 / 34	582 / 450 / 33	707 / 570 / 28	593 / 567 / 34	710 / 701 / 28	720 / 650 / 35	865 / 797 / 29	735 / 616 / 39	889 / 759 / 32	615 / 482 / 31	759 / 618 / 26	623 / 603 / 32	758 / 754 / 27	772 / 701 / 33	916 / 848 / 27	767 / 647 / 36	944 / 809 / 30
	2	668 / 532 / 30	797 / 654 / 24	658 / 655 / 30	787 / 804 / 24	807 / 748 / 31	973 / 918 / 25	827 / 712 / 34	1007 / 879 / 28	707 / 570 / 28	857 / 709 / 23	710 / 713 / 28	840 / 863 / 23	865 / 807 / 29	1029 / 974 / 23	889 / 770 / 32	1068 / 936 / 26	759 / 618 / 26	910 / 759 / 21	735 / 744 / 26	884 / 913 / 21	916 / 859 / 27	1119 / 1064 / 22	944 / 821 / 30	1165 / 1023 / 25
	3	649 / 801 / 22	774 / 975 / 18	749 / 747 / 26	902 / 916 / 21	934 / 866 / 27	1142 / 1072 / 22	964 / 826 / 30	1139 / 987 / 24	693 / 862 / 21	815 / 1031 / 16	803 / 806 / 24	953 / 973 / 19	993 / 924 / 25	1195 / 1124 / 20	1027 / 884 / 28	1249 / 1085 / 23	731 / 915 / 19	884 / 1124 / 16	849 / 858 / 23	1037 / 1062 / 19	1040 / 972 / 23	1293 / 1220 / 19	1080 / 933 / 26	1290 / 1123 / 21
5	1	545 / 414 / 35	668 / 532 / 30	558 / 525 / 43	675 / 660 / 35	682 / 609 / 47	832 / 761 / 39	677 / 563 / 48	827 / 702 / 39	582 / 450 / 33	707 / 570 / 28	593 / 567 / 40	710 / 701 / 33	720 / 650 / 44	865 / 797 / 36	735 / 616 / 45	889 / 759 / 37	615 / 482 / 31	759 / 618 / 26	623 / 603 / 37	758 / 754 / 31	772 / 701 / 41	916 / 848 / 33	767 / 647 / 42	944 / 809 / 35
	2	668 / 532 / 30	797 / 654 / 24	658 / 655 / 34	787 / 804 / 28	807 / 748 / 38	973 / 918 / 31	827 / 712 / 39	1007 / 879 / 32	707 / 570 / 28	857 / 709 / 23	710 / 713 / 33	840 / 863 / 26	865 / 807 / 36	1029 / 974 / 29	889 / 770 / 37	1068 / 936 / 30	759 / 618 / 26	910 / 759 / 21	735 / 744 / 30	884 / 913 / 24	916 / 859 / 33	1119 / 1064 / 27	944 / 821 / 35	1165 / 1023 / 29
	3	649 / 801 / 22	774 / 975 / 18	749 / 747 / 30	902 / 916 / 24	934 / 866 / 33	1142 / 1072 / 27	964 / 826 / 35	1139 / 987 / 28	693 / 862 / 21	815 / 1031 / 16	803 / 806 / 28	953 / 973 / 23	993 / 924 / 31	1195 / 1124 / 25	1027 / 884 / 32	1249 / 1085 / 26	731 / 915 / 19	884 / 1124 / 16	849 / 858 / 26	1037 / 1062 / 22	1040 / 972 / 29	1293 / 1220 / 24	1080 / 933 / 30	1290 / 1123 / 24
10	1	545 / 414 / 42	668 / 532 / 35	558 / 525 / 55	675 / 660 / 46	682 / 609 / 61	832 / 761 / 51	677 / 563 / 58	827 / 702 / 48	582 / 450 / 39	707 / 570 / 33	593 / 567 / 52	710 / 701 / 42	720 / 650 / 57	865 / 797 / 46	735 / 616 / 55	889 / 759 / 45	615 / 482 / 37	759 / 618 / 31	623 / 603 / 48	758 / 754 / 40	772 / 701 / 54	916 / 848 / 43	767 / 647 / 51	944 / 809 / 42
	2	668 / 532 / 35	797 / 654 / 29	658 / 655 / 44	787 / 804 / 36	807 / 748 / 49	973 / 918 / 40	827 / 712 / 48	1007 / 879 / 39	707 / 570 / 33	857 / 709 / 27	710 / 713 / 42	840 / 863 / 34	865 / 807 / 46	1029 / 974 / 37	889 / 770 / 45	1068 / 936 / 36	759 / 618 / 31	910 / 759 / 25	735 / 744 / 39	884 / 913 / 31	916 / 859 / 43	1119 / 1064 / 35	944 / 821 / 42	1165 / 1023 / 35
	3	649 / 801 / 26	774 / 975 / 21	749 / 747 / 39	902 / 916 / 31	934 / 866 / 43	1142 / 1072 / 35	964 / 826 / 42	1139 / 987 / 33	693 / 862 / 25	815 / 1031 / 20	803 / 806 / 36	953 / 973 / 29	993 / 924 / 40	1195 / 1124 / 32	1027 / 884 / 39	1249 / 1085 / 32	731 / 915 / 23	884 / 1124 / 19	849 / 858 / 34	1037 / 1062 / 28	1040 / 972 / 37	1293 / 1220 / 31	1080 / 933 / 36	1290 / 1123 / 29
Wind Speed [mph]		170								180															
0	1	658 / 522 / 30	784 / 643 / 24	664 / 649 / 31	800 / 802 / 25	818 / 748 / 32	994 / 924 / 26	814 / 690 / 34	990 / 852 / 28	698 / 560 / 28	849 / 702 / 23	702 / 691 / 29	836 / 842 / 23	859 / 790 / 30	1030 / 961 / 24	855 / 728 / 32	1067 / 920 / 27	ASCE Group Zone							
	2	784 / 643 / 24	956 / 801 / 20	774 / 790 / 24	957 / 993 / 20	957 / 902 / 25	1152 / 1097 / 20	990 / 864 / 28	1204 / 1060 / 23	849 / 702 / 23	1031 / 868 / 19	836 / 857 / 23	985 / 1026 / 19	1030 / 974 / 24	1228 / 1173 / 19	1067 / 934 / 27	1286 / 1135 / 22	Panal Angle							
	3	761 / 958 / 18	905 / 1155 / 14	887 / 901 / 21	1066 / 1096 / 17	1123 / 1053 / 22	1385 / 1309 / 18	1169 / 1012 / 25	1382 / 1205 / 20	817 / 1033 / 17	962 / 1231 / 14	954 / 972 / 20	1136 / 1172 / 16	1202 / 1130 / 21	1469 / 1391 / 17	1199 / 1041 / 23	1466 / 1281 / 19	Mono Slope							
5	1	658 / 522 / 30	784 / 643 / 24	664 / 649 / 35	800 / 802 / 29	818 / 748 / 39	994 / 924 / 32	814 / 690 / 39	990 / 852 / 32	698 / 560 / 28	849 / 702 / 23	702 / 691 / 34	836 / 842 / 27	859 / 790 / 37	1030 / 961 / 30	855 / 728 / 37	1067 / 920 / 31	0 - 7.5							
	2	784 / 643 / 24	956 / 801 / 20	774 / 790 / 28	957 / 993 / 23	957 / 902 / 25	1152 / 1097 / 25	990 / 864 / 28	1204 / 1060 / 26	849 / 702 / 23	1031 / 868 / 19	836 / 857 / 27	985 / 1026 / 22	1030 / 974 / 30	1228 / 1173 / 24	1067 / 934 / 31	1286 / 1135 / 25	2 = 2							
	3	761 / 958 / 18	905 / 1155 / 14	887 / 901 / 24	1066 / 1096 / 20	1123 / 1053 / 27	1385 / 1309 / 23	1169 / 1012 / 29	1382 / 1205 / 23	817 / 1033 / 17	962 / 1231 / 14	954 / 972 / 23	1136 / 1172 / 19	1202 / 1130 / 26	1469 / 1391 / 22	1199 / 1041 / 26	1466 / 1281 / 22	3 = 3							
10	1	658 / 522 / 35	784 / 643 / 29	664 / 649 / 46	800 / 802 / 37	818 / 748 / 51	994 / 924 / 42	814 / 690 / 48	990 / 852 / 39	698 / 560 / 34	849 / 702 / 28	702 / 691 / 43	836 / 842 / 35	859 / 790 / 48	1030 / 961 / 39	855 / 728 / 45	1067 / 920 / 38	7.5 - 15							
	2	784 / 643 / 29	956 / 801 / 24	774 / 790 / 36	957 / 993 / 30	957 / 902 / 40	1152 / 1097 / 32	990 / 864 / 39	1204 / 1060 / 32	849 / 702 / 28	1031 / 868 / 23	836 / 857 / 35	985 / 1026 / 28	1030 / 974 / 39	1228 / 1173 / 31	1067 / 934 / 38	1286 / 1135 / 31	2 = 2							
	3	761 / 958 / 21	905 / 1155 / 17	887 / 901 / 31	1066 / 1096 / 25	1123 / 1053 / 35	1385 / 1309 / 29	1169 / 1012 / 35	1382 / 1205 / 28	817 / 1033 / 20	962 / 1231 / 16	954 / 972 / 30	1136 / 1172 / 24	1202 / 1130 / 34	1469 / 1391 / 28	1199 / 1041 / 32	1466 / 1281 / 26	3 = 3							
Wind Speed [mph]		190								200															
0	1	735 / 595 / 27	886 / 736 / 22	735 / 729 / 27	865 / 875 / 22	893 / 825 / 28	1099 / 1029 / 23	919 / 786 / 31	1096 / 948 / 25	768 / 627 / 25	916 / 765 / 21	764 / 762 / 26	920 / 935 / 21	953 / 883 / 27	1115 / 1046 / 21	949 / 814 / 29	1162 / 1007 / 24	ASCE Group Zone							
	2	886 / 736 / 22	1061 / 897 / 18	865 / 891 / 22	1048 / 1094 / 18	1099 / 1043 / 23	1298 / 1242 / 18	1096 / 962 / 25	1364 / 1205 / 21	916 / 765 / 21	1126 / 955 / 17	920 / 952 / 21	1106 / 1159 / 17	1115 / 1060 / 21	1361 / 1305 / 17	1162 / 1022 / 24	1434 / 1270 / 20	Panal Angle							
	3	832 / 1056 / 16	1013 / 1301 / 13	1018 / 1041 / 19	1201 / 1241 / 16	1216 / 1146 / 19	1544 / 1465 / 16	1274 / 1108 / 22	1542 / 1349 / 18	878 / 1118 / 15	1059 / 1362 / 12	1032 / 1059 / 18	1259 / 1304 / 15	1279 / 1207 / 18	1609 / 1528 / 16	1343 / 1170 / 21	1607 / 1407 / 17	Mono Slope							
5	1	735 / 595 / 27	886 / 736 / 22	735 / 729 / 32	865 / 875 / 25	893 / 825 / 34	1099 / 1029 / 29	919 / 786 / 36	1096 / 948 / 29	768 / 627 / 25	916 / 765 / 21	764 / 762 / 30	920 / 935 / 24	953 / 883 / 33	1115 / 1046 / 26	949 / 814 / 33	1162 / 1007 / 28	0 - 7.5							
	2	886 / 736 / 22	1061 / 897 / 18	865 / 891 / 25	1048 / 1094 / 21	1099 / 1043 / 29	1298 / 1242 / 23	1096 / 962 / 29	1364 / 1205 / 24	916 / 765 / 21	1126 / 955 / 17	920 / 952 / 24	1106 / 1159 / 20	1115 / 1060 / 26	1361 / 1305 / 22	1162 / 1022 / 28	1434 / 1270 / 23	2 = 2							
	3	832 / 1056 / 16	1013 / 1301 / 13	1018 / 1041 / 23	1201 / 1241 / 18	1216 / 1146 / 24	1544 / 1465 / 20	1274 / 1108 / 25	1542 / 1349 / 21	878 / 1118 / 15	1059 / 1362 / 12	1032 / 1059 / 21	1259 / 1304 / 17	1279 / 1207 / 23	1609 / 1528 / 19	1343 / 1170 / 24	1607 / 1407 / 19	3 = 3							
10	1	735 / 595 / 32	886 / 736 / 26	735 / 729 / 41	865 / 875 / 33	893 / 825 / 45	1099 / 1029 / 37	919 / 786 / 43	1096 / 948 / 35	768 / 627 / 30	916 / 765 / 25	764 / 762 / 39	920 / 935 / 31	953 / 883 / 43	1115 / 1046 / 34	949 / 814 / 41	1162 / 1007 / 33	7.5 - 15							
	2	886 / 736 / 26	1061 / 897 / 21	865 / 891 / 33	1048 / 1094 / 27	1099 / 1043 / 37	1298 / 1242 / 29	1096 / 962 / 35	1364 / 1205 / 29	916 / 765 / 25	1126 / 955 / 20	920 / 952 / 31	1106 / 1159 / 25	1115 / 1060 / 34	1361 / 1305 / 28	1162 / 1022 / 33	1434 / 1270 / 28	3 = 3							
	3	832 / 1056 / 19	1013 / 1301 / 15	1018 / 1041 / 29	1201 / 1241 / 23	1216 / 1146 / 31	1544 / 1465 / 26	1274 / 1108 / 31	1542 / 1349 / 25	878 / 1118 / 18	1059 / 1362 / 15	1032 / 1059 / 27	1259 / 1304 / 22	1279 / 1207 / 29	1609 / 1528 / 25	1343 / 1170 / 29	1607 / 1407 / 23	15 - 30							

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																																															
Wind Speed [mph]		95								100								105																																			
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45																													
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																													
		15	1	522 / 295 / 59	573 / 396 / 51	527 / 398 / 85	562 / 506 / 71	552 / 471 / 96	666 / 591 / 79	545 / 436 / 87	660 / 546 / 71	529 / 314 / 57	583 / 419 / 49	546 / 430 / 84	572 / 532 / 68	564 / 487 / 90	690 / 617 / 75	569 / 459 / 83	685 / 570 / 68	546 / 339 / 56	593 / 440 / 47	555 / 454 / 81	584 / 556 / 65	598 / 521 / 89	711 / 640 / 72	592 / 481 / 80	706 / 590 / 65																										
Exposure Category : B	15	2	573 / 396 / 51	636 / 503 / 42	562 / 515 / 71	644 / 637 / 57	650 / 585 / 77	796 / 735 / 64	660 / 554 / 71	791 / 679 / 58	583 / 419 / 49	660 / 526 / 40	572 / 542 / 68	665 / 663 / 54	690 / 625 / 75	816 / 758 / 60	685 / 578 / 68	837 / 721 / 56	593 / 440 / 47	698 / 560 / 39	584 / 566 / 65	683 / 684 / 52	711 / 648 / 72	859 / 800 / 59	706 / 599 / 65	855 / 739 / 53																											
		20	1	556 / 280 / 64	616 / 389 / 57	566 / 384 / 97	610 / 506 / 84	552 / 471 / 119	666 / 591 / 98	545 / 436 / 101	660 / 546 / 83	571 / 303 / 63	624 / 411 / 55	572 / 407 / 94	618 / 532 / 80	564 / 487 / 112	690 / 617 / 93	569 / 459 / 97	685 / 570 / 79	575 / 321 / 60	644 / 440 / 54	588 / 438 / 92	625 / 556 / 77	602 / 521 / 109	711 / 640 / 89	592 / 481 / 93	706 / 590 / 75																										
			25	1	556 / 280 / 64	616 / 389 / 57	566 / 384 / 97	610 / 506 / 84	580 / 471 / 143	666 / 591 / 118	545 / 436 / 118	660 / 546 / 98	571 / 303 / 63	624 / 411 / 55	572 / 407 / 94	618 / 532 / 80	579 / 487 / 134	690 / 617 / 112	569 / 459 / 114	685 / 570 / 93	575 / 321 / 60	644 / 440 / 54	588 / 438 / 92	625 / 556 / 77	602 / 521 / 132	711 / 640 / 107	592 / 481 / 109	706 / 590 / 88																									
	15			1	553 / 357 / 54	600 / 460 / 45	552 / 468 / 76	602 / 578 / 62	619 / 542 / 85	749 / 677 / 70	613 / 501 / 76	744 / 625 / 63	569 / 381 / 53	623 / 488 / 44	558 / 489 / 73	633 / 612 / 60	637 / 562 / 81	764 / 694 / 66	631 / 519 / 73	781 / 659 / 61	ASCE Group Zone																																
		20		1	589 / 344 / 59	649 / 460 / 51	604 / 468 / 90	630 / 578 / 73	619 / 542 / 105	749 / 677 / 86	613 / 501 / 89	744 / 625 / 74	603 / 367 / 58	668 / 488 / 50	609 / 489 / 87	649 / 612 / 71	637 / 562 / 100	764 / 694 / 82	631 / 519 / 85	781 / 659 / 72	<table border="1"> <thead> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td>0 - 7.5</td> <td>1 = 1</td> </tr> <tr> <td></td> <td>2 = 2</td> </tr> <tr> <td></td> <td>3 = 3</td> </tr> <tr> <td>7.5 - 15</td> <td>1 = 1</td> </tr> <tr> <td></td> <td>2 = 2</td> </tr> <tr> <td></td> <td>3 = 3</td> </tr> <tr> <td>15 - 30</td> <td>1 = 1</td> </tr> <tr> <td></td> <td>2 = 2</td> </tr> <tr> <td></td> <td>3 = 3</td> </tr> <tr> <td>30 - 45</td> <td>1 = 1</td> </tr> <tr> <td></td> <td>2 = 2</td> </tr> <tr> <td></td> <td>3 = 3</td> </tr> </tbody> </table>								Panal Angle	Mono Slope	0 - 7.5	1 = 1		2 = 2		3 = 3	7.5 - 15	1 = 1		2 = 2		3 = 3	15 - 30	1 = 1		2 = 2		3 = 3	30 - 45	1 = 1		2 = 2	
			Panal Angle	Mono Slope																																																	
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25	1	589 / 344 / 59	649 / 460 / 51	604 / 468 / 90	630 / 578 / 73	619 / 542 / 126	749 / 677 / 104	613 / 501 / 105	744 / 625 / 86	603 / 367 / 58	668 / 488 / 50	609 / 489 / 87	649 / 612 / 71	637 / 562 / 121	764 / 694 / 98	631 / 519 / 100	781 / 659 / 84																																				

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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Load: Up / Down / Side , lbs																																																																																															
Wind Speed [mph]		140																150																160																																																																															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																																																																			
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15	1	579 / 414 / 49	668 / 532 / 41	567 / 525 / 68	675 / 660 / 56	682 / 609 / 75	832 / 761 / 62	677 / 563 / 68	827 / 702 / 56	596 / 450 / 46	707 / 570 / 38	593 / 567 / 63	710 / 701 / 52	720 / 650 / 70	865 / 797 / 57	735 / 616 / 65	889 / 759 / 53	615 / 482 / 43	759 / 618 / 36	623 / 603 / 59	758 / 754 / 49	772 / 701 / 66	916 / 848 / 53	767 / 647 / 60	944 / 809 / 49	20	2	668 / 532 / 41	797 / 654 / 33	658 / 655 / 54	787 / 804 / 44	807 / 748 / 60	973 / 918 / 49	827 / 712 / 56	1007 / 879 / 46	707 / 570 / 38	857 / 709 / 31	710 / 713 / 52	840 / 863 / 41	865 / 807 / 57	1029 / 974 / 45	889 / 770 / 53	1068 / 936 / 43	759 / 618 / 36	910 / 759 / 30	735 / 744 / 47	884 / 913 / 38	916 / 859 / 53	1119 / 1064 / 44	944 / 821 / 49	1165 / 1023 / 41																																																														
	3	649 / 801 / 31	774 / 975 / 25	749 / 747 / 47	902 / 916 / 38	934 / 866 / 53	1142 / 1072 / 44	964 / 826 / 49	1139 / 987 / 39	693 / 862 / 29	815 / 1031 / 23	803 / 806 / 44	953 / 973 / 36	993 / 924 / 49	1195 / 1124 / 40	1027 / 884 / 46	1249 / 1085 / 38	731 / 915 / 27	884 / 1124 / 22	849 / 858 / 41	1037 / 1062 / 34	1040 / 972 / 45	1293 / 1220 / 38	1080 / 933 / 43	1290 / 1123 / 34		25	1	619 / 405 / 55	689 / 532 / 47	614 / 525 / 80	675 / 660 / 66	682 / 609 / 93	832 / 761 / 77	677 / 563 / 79	827 / 702 / 66	646 / 450 / 53	707 / 570 / 44	628 / 567 / 75	710 / 701 / 61	720 / 650 / 86	865 / 797 / 70	735 / 616 / 75	889 / 759 / 62	657 / 482 / 49	759 / 618 / 42	637 / 603 / 70	758 / 754 / 58	772 / 701 / 82	916 / 848 / 65	767 / 647 / 70	944 / 809 / 58																																																													
	2	689 / 532 / 47	797 / 654 / 38	658 / 655 / 64	787 / 804 / 52	807 / 748 / 75	973 / 918 / 61	827 / 712 / 66	1007 / 879 / 54	707 / 570 / 44	857 / 709 / 36	710 / 713 / 61	840 / 863 / 49	865 / 807 / 70	1029 / 974 / 56	889 / 770 / 62	1068 / 936 / 50	759 / 618 / 42	910 / 759 / 34	735 / 744 / 56	884 / 913 / 45	916 / 859 / 65	1119 / 1064 / 54	944 / 821 / 58	1165 / 1023 / 48			30	3	649 / 801 / 35	774 / 975 / 28	749 / 747 / 56	902 / 916 / 45	934 / 866 / 65	1142 / 1072 / 54	964 / 826 / 58	1139 / 987 / 46	693 / 862 / 33	815 / 1031 / 26	803 / 806 / 52	953 / 973 / 42	993 / 924 / 61	1195 / 1124 / 49	1027 / 884 / 54	1249 / 1085 / 44	731 / 915 / 30	884 / 1124 / 25	849 / 858 / 49	1037 / 1062 / 40	1040 / 972 / 56	1293 / 1220 / 47	1080 / 933 / 50	1290 / 1123 / 40																																																												
15	1	658 / 522 / 41	784 / 643 / 33	664 / 649 / 56	800 / 802 / 46	818 / 748 / 62	994 / 924 / 51	814 / 690 / 56	990 / 852 / 46	698 / 560 / 39	849 / 702 / 32	702 / 691 / 53	836 / 842 / 43	859 / 790 / 59	1030 / 961 / 47	855 / 728 / 53	1067 / 920 / 44	20	2	784 / 643 / 33	956 / 801 / 28	774 / 790 / 44	957 / 993 / 37	957 / 902 / 49	1152 / 1097 / 40	990 / 864 / 46			1204 / 1060 / 38	849 / 702 / 32	1031 / 868 / 27	836 / 857 / 43	985 / 1026 / 34	1030 / 974 / 47	1228 / 1173 / 38	1067 / 934 / 44	1286 / 1135 / 36	25	3	761 / 958 / 25	905 / 1155 / 20	887 / 901 / 38	1066 / 1096 / 31	1123 / 1053 / 44	1385 / 1309 / 36	1169 / 1012 / 41	1382 / 1205 / 33	817 / 1033 / 24	962 / 1231 / 19	954 / 972 / 37	1136 / 1172 / 30	1202 / 1130 / 42	1469 / 1391 / 34	1199 / 1041 / 38	1466 / 1281 / 31	30	1	681 / 522 / 47	784 / 643 / 38	664 / 649 / 66	800 / 802 / 54	818 / 748 / 77	994 / 924 / 63	814 / 690 / 66	990 / 852 / 54	702 / 560 / 45	849 / 702 / 37	702 / 691 / 63	836 / 842 / 51	859 / 790 / 72	1030 / 961 / 58	855 / 728 / 62	1067 / 920 / 52	35	2	784 / 643 / 38	956 / 801 / 32	774 / 790 / 52	957 / 993 / 44	957 / 902 / 61	1152 / 1097 / 49	990 / 864 / 54	1204 / 1060 / 44	849 / 702 / 37	1031 / 868 / 30	836 / 857 / 51	985 / 1026 / 40	1030 / 974 / 58	1228 / 1173 / 47	1067 / 934 / 52	1286 / 1135 / 42	40	3	761 / 958 / 28	905 / 1155 / 23	887 / 901 / 45	1066 / 1096 / 37	1123 / 1053 / 54	1385 / 1309 / 45	1169 / 1012 / 48	1382 / 1205 / 38	817 / 1033 / 27	962 / 1231 / 22	954 / 972 / 44	1136 / 1172 / 35	1202 / 1130 / 52	1469 / 1391 / 42	1199 / 1041 / 44	1466 / 1281 / 36				
	15	1	735 / 595 / 37	886 / 736 / 31	735 / 729 / 50	865 / 875 / 40	893 / 825 / 55	1099 / 1029 / 45	919 / 786 / 51	1096 / 948 / 41	768 / 627 / 35	916 / 765 / 29	764 / 762 / 47	920 / 935 / 38	953 / 883 / 53	1115 / 1046 / 42	949 / 814 / 48		1162 / 1007 / 39	20	2	886 / 736 / 31	1061 / 897 / 25	865 / 891 / 40	1048 / 1094 / 33	1099 / 1043 / 45	1298 / 1242 / 36		1096 / 962 / 41	1364 / 1205 / 34	916 / 765 / 29	1126 / 955 / 24	920 / 952 / 38	1106 / 1159 / 31	1115 / 1060 / 42	1361 / 1305 / 34	1162 / 1022 / 39		1434 / 1270 / 33	25	3	832 / 1056 / 22	1013 / 1301 / 18	1018 / 1041 / 36	1201 / 1241 / 28	1216 / 1146 / 38	1544 / 1465 / 32	1274 / 1108 / 36	1542 / 1349 / 29	878 / 1118 / 21	1059 / 1362 / 17	1032 / 1059 / 33	1259 / 1304 / 27	1279 / 1207 / 36	1609 / 1528 / 30		1343 / 1170 / 34	1607 / 1407 / 28	30	1	735 / 595 / 43	886 / 736 / 35	735 / 729 / 59	865 / 875 / 47	893 / 825 / 68	1099 / 1029 / 56	919 / 786 / 60	1096 / 948 / 48	768 / 627 / 40	916 / 765 / 33	764 / 762 / 56	920 / 935 / 45	953 / 883 / 65		1115 / 1046 / 52	949 / 814 / 56	1162 / 1007 / 46	35	2	886 / 736 / 35	1061 / 897 / 28	865 / 891 / 47	1048 / 1094 / 39	1099 / 1043 / 56	1298 / 1242 / 45	1096 / 962 / 48	1364 / 1205 / 40	916 / 765 / 33	1126 / 955 / 27	920 / 952 / 45	1106 / 1159 / 37		1115 / 1060 / 52	1361 / 1305 / 42	1162 / 1022 / 46	1434 / 1270 / 38	40	3	832 / 1056 / 25	1013 / 1301 / 20	1018 / 1041 / 42	1201 / 1241 / 33	1216 / 1146 / 47	1544 / 1465 / 40	1274 / 1108 / 42	1542 / 1349 / 34	878 / 1118 / 24	1059 / 1362 / 19	1032 / 1059 / 39	1259 / 1304 / 32	1279 / 1207 / 45	1609 / 1528 / 38	1343 / 1170 / 40
		25	1	735 / 595 / 43	886 / 736 / 35	735 / 729 / 59	865 / 875 / 47	893 / 825 / 81	1099 / 1029 / 67	919 / 786 / 70	1096 / 948 / 56	768 / 627 / 40	916 / 765 / 33	764 / 762 / 56	920 / 935 / 45	953 / 883 / 79	1115 / 1046 / 62		949 / 814 / 65		1162 / 1007 / 54	30	2	886 / 736 / 35	1061 / 897 / 28	865 / 891 / 47	1048 / 1094 / 39	1099 / 1043 / 56	1298 / 1242 / 45	1096 / 962 / 48	1364 / 1205 / 40	916 / 765 / 33	1126 / 955 / 27	920 / 952 / 45	1106 / 1159 / 37	1115 / 1060 / 52	1361 / 1305 / 42		1162 / 1022 / 46		1434 / 1270 / 38	35	3	832 / 1056 / 25	1013 / 1301 / 20	1018 / 1041 / 42	1201 / 1241 / 33	1216 / 1146 / 47	1544 / 1465 / 40	1274 / 1108 / 42	1542 / 1349 / 34	878 / 1118 / 24	1059 / 1362 / 19	1032 / 1059 / 39	1259 / 1304 / 32		1279 / 1207 / 45	1609 / 1528 / 38		1343 / 1170 / 40	1607 / 1407 / 32																																																				
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Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge			
		30	1	578 / 275 / 67	633 / 381 / 60	585 / 377 / 104	636 / 506 / 90	599 / 462 / 164	666 / 591 / 138	545 / 436 / 136	660 / 546 / 112	592 / 298 / 66	638 / 402 / 57	590 / 400 / 100	643 / 532 / 87	609 / 487 / 157	690 / 617 / 131	569 / 459 / 131	685 / 570 / 107	594 / 315 / 63	657 / 431 / 56	605 / 429 / 98	649 / 556 / 83	631 / 521 / 154	711 / 640 / 124	592 / 481 / 125	706 / 590 / 101
Wind Speed [mph]		110								115																	
30	1	607 / 338 / 62	675 / 460 / 55	620 / 459 / 96	653 / 578 / 79	638 / 542 / 147	749 / 677 / 121	613 / 501 / 120	744 / 625 / 99	621 / 360 / 61	678 / 477 / 53	623 / 479 / 92	671 / 612 / 77	644 / 562 / 141	764 / 694 / 115	631 / 519 / 115	781 / 659 / 96	ASCE Group Zone									
30	2	675 / 460 / 55	729 / 579 / 45	653 / 588 / 79	717 / 723 / 64	729 / 668 / 118	870 / 814 / 95	744 / 634 / 99	896 / 777 / 80	678 / 477 / 53	752 / 611 / 44	655 / 607 / 75	750 / 760 / 62	764 / 704 / 115	907 / 851 / 92	781 / 668 / 96	935 / 813 / 77	Panal Angle		Mono Slope		1 = 1		2 = 2		3 = 3	
	3	619 / 717 / 42	696 / 868 / 34	681 / 666 / 68	807 / 812 / 55	856 / 786 / 105	1033 / 963 / 85	852 / 724 / 85	1030 / 887 / 70	616 / 733 / 40	724 / 906 / 32	711 / 702 / 66	841 / 849 / 53	866 / 798 / 98	1073 / 1003 / 82	891 / 760 / 83	1070 / 924 / 67										
Wind Speed [mph]		120								130																	
30	1	634 / 383 / 60	696 / 505 / 51	638 / 508 / 90	672 / 629 / 74	668 / 594 / 138	799 / 728 / 111	663 / 548 / 112	794 / 672 / 91	621 / 360 / 61	678 / 477 / 53	623 / 479 / 92	671 / 612 / 77	644 / 562 / 141	764 / 694 / 115	631 / 519 / 115	781 / 659 / 96	Panal Angle		Mono Slope		1 = 1		2 = 2		3 = 3	
	2	696 / 505 / 51	765 / 625 / 42	672 / 640 / 74	758 / 771 / 59	799 / 738 / 111	941 / 885 / 89	794 / 682 / 91	972 / 847 / 75	678 / 477 / 53	752 / 611 / 44	655 / 607 / 75	750 / 760 / 62	764 / 704 / 115	907 / 851 / 92	781 / 668 / 96	935 / 813 / 77										
35	1	647 / 368 / 62	713 / 493 / 55	660 / 497 / 101	702 / 629 / 84	689 / 594 / 157	799 / 728 / 127	663 / 548 / 126	794 / 672 / 102	636 / 346 / 64	714 / 477 / 57	647 / 469 / 103	702 / 612 / 88	670 / 562 / 161	764 / 694 / 131	631 / 519 / 129	781 / 659 / 108	Panal Angle		Mono Slope		1 = 1		2 = 2		3 = 3	
	2	713 / 493 / 55	778 / 625 / 46	702 / 640 / 84	758 / 771 / 67	799 / 738 / 127	941 / 885 / 101	794 / 682 / 102	972 / 847 / 84	678 / 477 / 53	752 / 611 / 44	655 / 607 / 75	750 / 760 / 62	764 / 704 / 115	907 / 851 / 92	781 / 668 / 96	935 / 813 / 77										
40	1	672 / 360 / 107	747 / 493 / 96	681 / 487 / 144	731 / 629 / 122	715 / 594 / 181	799 / 728 / 147	663 / 548 / 141	794 / 672 / 114	669 / 733 / 43	724 / 906 / 35	754 / 702 / 75	841 / 849 / 60	866 / 798 / 113	1073 / 1003 / 94	891 / 760 / 93	1070 / 924 / 75	Panal Angle		Mono Slope		1 = 1		2 = 2		3 = 3	
	2	747 / 493 / 96	806 / 625 / 80	731 / 640 / 122	764 / 771 / 97	799 / 738 / 147	941 / 885 / 117	794 / 682 / 114	972 / 847 / 94	678 / 477 / 53	752 / 611 / 44	655 / 607 / 75	750 / 760 / 62	764 / 704 / 115	907 / 851 / 92	781 / 668 / 96	935 / 813 / 77										

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	634 / 397 / 57	713 / 532 / 50	639 / 525 / 87	688 / 660 / 72	682 / 609 / 131	832 / 761 / 108	677 / 563 / 107	827 / 702 / 88	659 / 440 / 55	727 / 570 / 47	651 / 567 / 81	710 / 701 / 66	720 / 650 / 121	865 / 797 / 98	735 / 616 / 101	889 / 759 / 83	683 / 482 / 53	759 / 618 / 44	659 / 603 / 75	758 / 754 / 62	772 / 701 / 115	916 / 848 / 92	767 / 647 / 93	944 / 809 / 77
	2	713 / 532 / 50	797 / 654 / 41	670 / 655 / 70	787 / 804 / 57	807 / 748 / 105	973 / 918 / 85	827 / 712 / 88	1007 / 879 / 72	727 / 570 / 47	857 / 709 / 38	710 / 713 / 66	840 / 863 / 53	865 / 807 / 98	1029 / 974 / 79	889 / 770 / 83	1068 / 936 / 67	759 / 618 / 44	910 / 759 / 36	735 / 744 / 60	884 / 913 / 49	916 / 859 / 92	1119 / 1064 / 76	944 / 821 / 77	1165 / 1023 / 64
	3	649 / 801 / 37	774 / 975 / 30	749 / 747 / 60	902 / 916 / 49	934 / 866 / 92	1142 / 1072 / 76	964 / 826 / 77	1139 / 987 / 62	693 / 862 / 35	815 / 1031 / 28	803 / 806 / 57	953 / 973 / 45	993 / 924 / 85	1195 / 1124 / 69	1027 / 884 / 72	1249 / 1085 / 59	731 / 915 / 32	884 / 1124 / 27	849 / 858 / 53	1037 / 1062 / 44	1040 / 972 / 79	1293 / 1220 / 66	1080 / 933 / 67	1290 / 1123 / 54
35	1	659 / 389 / 61	729 / 519 / 53	674 / 525 / 98	717 / 660 / 81	691 / 609 / 150	832 / 761 / 124	677 / 563 / 120	827 / 702 / 99	681 / 431 / 59	758 / 570 / 51	684 / 567 / 92	727 / 701 / 75	720 / 650 / 139	865 / 797 / 113	735 / 616 / 114	889 / 759 / 93	702 / 471 / 56	786 / 618 / 48	689 / 603 / 86	758 / 754 / 71	772 / 701 / 131	916 / 848 / 105	767 / 647 / 105	944 / 809 / 87
	2	729 / 519 / 53	797 / 654 / 44	699 / 655 / 79	787 / 804 / 64	807 / 748 / 120	973 / 918 / 98	827 / 712 / 99	1007 / 879 / 81	758 / 570 / 51	857 / 709 / 42	727 / 713 / 75	840 / 863 / 60	865 / 807 / 113	1029 / 974 / 90	889 / 770 / 93	1068 / 936 / 75	786 / 618 / 48	910 / 759 / 39	735 / 744 / 69	884 / 913 / 56	916 / 859 / 105	1119 / 1064 / 86	944 / 821 / 87	1165 / 1023 / 72
	3	668 / 801 / 40	774 / 975 / 33	749 / 747 / 69	902 / 916 / 56	934 / 866 / 105	1142 / 1072 / 86	964 / 826 / 87	1139 / 987 / 69	693 / 862 / 38	815 / 1031 / 30	803 / 806 / 64	953 / 973 / 52	993 / 924 / 98	1195 / 1124 / 79	1027 / 884 / 81	1249 / 1085 / 66	731 / 915 / 35	884 / 1124 / 29	849 / 858 / 60	1037 / 1062 / 49	1040 / 972 / 90	1293 / 1220 / 75	1080 / 933 / 75	1290 / 1123 / 60
40	1	682 / 381 / 105	762 / 519 / 93	693 / 514 / 140	746 / 660 / 119	715 / 609 / 173	832 / 761 / 143	677 / 563 / 134	827 / 702 / 111	701 / 421 / 100	790 / 570 / 89	716 / 567 / 134	753 / 701 / 109	729 / 650 / 160	865 / 797 / 130	735 / 616 / 127	889 / 759 / 104	736 / 471 / 98	815 / 618 / 84	720 / 603 / 125	776 / 754 / 103	772 / 701 / 151	916 / 848 / 121	767 / 647 / 117	944 / 809 / 97
	2	762 / 519 / 93	824 / 654 / 78	727 / 655 / 116	787 / 804 / 94	807 / 748 / 138	973 / 918 / 113	827 / 712 / 111	1007 / 879 / 91	790 / 570 / 89	857 / 709 / 73	753 / 713 / 109	840 / 863 / 88	865 / 807 / 130	1029 / 974 / 104	889 / 770 / 104	1068 / 936 / 84	815 / 618 / 84	910 / 759 / 68	753 / 744 / 100	884 / 913 / 81	916 / 859 / 121	1119 / 1064 / 100	944 / 821 / 97	1165 / 1023 / 81
	3	693 / 801 / 71	774 / 975 / 57	764 / 747 / 100	902 / 916 / 81	934 / 866 / 121	1142 / 1072 / 100	964 / 826 / 97	1139 / 987 / 77	713 / 862 / 66	815 / 1031 / 53	803 / 806 / 94	953 / 973 / 75	993 / 924 / 113	1195 / 1124 / 91	1027 / 884 / 91	1249 / 1085 / 74	731 / 915 / 62	884 / 1124 / 50	849 / 858 / 88	1037 / 1062 / 72	1040 / 972 / 104	1293 / 1220 / 87	1080 / 933 / 84	1290 / 1123 / 67
Wind Speed [mph]		170								180															
30	1	705 / 522 / 50	784 / 643 / 41	680 / 649 / 72	800 / 802 / 59	818 / 748 / 108	994 / 924 / 89	814 / 690 / 88	990 / 852 / 72	725 / 560 / 48	849 / 702 / 40	702 / 691 / 68	836 / 842 / 55	859 / 790 / 102	1030 / 961 / 82	855 / 728 / 83	1067 / 920 / 70	ASCE Group Zone							
	2	784 / 643 / 41	956 / 801 / 34	774 / 790 / 57	957 / 993 / 47	957 / 902 / 85	1152 / 1097 / 69	990 / 864 / 72	1204 / 1060 / 59	849 / 702 / 40	1031 / 868 / 32	836 / 857 / 55	985 / 1026 / 44	1030 / 974 / 82	1228 / 1173 / 66	1067 / 934 / 70	1286 / 1135 / 56	Panal Angle							
	3	761 / 958 / 30	905 / 1155 / 24	887 / 901 / 49	1066 / 1096 / 40	1123 / 1053 / 76	1385 / 1309 / 62	1169 / 1012 / 64	1382 / 1205 / 51	817 / 1033 / 29	962 / 1231 / 23	954 / 972 / 47	1136 / 1172 / 38	1202 / 1130 / 72	1469 / 1391 / 59	1199 / 1041 / 59	1466 / 1281 / 48	Mono Slope							
35	1	738 / 522 / 55	786 / 643 / 44	709 / 649 / 81	800 / 802 / 67	818 / 748 / 124	994 / 924 / 101	814 / 690 / 99	990 / 852 / 81	757 / 560 / 52	849 / 702 / 43	726 / 691 / 77	836 / 842 / 62	859 / 790 / 116	1030 / 961 / 94	855 / 728 / 93	1067 / 920 / 78	0 - 7.5							
	2	786 / 643 / 44	956 / 801 / 37	774 / 790 / 64	957 / 993 / 54	957 / 902 / 98	1152 / 1097 / 79	990 / 864 / 81	1204 / 1060 / 66	849 / 702 / 43	1031 / 868 / 35	836 / 857 / 62	985 / 1026 / 49	1030 / 974 / 94	1228 / 1173 / 75	1067 / 934 / 78	1286 / 1135 / 63	7.5 - 15							
	3	761 / 958 / 33	905 / 1155 / 26	887 / 901 / 56	1066 / 1096 / 45	1123 / 1053 / 86	1385 / 1309 / 71	1169 / 1012 / 72	1382 / 1205 / 57	817 / 1033 / 31	962 / 1231 / 25	954 / 972 / 54	1136 / 1172 / 43	1202 / 1130 / 83	1469 / 1391 / 68	1199 / 1041 / 66	1466 / 1281 / 54	15 - 30							
40	1	754 / 510 / 93	814 / 643 / 78	738 / 649 / 119	800 / 802 / 97	818 / 748 / 143	994 / 924 / 117	814 / 690 / 111	990 / 852 / 91	769 / 546 / 89	856 / 702 / 75	754 / 691 / 112	836 / 842 / 91	859 / 790 / 134	1030 / 961 / 108	855 / 728 / 104	1067 / 920 / 87	30 - 45							
	2	814 / 643 / 78	956 / 801 / 64	774 / 790 / 94	957 / 993 / 78	957 / 902 / 113	1152 / 1097 / 91	990 / 864 / 91	1204 / 1060 / 74	856 / 702 / 75	1031 / 868 / 62	836 / 857 / 91	985 / 1026 / 72	1030 / 974 / 108	1228 / 1173 / 87	1067 / 934 / 87	1286 / 1135 / 71	1 - 1							
	3	761 / 958 / 57	905 / 1155 / 46	887 / 901 / 81	1066 / 1096 / 66	1123 / 1053 / 100	1385 / 1309 / 82	1169 / 1012 / 81	1382 / 1205 / 64	817 / 1033 / 55	962 / 1231 / 44	954 / 972 / 78	1136 / 1172 / 63	1202 / 1130 / 95	1469 / 1391 / 78	1199 / 1041 / 74	1466 / 1281 / 61	2 = 2							
Wind Speed [mph]		190								200															
30	1	743 / 595 / 45	886 / 736 / 37	735 / 729 / 64	865 / 875 / 51	893 / 825 / 95	1099 / 1029 / 79	919 / 786 / 80	1096 / 948 / 64	768 / 627 / 43	916 / 765 / 35	764 / 762 / 60	920 / 935 / 49	953 / 883 / 92	1115 / 1046 / 72	949 / 814 / 75	1162 / 1007 / 62	2 = 2							
	2	886 / 736 / 37	1061 / 897 / 30	865 / 891 / 51	1048 / 1094 / 42	1099 / 1043 / 79	1298 / 1242 / 62	1096 / 962 / 64	1364 / 1205 / 54	916 / 765 / 35	1126 / 955 / 29	920 / 952 / 49	1106 / 1159 / 40	1115 / 1060 / 72	1361 / 1305 / 59	1162 / 1022 / 62	1434 / 1270 / 51	3 = 3							
	3	832 / 1056 / 27	1013 / 1301 / 22	1018 / 1041 / 45	1201 / 1241 / 36	1216 / 1146 / 66	1544 / 1465 / 56	1274 / 1108 / 56	1542 / 1349 / 46	878 / 1118 / 25	1059 / 1362 / 21	1032 / 1059 / 42	1259 / 1304 / 34	1279 / 1207 / 62	1609 / 1528 / 53	1343 / 1170 / 54	1607 / 1407 / 43	1 = 1							
35	1	773 / 595 / 49	886 / 736 / 40	740 / 729 / 73	865 / 875 / 58	893 / 825 / 109	1099 / 1029 / 90	919 / 786 / 90	1096 / 948 / 72	786 / 627 / 47	916 / 765 / 38	764 / 762 / 69	920 / 935 / 56	953 / 883 / 105	1115 / 1046 / 83	949 / 814 / 84	1162 / 1007 / 69	2 = 2							
	2	886 / 736 / 40	1061 / 897 / 33	865 / 891 / 58	1048 / 1094 / 47	1099 / 1043 / 90	1298 / 1242 / 71	1096 / 962 / 72	1364 / 1205 / 60	916 / 765 / 38	1126 / 955 / 31	920 / 952 / 56	1106 / 1159 / 45	1115 / 1060 / 83	1361 / 1305 / 68	1162 / 1022 / 69	1434 / 1270 / 57	3 = 3							
	3	832 / 1056 / 29	1013 / 1301 / 24	1018 / 1041 / 52	1201 / 1241 / 41	1216 / 1146 / 75	1544 / 1465 / 64	1274 / 1108 / 63	1542 / 1349 / 51	878 / 1118 / 28	1059 / 1362 / 22	1032 / 1059 / 47	1259 / 1304 / 39	1279 / 1207 / 71	1609 / 1528 / 60	1343 / 1170 / 60	1607 / 1407 / 48	1 = 1							
40	1	804 / 595 / 87	886 / 736 / 71	766 / 729 / 106	865 / 875 / 84	893 / 825 / 125	1099 / 1029 / 104	919 / 786 / 101	1096 / 948 / 81	815 / 627 / 82	916 / 765 / 66	775 / 762 / 100	920 / 935 / 81	953 / 883 / 121	1115 / 1046 / 95	949 / 814 / 94	1162 / 1007 / 77	2 = 2							
	2	886 / 736 / 71	1061 / 897 / 57	865 / 891 / 84	1048 / 1094 / 69	1099 / 1043 / 104	1298 / 1242 / 82	1096 / 962 / 81	1364 / 1205 / 67	916 / 765 / 66	1126 / 955 / 55	920 / 952 / 81	1106 / 1159 / 66	1115 / 1060 / 95	1361 / 1305 / 78	1162 / 1022 / 77	1434 / 1270 / 64	3 = 3							
	3	832 / 1056 / 50	1013 / 1301 / 41	1018 / 1041 / 75	1201 / 1241 / 60	1216 / 1146 / 87	1544 / 1465 / 74	1274 / 1108 / 71	1542 / 1349 / 57	878 / 1118 / 48	1059 / 1362 / 39	1032 / 1059 / 69	1259 / 1304 / 56	1279 / 1207 / 82	1609 / 1528 / 69	1343 / 1170 / 67	1607 / 1407 / 54	1 = 1							

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	703 / 372 / 112	775 / 506 / 100	711 / 503 / 151	775 / 660 / 130	740 / 609 / 190	832 / 761 / 157	677 / 563 / 148	827 / 702 / 122	736 / 421 / 110	800 / 555 / 95	732 / 554 / 144	780 / 701 / 120	751 / 650 / 176	865 / 797 / 143	735 / 616 / 140	889 / 759 / 114	753 / 460 / 105	822 / 601 / 90	750 / 603 / 137	802 / 754 / 113	779 / 701 / 167	916 / 848 / 133	767 / 647 / 129	944 / 809 / 107
	2	775 / 506 / 100	851 / 654 / 85	755 / 655 / 127	803 / 804 / 103	807 / 748 / 152	973 / 918 / 124	827 / 712 / 122	1007 / 879 / 100	800 / 555 / 95	881 / 709 / 80	780 / 713 / 144	840 / 863 / 96	865 / 807 / 143	1029 / 974 / 114	889 / 770 / 114	1068 / 936 / 92	822 / 601 / 90	910 / 759 / 75	777 / 744 / 110	884 / 913 / 89	916 / 859 / 133	1119 / 1064 / 110	944 / 821 / 107	1165 / 1023 / 89
	3	718 / 801 / 77	774 / 975 / 63	788 / 747 / 110	902 / 916 / 89	934 / 866 / 133	1142 / 1072 / 110	964 / 826 / 107	1139 / 987 / 85	736 / 862 / 72	815 / 1031 / 58	814 / 806 / 103	953 / 973 / 83	993 / 924 / 124	1195 / 1124 / 100	1027 / 884 / 100	1249 / 1085 / 81	749 / 915 / 67	884 / 1124 / 55	849 / 858 / 96	1037 / 1062 / 79	1040 / 972 / 114	1293 / 1220 / 95	1080 / 933 / 92	1290 / 1123 / 74
	1	723 / 364 / 119	787 / 494 / 106	728 / 491 / 161	804 / 660 / 142	765 / 609 / 208	833 / 761 / 172	677 / 563 / 161	827 / 702 / 133	754 / 412 / 116	830 / 555 / 103	764 / 554 / 157	807 / 701 / 131	774 / 650 / 192	865 / 797 / 156	735 / 616 / 153	889 / 759 / 125	768 / 449 / 111	851 / 601 / 98	781 / 603 / 150	827 / 754 / 123	800 / 701 / 182	916 / 848 / 146	767 / 647 / 141	944 / 809 / 117
	2	787 / 494 / 106	878 / 654 / 92	783 / 655 / 138	825 / 804 / 112	807 / 748 / 166	973 / 918 / 135	827 / 712 / 133	1007 / 879 / 109	830 / 555 / 103	907 / 709 / 87	807 / 713 / 131	849 / 863 / 105	865 / 807 / 156	1029 / 974 / 125	889 / 770 / 125	1068 / 936 / 101	851 / 601 / 98	930 / 759 / 81	802 / 744 / 120	884 / 913 / 97	916 / 859 / 146	1119 / 1064 / 120	944 / 821 / 117	1165 / 1023 / 97
	3	742 / 801 / 84	787 / 975 / 68	813 / 747 / 120	902 / 916 / 97	934 / 866 / 146	1142 / 1072 / 120	964 / 826 / 117	1139 / 987 / 93	759 / 862 / 79	815 / 1031 / 62	837 / 806 / 112	953 / 973 / 90	993 / 924 / 135	1195 / 1124 / 109	1027 / 884 / 109	1249 / 1085 / 89	771 / 915 / 73	884 / 1124 / 60	856 / 858 / 105	1037 / 1062 / 86	1040 / 972 / 125	1293 / 1220 / 104	1080 / 933 / 101	1290 / 1123 / 81
	1	775 / 356 / 135	828 / 481 / 119	775 / 480 / 183	840 / 643 / 161	793 / 594 / 238	873 / 761 / 202	677 / 563 / 188	827 / 702 / 155	785 / 392 / 129	868 / 541 / 116	788 / 527 / 174	860 / 701 / 152	819 / 650 / 226	875 / 797 / 183	735 / 616 / 179	889 / 759 / 146	813 / 438 / 125	884 / 584 / 110	821 / 588 / 170	877 / 754 / 144	843 / 701 / 214	916 / 848 / 171	767 / 647 / 165	944 / 809 / 137
	2	828 / 481 / 119	905 / 635 / 104	840 / 655 / 161	871 / 804 / 131	847 / 748 / 195	973 / 918 / 159	827 / 712 / 155	1007 / 879 / 127	868 / 541 / 116	958 / 709 / 100	860 / 713 / 152	892 / 863 / 122	875 / 807 / 183	1029 / 974 / 147	889 / 770 / 146	1068 / 936 / 118	884 / 584 / 110	979 / 759 / 94	851 / 744 / 139	907 / 913 / 113	916 / 859 / 171	1119 / 1064 / 141	944 / 821 / 137	1165 / 1023 / 113
	3	792 / 801 / 97	827 / 975 / 79	862 / 747 / 139	920 / 916 / 113	934 / 866 / 171	1142 / 1072 / 141	964 / 826 / 137	1139 / 987 / 109	806 / 862 / 91	838 / 1031 / 72	883 / 806 / 131	953 / 973 / 105	993 / 924 / 159	1195 / 1124 / 128	1027 / 884 / 127	1249 / 1085 / 104	814 / 915 / 85	884 / 1124 / 69	899 / 858 / 122	1037 / 1062 / 100	1040 / 972 / 147	1293 / 1220 / 122	1080 / 933 / 118	1290 / 1123 / 94
Wind Speed [mph]		170								180															
45	1	768 / 498 / 100	841 / 643 / 85	767 / 649 / 130	819 / 802 / 106	818 / 748 / 157	994 / 924 / 129	814 / 690 / 122	990 / 852 / 100	801 / 546 / 97	883 / 702 / 82	781 / 691 / 124	836 / 842 / 100	859 / 790 / 148	1030 / 961 / 119	855 / 728 / 114	1067 / 920 / 96	ASCE Group Zone							
	2	841 / 643 / 85	956 / 801 / 70	793 / 790 / 103	957 / 993 / 86	957 / 902 / 124	1152 / 1097 / 100	990 / 864 / 100	1204 / 1060 / 81	883 / 702 / 82	1031 / 868 / 67	836 / 857 / 100	985 / 1026 / 79	1030 / 974 / 119	1228 / 1173 / 95	1067 / 934 / 96	1286 / 1135 / 78	Panal Angle							
	3	761 / 958 / 63	905 / 1155 / 50	887 / 901 / 89	1066 / 1096 / 72	1123 / 1053 / 110	1385 / 1309 / 91	1169 / 1012 / 89	1382 / 1205 / 70	817 / 1033 / 60	962 / 1231 / 48	954 / 972 / 86	1136 / 1172 / 69	1202 / 1130 / 105	1469 / 1391 / 86	1199 / 1041 / 81	1466 / 1281 / 67	Mono Slope							
	1	800 / 498 / 108	868 / 643 / 92	796 / 649 / 142	843 / 802 / 116	822 / 748 / 172	994 / 924 / 140	814 / 690 / 133	990 / 852 / 109	811 / 532 / 103	909 / 702 / 89	809 / 691 / 135	854 / 842 / 109	859 / 790 / 161	1030 / 961 / 130	855 / 728 / 125	1067 / 920 / 105	0 - 7.5							
	2	868 / 643 / 92	956 / 801 / 76	816 / 790 / 112	957 / 993 / 94	957 / 902 / 135	1152 / 1097 / 109	990 / 864 / 89	1204 / 1060 / 89	909 / 702 / 89	1031 / 868 / 73	854 / 857 / 109	985 / 1026 / 86	1030 / 974 / 130	1228 / 1173 / 104	1067 / 934 / 105	1286 / 1135 / 85	7.5 - 15							
	3	777 / 958 / 68	905 / 1155 / 54	887 / 901 / 97	1066 / 1096 / 79	1123 / 1053 / 120	1385 / 1309 / 99	1169 / 1012 / 97	1382 / 1205 / 77	817 / 1033 / 65	962 / 1231 / 52	954 / 972 / 94	1136 / 1172 / 75	1202 / 1130 / 115	1469 / 1391 / 94	1199 / 1041 / 89	1466 / 1281 / 73	15 - 30							
	1	821 / 473 / 119	923 / 643 / 107	832 / 632 / 161	890 / 802 / 135	863 / 748 / 202	994 / 924 / 165	814 / 690 / 155	990 / 852 / 127	849 / 518 / 116	933 / 680 / 100	863 / 691 / 157	899 / 842 / 126	878 / 790 / 189	1030 / 961 / 153	855 / 728 / 146	1067 / 920 / 123	30 - 45							
	2	923 / 643 / 107	993 / 801 / 88	861 / 790 / 131	957 / 993 / 109	957 / 902 / 159	1152 / 1097 / 128	990 / 864 / 127	1204 / 1060 / 104	933 / 680 / 100	1039 / 868 / 85	899 / 857 / 126	985 / 1026 / 100	1030 / 974 / 153	1228 / 1173 / 122	1067 / 934 / 123	1286 / 1135 / 99	1 - 1							
	3	817 / 958 / 79	905 / 1155 / 63	909 / 901 / 113	1066 / 1096 / 92	1123 / 1053 / 141	1385 / 1309 / 116	1169 / 1012 / 113	1382 / 1205 / 90	849 / 1033 / 75	962 / 1231 / 60	954 / 972 / 109	1136 / 1172 / 87	1202 / 1130 / 135	1469 / 1391 / 110	1199 / 1041 / 104	1466 / 1281 / 85	2 = 2							
Wind Speed [mph]		190								200															
45	1	812 / 580 / 92	895 / 736 / 77	792 / 729 / 117	865 / 875 / 93	893 / 825 / 138	1099 / 1029 / 114	919 / 786 / 111	1096 / 948 / 89	844 / 627 / 90	916 / 765 / 72	799 / 762 / 110	920 / 935 / 89	953 / 883 / 133	1115 / 1046 / 105	949 / 814 / 103	1162 / 1007 / 85	ASCE Group Zone							
	2	895 / 736 / 77	1061 / 897 / 63	865 / 891 / 93	1048 / 1094 / 76	1099 / 1043 / 114	1298 / 1242 / 91	1096 / 962 / 89	1364 / 1205 / 74	916 / 765 / 72	1126 / 955 / 60	920 / 952 / 89	1106 / 1159 / 72	1115 / 1060 / 105	1361 / 1305 / 86	1162 / 1022 / 85	1434 / 1270 / 70	Panal Angle							
	3	832 / 1056 / 55	1013 / 1301 / 45	1018 / 1041 / 83	1201 / 1241 / 65	1216 / 1146 / 95	1544 / 1465 / 81	1274 / 1108 / 78	1542 / 1349 / 63	878 / 1118 / 53	1059 / 1362 / 43	1032 / 1059 / 76	1259 / 1304 / 62	1279 / 1207 / 91	1609 / 1528 / 76	1343 / 1170 / 74	1607 / 1407 / 59	Mono Slope							
	1	842 / 580 / 100	920 / 736 / 84	818 / 729 / 127	865 / 875 / 101	893 / 825 / 151	1099 / 1029 / 125	919 / 786 / 121	1096 / 948 / 97	849 / 609 / 95	926 / 765 / 79	824 / 762 / 120	920 / 935 / 97	953 / 883 / 146	1115 / 1046 / 115	949 / 814 / 113	1162 / 1007 / 93	0 - 7.5							
	2	920 / 736 / 84	1061 / 897 / 68	865 / 891 / 101	1048 / 1094 / 82	1099 / 1043 / 125	1298 / 1242 / 99	1096 / 962 / 97	1364 / 1205 / 81	926 / 765 / 79	1126 / 955 / 65	920 / 952 / 97	1106 / 1159 / 79	1115 / 1060 / 115	1361 / 1305 / 94	1162 / 1022 / 93	1434 / 1270 / 77	7.5 - 15							
	3	832 / 1056 / 60	1013 / 1301 / 49	1018 / 1041 / 90	1201 / 1241 / 71	1216 / 1146 / 104	1544 / 1465 / 89	1274 / 1108 / 85	1542 / 1349 / 69	878 / 1118 / 57	1059 / 1362 / 46	1032 / 1059 / 82	1259 / 1304 / 68	1279 / 1207 / 99	1609 / 1528 / 83	1343 / 1170 / 81	1607 / 1407 / 65	15 - 30							
	1	877 / 564 / 113	970 / 736 / 97	870 / 729 / 148	901 / 875 / 118	893 / 825 / 177	1099 / 1029 / 147	919 / 786 / 141	1096 / 948 / 113	905 / 609 / 110	973 / 765 / 91	873 / 762 / 139	934 / 935 / 113	953 / 883 / 171	1115 / 1046 / 135	949 / 814 / 132	1162 / 1007 / 109	30 - 45							
	2	970 / 736 / 97	1061 / 897 / 79	901 / 891 / 118	1048 / 1094 / 96	1099 / 1043 / 147	1298 / 1242 / 116	1096 / 962 / 113	1364 / 1205 / 94	973 / 765 / 91	1126 / 955 / 75	934 / 952 / 113	1106 / 1159 / 92	1115 / 1060 / 135	1361 / 1305 / 110	1162 / 1022 / 109	1434 / 1270 / 90	1 - 1							
	3	841 / 1056 / 69	1013 / 1301 / 57	1018 / 1041 / 105	1201 / 1241 / 83	1216 / 1146 / 122	1544 / 1465 / 104	1274 / 1108 / 99	1542 / 1349 / 80	878 / 1118 / 66	1059 / 1362 / 54	1032 / 1059 / 96	1259 / 1304 / 79	1279 / 1207 / 116	1609 / 1528 / 98	1343 / 1170 / 94	1607 / 1407 / 76	2 = 2							

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		70	1	754 / 221 / 160	801 / 320 / 150	753 / 309 / 224	794 / 432 / 204	743 / 406 / 310	806 / 549 / 275	599 / 436 / 275	660 / 546 / 226	773 / 244 / 160	809 / 344 / 146	758 / 332 / 219	803 / 463 / 199	756 / 436 / 303	825 / 586 / 268	610 / 459 / 264	685 / 570 / 216	776 / 262 / 157	816 / 367 / 143	780 / 363 / 219	813 / 493 / 194	769 / 465 / 296	844 / 623 / 261	619 / 481 / 253
70	2	801 / 320 / 150	857 / 444 / 136	794 / 440 / 204	861 / 605 / 184	806 / 556 / 275	895 / 735 / 240	660 / 554 / 226	791 / 679 / 183	809 / 344 / 146	871 / 474 / 132	803 / 471 / 199	877 / 645 / 179	825 / 594 / 268	893 / 758 / 226	685 / 578 / 216	837 / 721 / 178	816 / 367 / 143	884 / 504 / 128	813 / 502 / 194	893 / 684 / 174	844 / 631 / 261	916 / 800 / 219	706 / 599 / 205	855 / 739 / 167	
70	3	835 / 614 / 139	834 / 764 / 114	835 / 540 / 189	925 / 733 / 169	855 / 662 / 247	928 / 829 / 205	747 / 628 / 194	924 / 791 / 162	846 / 656 / 136	848 / 811 / 111	849 / 577 / 184	917 / 756 / 159	878 / 704 / 240	954 / 876 / 198	792 / 669 / 189	941 / 807 / 151	834 / 678 / 128	832 / 827 / 104	862 / 612 / 179	935 / 799 / 154	901 / 746 / 233	991 / 921 / 190	811 / 688 / 178	987 / 849 / 146	
80	1	808 / 216 / 176	827 / 305 / 160	786 / 295 / 240	835 / 422 / 223	779 / 397 / 344	832 / 535 / 304	613 / 427 / 303	673 / 546 / 255	808 / 233 / 172	853 / 335 / 160	806 / 325 / 240	843 / 451 / 218	790 / 426 / 336	849 / 571 / 296	635 / 459 / 297	685 / 570 / 243	808 / 250 / 168	858 / 358 / 156	809 / 347 / 234	850 / 480 / 212	801 / 454 / 328	865 / 606 / 288	643 / 481 / 285	706 / 590 / 231	
80	2	827 / 305 / 160	894 / 433 / 148	835 / 429 / 223	893 / 588 / 201	832 / 542 / 304	909 / 714 / 264	673 / 554 / 255	791 / 679 / 206	853 / 335 / 160	905 / 462 / 144	843 / 459 / 218	906 / 627 / 195	849 / 579 / 296	932 / 758 / 256	685 / 578 / 243	837 / 721 / 200	858 / 358 / 156	915 / 490 / 140	850 / 489 / 212	919 / 665 / 190	865 / 614 / 288	954 / 800 / 248	706 / 599 / 231	855 / 739 / 188	
80	3	874 / 599 / 152	885 / 764 / 128	869 / 526 / 207	948 / 712 / 184	898 / 662 / 280	963 / 829 / 232	747 / 628 / 219	924 / 791 / 182	883 / 639 / 148	897 / 811 / 124	881 / 561 / 201	966 / 756 / 179	920 / 704 / 272	989 / 876 / 224	792 / 669 / 213	941 / 807 / 170	892 / 678 / 144	879 / 827 / 116	892 / 595 / 195	983 / 799 / 173	941 / 746 / 264	1013 / 921 / 216	811 / 688 / 200	987 / 849 / 164	
90	1	846 / 206 / 186	869 / 297 / 173	831 / 288 / 260	874 / 411 / 242	793 / 379 / 366	855 / 521 / 331	625 / 419 / 331	695 / 546 / 284	836 / 222 / 181	872 / 318 / 168	831 / 309 / 254	879 / 440 / 236	822 / 416 / 366	870 / 555 / 322	646 / 450 / 324	704 / 570 / 270	855 / 244 / 181	897 / 348 / 168	852 / 339 / 254	884 / 468 / 229	831 / 443 / 357	884 / 589 / 313	653 / 471 / 310	710 / 590 / 257	
90	2	869 / 297 / 173	928 / 421 / 159	874 / 419 / 242	921 / 572 / 217	855 / 528 / 331	950 / 714 / 295	695 / 554 / 284	791 / 679 / 230	872 / 318 / 168	936 / 449 / 155	879 / 448 / 236	932 / 609 / 211	870 / 563 / 322	971 / 758 / 286	704 / 578 / 270	837 / 721 / 223	897 / 348 / 168	944 / 476 / 151	884 / 476 / 229	943 / 645 / 205	884 / 597 / 313	992 / 800 / 277	710 / 599 / 257	855 / 739 / 209	
90	3	911 / 583 / 164	936 / 764 / 142	901 / 512 / 223	968 / 690 / 198	914 / 643 / 304	999 / 829 / 259	747 / 628 / 243	924 / 791 / 203	917 / 622 / 159	947 / 811 / 137	910 / 546 / 217	983 / 732 / 192	934 / 684 / 295	1023 / 876 / 250	792 / 669 / 236	941 / 807 / 189	923 / 660 / 155	925 / 827 / 128	945 / 595 / 217	1030 / 799 / 192	952 / 723 / 286	1046 / 921 / 241	811 / 688 / 223	987 / 849 / 182	
Wind Speed [mph]		110								115																
70	1	779 / 279 / 153	823 / 390 / 139	785 / 387 / 214	844 / 536 / 194	782 / 494 / 289	863 / 659 / 254	627 / 501 / 242	744 / 625 / 199	800 / 304 / 153	852 / 423 / 139	790 / 411 / 209	854 / 567 / 189	795 / 523 / 282	880 / 694 / 247	634 / 519 / 232	781 / 659 / 194									
	2	823 / 390 / 139	896 / 533 / 125	844 / 546 / 194	908 / 723 / 169	863 / 668 / 254	907 / 814 / 205	744 / 634 / 199	896 / 777 / 162	852 / 423 / 139	908 / 562 / 121	854 / 577 / 189	922 / 760 / 164	880 / 704 / 247	926 / 851 / 198	781 / 668 / 194	935 / 813 / 156									
	3	844 / 717 / 125	843 / 868 / 100	876 / 648 / 174	921 / 812 / 144	923 / 786 / 226	1033 / 963 / 183	852 / 724 / 173	1030 / 887 / 140	828 / 733 / 118	853 / 906 / 96	914 / 702 / 174	936 / 849 / 139	913 / 798 / 212	1073 / 1003 / 176	891 / 760 / 167	1070 / 924 / 135									
	80	1	828 / 273 / 168	863 / 380 / 152	811 / 369 / 229	880 / 523 / 212	812 / 482 / 320	881 / 641 / 280	650 / 501 / 273	744 / 625 / 225	828 / 290 / 164	868 / 401 / 148	834 / 401 / 229	888 / 552 / 207	823 / 510 / 312	897 / 674 / 272	656 / 519 / 261	781 / 659 / 219								
		2	863 / 380 / 152	925 / 518 / 136	880 / 532 / 212	931 / 701 / 184	881 / 649 / 280	942 / 814 / 232	744 / 634 / 225	896 / 777 / 182	868 / 401 / 148	934 / 545 / 132	888 / 562 / 207	972 / 760 / 184	897 / 684 / 272	960 / 851 / 224	781 / 668 / 219	935 / 813 / 176								
		3	900 / 717 / 140	888 / 868 / 112	929 / 648 / 195	965 / 812 / 162	962 / 786 / 256	1035 / 963 / 208	852 / 724 / 194	1030 / 887 / 158	881 / 733 / 132	896 / 906 / 108	940 / 682 / 190	978 / 849 / 156	949 / 798 / 240	1073 / 1003 / 200	891 / 760 / 188	1070 / 924 / 152								
	90	1	853 / 260 / 177	900 / 370 / 164	853 / 360 / 248	914 / 509 / 229	840 / 470 / 349	898 / 622 / 304	673 / 501 / 250	744 / 625 / 250	872 / 283 / 177	902 / 391 / 159	853 / 381 / 242	919 / 537 / 223	849 / 497 / 340	939 / 674 / 304	678 / 519 / 290	781 / 659 / 243								
		2	900 / 370 / 164	951 / 503 / 146	914 / 518 / 229	982 / 701 / 205	898 / 631 / 304	978 / 814 / 259	744 / 634 / 250	896 / 777 / 203	902 / 391 / 159	987 / 545 / 146	919 / 547 / 223	992 / 737 / 198	939 / 684 / 304	994 / 851 / 250	781 / 668 / 243	935 / 813 / 196								
		3	956 / 717 / 155	933 / 868 / 124	954 / 629 / 211	1010 / 812 / 180	970 / 761 / 277	1067 / 963 / 233	852 / 724 / 216	1030 / 887 / 176	934 / 733 / 146	939 / 906 / 120	962 / 662 / 205	1021 / 849 / 174	986 / 798 / 268	1085 / 1003 / 224	891 / 760 / 209	1070 / 924 / 169								
Wind Speed [mph]		120								130																
70	1	803 / 322 / 150	859 / 446 / 136	795 / 434 / 204	863 / 597 / 184	808 / 551 / 275	897 / 728 / 240	663 / 548 / 226	794 / 672 / 183	800 / 304 / 153	852 / 423 / 139	790 / 411 / 209	854 / 567 / 189	795 / 523 / 282	880 / 694 / 247	634 / 519 / 232	781 / 659 / 194									
	2	859 / 446 / 136	919 / 589 / 118	863 / 607 / 184	906 / 771 / 154	897 / 738 / 240	943 / 885 / 190	794 / 682 / 183	972 / 847 / 151	852 / 423 / 139	908 / 562 / 121	854 / 577 / 189	922 / 760 / 164	880 / 704 / 247	926 / 851 / 198	781 / 668 / 194	935 / 813 / 156									
	3	835 / 767 / 114	861 / 942 / 93	927 / 737 / 169	949 / 884 / 134	930 / 833 / 205	1110 / 1039 / 169	928 / 794 / 162	1106 / 957 / 130	828 / 733 / 118	853 / 906 / 96	914 / 702 / 174	936 / 849 / 139	913 / 798 / 212	1073 / 1003 / 176	891 / 760 / 167	1070 / 924 / 135									
80	1	829 / 306 / 160	896 / 434 / 148	837 / 423 / 223	895 / 581 / 201	833 / 537 / 304	911 / 707 / 264	675 / 548 / 255	794 / 672 / 206	828 / 290 / 164	868 / 401 / 148	834 / 401 / 229	888 / 552 / 207	823 / 510 / 312	897 / 674 / 272	656 / 519 / 261	781 / 659 / 219									
	2	896 / 434 / 148	972 / 589 / 132	895 / 591 / 201	953 / 771 / 173	911 / 717 / 264	976 / 885 / 216	794 / 682 / 206	972 / 847 / 170	868 / 401 / 148	934 / 545 / 132	888 / 562 / 207	972 / 760 / 184	897 / 684 / 272	960 / 851 / 224	781 / 668 / 219	935 / 813 / 176									
	3	887 / 767 / 128	902 / 942 / 104	950 / 715 / 184	990 / 884 / 151	966 / 833 / 232	1110 / 1039 / 192	928 / 794 / 182	1106 / 957 / 146	881 / 733 / 132	896 / 906 / 108	940 / 682 / 190	978 / 849 / 156	949 / 798 / 240	1073 / 1003 / 200	891 / 760 / 188	1070 / 924 / 152									
90	1	871 / 299 / 173	929 / 423 / 159	875 / 413 / 242	923 / 564 / 217	857 / 523 / 331	952 / 707 / 295	697 / 548 / 284	794 / 672 / 230	872 / 283 / 177	902 / 391 / 159	853 / 381 / 242	919 / 537 / 223	849 / 497 / 340	939 / 674 / 304	678 / 519 / 290	781 / 659 / 243									
	2	929 / 423 / 159	994 / 572 / 142	923 / 575 / 217	1001 / 771 / 192	952 / 717 / 295	1009 / 885 / 241	794 / 682 / 230	972 / 847 / 189	902 / 391 / 159	987 / 545 / 146	919 / 547 / 223	992 / 737 / 198	939 / 684 / 304	994 / 851 / 250	781 / 668 / 243	935 / 813 / 196									
	3	938 / 767 / 142	944 / 942 / 115	970 / 693 / 198	1031 / 884 / 168	1001 / 833 / 259	1110 / 1039 / 215	928 / 794 / 203	1106 / 957 / 162	934 / 733 / 146	939 / 906 / 120	962 / 662 / 205	1021 / 849 / 174	986 / 798 / 268	1085 / 1003 / 224	891 / 760 / 209	1070 / 924 / 169									

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
70	1	805 / 339 / 146	866 / 469 / 132	799 / 457 / 199	872 / 626 / 179	819 / 579 / 268	913 / 761 / 233	677 / 563 / 216	827 / 702 / 178	830 / 383 / 143	902 / 526 / 128	828 / 514 / 194	913 / 701 / 174	841 / 632 / 254	912 / 797 / 212	735 / 616 / 205	889 / 759 / 167	834 / 417 / 136	913 / 568 / 121	858 / 573 / 189	927 / 754 / 164	886 / 701 / 247	932 / 848 / 198	767 / 647 / 189	944 / 809 / 156	
	2	866 / 469 / 132	958 / 635 / 118	872 / 637 / 179	917 / 804 / 149	886 / 748 / 226	973 / 918 / 183	827 / 712 / 178	1007 / 879 / 146	902 / 526 / 128	978 / 687 / 111	913 / 713 / 174	935 / 863 / 139	912 / 807 / 212	1029 / 974 / 169	889 / 770 / 167	1068 / 936 / 135	913 / 568 / 121	1027 / 759 / 107	899 / 744 / 159	946 / 913 / 129	932 / 859 / 198	1119 / 1064 / 162	944 / 821 / 156	1165 / 1023 / 130	
	3	842 / 801 / 111	867 / 975 / 89	910 / 747 / 159	960 / 916 / 129	946 / 866 / 198	1142 / 1072 / 162	964 / 826 / 156	1139 / 987 / 124	852 / 862 / 104	875 / 1031 / 82	929 / 806 / 149	976 / 973 / 119	993 / 924 / 183	1195 / 1124 / 148	1027 / 884 / 146	1249 / 1085 / 119	858 / 915 / 96	915 / 1124 / 79	942 / 858 / 139	1037 / 1062 / 114	1040 / 972 / 169	1293 / 1220 / 141	1080 / 933 / 135	1290 / 1123 / 108	
	80	1	850 / 331 / 160	900 / 456 / 144	839 / 445 / 218	901 / 608 / 195	843 / 564 / 296	925 / 738 / 256	677 / 563 / 243	827 / 702 / 200	872 / 373 / 156	934 / 511 / 140	865 / 501 / 212	939 / 681 / 190	886 / 632 / 288	949 / 797 / 240	735 / 616 / 231	889 / 759 / 188	871 / 406 / 148	939 / 551 / 132	892 / 558 / 207	948 / 731 / 179	902 / 681 / 272	967 / 848 / 224	767 / 647 / 213	944 / 809 / 176
		2	900 / 456 / 144	981 / 616 / 128	901 / 619 / 195	963 / 804 / 168	925 / 748 / 256	990 / 918 / 208	827 / 712 / 200	1007 / 879 / 164	934 / 511 / 140	1028 / 687 / 124	939 / 693 / 190	977 / 863 / 156	949 / 807 / 240	1029 / 974 / 192	889 / 770 / 188	1068 / 936 / 152	939 / 551 / 132	1039 / 734 / 116	948 / 744 / 179	986 / 913 / 145	967 / 859 / 224	1119 / 1064 / 184	944 / 821 / 176	1165 / 1023 / 146
		3	892 / 801 / 124	907 / 975 / 100	959 / 747 / 179	999 / 916 / 145	981 / 866 / 224	1142 / 1072 / 184	964 / 826 / 176	1139 / 987 / 140	899 / 862 / 116	912 / 1031 / 92	974 / 806 / 168	1013 / 973 / 134	1005 / 924 / 208	1195 / 1124 / 168	1027 / 884 / 164	1249 / 1085 / 134	901 / 915 / 108	951 / 1124 / 88	984 / 858 / 156	1063 / 1062 / 129	1040 / 972 / 192	1293 / 1220 / 160	1080 / 933 / 152	1290 / 1123 / 122
	90	1	891 / 323 / 173	931 / 443 / 155	875 / 434 / 236	927 / 591 / 211	865 / 549 / 322	964 / 738 / 286	698 / 563 / 270	827 / 702 / 223	887 / 354 / 164	962 / 497 / 151	899 / 488 / 229	962 / 661 / 205	904 / 614 / 313	985 / 797 / 268	735 / 616 / 257	889 / 759 / 209	905 / 395 / 159	992 / 551 / 146	922 / 542 / 223	997 / 731 / 198	916 / 661 / 295	1001 / 848 / 250	767 / 647 / 236	944 / 809 / 196
		2	931 / 443 / 155	1000 / 597 / 137	927 / 602 / 211	1008 / 804 / 186	964 / 748 / 286	1022 / 918 / 233	827 / 712 / 223	1007 / 879 / 182	962 / 497 / 151	1043 / 665 / 133	962 / 673 / 205	1020 / 863 / 174	985 / 807 / 268	1041 / 974 / 215	889 / 770 / 209	1068 / 936 / 169	992 / 551 / 146	1086 / 734 / 128	997 / 744 / 198	1026 / 913 / 161	1001 / 859 / 250	1119 / 1064 / 196	944 / 821 / 196	1165 / 1023 / 162
		3	942 / 801 / 137	948 / 975 / 111	1008 / 747 / 198	1039 / 916 / 161	1015 / 866 / 250	1142 / 1072 / 206	964 / 826 / 196	1139 / 987 / 155	945 / 862 / 128	949 / 1031 / 102	1020 / 806 / 186	1049 / 973 / 149	1036 / 924 / 233	1195 / 1124 / 188	1027 / 884 / 182	1249 / 1085 / 149	945 / 915 / 120	986 / 1124 / 98	1027 / 858 / 174	1098 / 1062 / 143	1050 / 972 / 215	1293 / 1220 / 179	1080 / 933 / 169	1290 / 1123 / 135
Wind Speed [mph]		170								180																
70	1	859 / 460 / 132	949 / 624 / 118	864 / 615 / 179	937 / 802 / 154	903 / 748 / 233	994 / 924 / 190	814 / 690 / 178	990 / 852 / 146	884 / 504 / 128	985 / 680 / 114	893 / 672 / 174	943 / 842 / 144	916 / 790 / 219	1030 / 961 / 176	855 / 728 / 167	1067 / 920 / 140									
	2	949 / 624 / 118	1038 / 801 / 100	907 / 790 / 149	990 / 993 / 124	957 / 902 / 183	1152 / 1097 / 148	990 / 864 / 146	1204 / 1060 / 119	985 / 680 / 114	1083 / 868 / 96	943 / 857 / 144	989 / 1026 / 114	1030 / 974 / 176	1228 / 1173 / 141	1067 / 934 / 140	1286 / 1135 / 113									
	3	858 / 958 / 89	908 / 1155 / 72	949 / 901 / 129	1066 / 1096 / 105	1123 / 1053 / 162	1385 / 1309 / 134	1169 / 1012 / 130	1382 / 1205 / 103	888 / 1033 / 86	962 / 1231 / 68	988 / 972 / 124	1136 / 1172 / 100	1202 / 1130 / 155	1469 / 1391 / 127	1199 / 1041 / 119	1466 / 1281 / 97									
80	1	893 / 448 / 144	972 / 605 / 128	893 / 598 / 195	985 / 802 / 173	944 / 748 / 264	1015 / 924 / 216	814 / 690 / 200	990 / 852 / 164	915 / 490 / 140	1004 / 659 / 124	919 / 653 / 190	987 / 842 / 162	954 / 790 / 248	1030 / 961 / 200	855 / 728 / 188	1067 / 920 / 158									
	2	972 / 605 / 128	1083 / 801 / 112	953 / 790 / 168	1028 / 993 / 140	978 / 902 / 208	1152 / 1097 / 168	990 / 864 / 134	1204 / 1060 / 134	1004 / 659 / 124	1126 / 868 / 108	987 / 857 / 162	1024 / 1026 / 129	1030 / 974 / 200	1228 / 1173 / 160	1067 / 934 / 158	1286 / 1135 / 128									
	3	898 / 958 / 100	940 / 1155 / 80	988 / 901 / 145	1066 / 1096 / 117	1123 / 1053 / 184	1385 / 1309 / 152	1169 / 1012 / 146	1382 / 1205 / 116	926 / 1033 / 96	970 / 1231 / 76	1026 / 972 / 140	1136 / 1172 / 112	1202 / 1130 / 176	1469 / 1391 / 144	1199 / 1041 / 134	1466 / 1281 / 110									
90	1	925 / 435 / 155	991 / 586 / 137	947 / 598 / 217	1032 / 802 / 192	954 / 726 / 286	1048 / 924 / 241	814 / 690 / 223	990 / 852 / 182	944 / 476 / 151	1019 / 638 / 133	943 / 634 / 205	1031 / 842 / 180	992 / 790 / 277	1053 / 961 / 224	855 / 728 / 209	1067 / 920 / 176									
	2	991 / 586 / 137	1128 / 801 / 124	999 / 790 / 186	1066 / 993 / 155	1010 / 902 / 233	1152 / 1097 / 188	990 / 864 / 182	1204 / 1060 / 149	1019 / 638 / 133	1126 / 836 / 115	1031 / 857 / 180	1059 / 1026 / 143	1053 / 974 / 224	1228 / 1173 / 179	1067 / 934 / 176	1286 / 1135 / 142									
	3	938 / 958 / 111	972 / 1155 / 89	1028 / 901 / 161	1092 / 1096 / 130	1123 / 1053 / 206	1385 / 1309 / 170	1169 / 1012 / 162	1382 / 1205 / 129	965 / 1033 / 106	1000 / 1231 / 84	1064 / 972 / 155	1136 / 1172 / 124	1202 / 1130 / 197	1469 / 1391 / 161	1199 / 1041 / 149	1466 / 1281 / 122									
Wind Speed [mph]		190								200																
70	1	909 / 548 / 125	987 / 712 / 107	922 / 729 / 169	942 / 875 / 134	924 / 825 / 205	1099 / 1029 / 169	919 / 786 / 162	1096 / 948 / 130	934 / 592 / 121	1019 / 765 / 104	921 / 762 / 159	973 / 935 / 129	960 / 883 / 198	1115 / 1046 / 155	949 / 814 / 151	1162 / 1007 / 124									
	2	987 / 712 / 107	1082 / 897 / 89	942 / 891 / 134	1048 / 1094 / 110	1099 / 1043 / 169	1298 / 1242 / 134	1096 / 962 / 130	1364 / 1205 / 108	1019 / 765 / 104	1126 / 955 / 86	973 / 952 / 129	1106 / 1159 / 105	1115 / 1060 / 155	1361 / 1305 / 127	1162 / 1022 / 124	1434 / 1270 / 103									
	3	876 / 1056 / 79	1013 / 1301 / 64	1025 / 1041 / 119	1201 / 1241 / 95	1216 / 1146 / 141	1544 / 1465 / 120	1274 / 1108 / 113	1542 / 1349 / 92	899 / 1118 / 75	1059 / 1362 / 61	1032 / 1059 / 110	1259 / 1304 / 90	1279 / 1207 / 134	1609 / 1528 / 113	1343 / 1170 / 108	1607 / 1407 / 87									
80	1	938 / 533 / 136	1035 / 712 / 120	945 / 708 / 184	984 / 875 / 151	959 / 825 / 232	1099 / 1029 / 192	919 / 786 / 182	1096 / 948 / 146	959 / 575 / 132	1066 / 765 / 116	970 / 762 / 179	1013 / 935 / 145	994 / 883 / 224	1115 / 1046 / 176	949 / 814 / 170	1162 / 1007 / 140									
	2	1035 / 712 / 120	1123 / 897 / 100	984 / 891 / 151	1059 / 1094 / 123	1099 / 1043 / 192	1298 / 1242 / 152	1096 / 962 / 146	1364 / 1205 / 122	1066 / 765 / 116	1158 / 955 / 96	1013 / 952 / 145	1106 / 1159 / 117	1115 / 1060 / 176	1361 / 1305 / 144	1162 / 1022 / 140	1434 / 1270 / 116									
	3	912 / 1056 / 88	1013 / 1301 / 72	1061 / 1041 / 134	1201 / 1241 / 106	1216 / 1146 / 160	1544 / 1465 / 136	1274 / 1108 / 128	1542 / 1349 / 103	933 / 1118 / 84	1059 / 1362 / 68	1047 / 1059 / 123	1259 / 1304 / 101	1279 / 1207 / 152	1609 / 1528 / 128	1343 / 1170 / 122	1607 / 1407 / 97									
90	1	963 / 517 / 146	1047 / 689 / 128	965 / 686 / 198	1025 / 875 / 168	995 / 825 / 259	1099 / 1029 / 215	919 / 786 / 203	1096 / 948 / 162	982 / 557 / 142	1074 / 738 / 124	987 / 738 / 192	1053 / 935 / 161	1029 / 883 / 250	1115 / 1046 / 197	949 / 814 / 189	1162 / 1007 / 155									
	2	1047 / 689 / 128	1163 / 897 / 111	1025 / 891 / 168	1092 / 1094 / 137	1099 / 1043 / 215	1298 / 1242 / 170	1096 / 962 / 162	1364 / 1205 / 135	1074 / 738 / 124	1197 / 955 / 106	1053 / 952 / 161	1122 / 1159 / 130	1115 / 1060 / 197	1361 / 1305 / 161	1162 / 1022 / 155	1434 / 1270 / 129									
	3	947 / 1056 / 98	1024 / 1301 / 80	1098 / 1041 / 149	1201 / 1241 / 118	1216 / 1146 / 179	1544 / 1465 / 152	1274 / 1108 / 142	1542 / 1349 / 115	967 / 1118 / 93	1059 / 1362 / 76	1081 / 1059 / 137	1259 / 1304 / 112	1279 / 1207 / 170	1609 / 1528 / 143	1343 / 1170 / 135	1607 / 1407 / 108									

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	914 / 202 / 199	908 / 290 / 185	874 / 281 / 279	909 / 401 / 259	823 / 370 / 395	876 / 507 / 356	650 / 419 / 364	716 / 546 / 312	891 / 217 / 194	908 / 310 / 180	872 / 302 / 273	912 / 428 / 252	851 / 406 / 395	914 / 555 / 356	657 / 440 / 349	724 / 570 / 297	876 / 232 / 189	933 / 339 / 180	870 / 322 / 266	915 / 455 / 245	858 / 432 / 385	927 / 589 / 346	677 / 471 / 342	730 / 590 / 282
	2	908 / 290 / 185	958 / 409 / 170	909 / 408 / 259	947 / 556 / 232	876 / 514 / 356	960 / 692 / 316	716 / 554 / 312	791 / 679 / 253	908 / 310 / 180	964 / 436 / 165	912 / 436 / 252	984 / 609 / 232	914 / 563 / 356	979 / 734 / 306	724 / 578 / 297	837 / 721 / 245	933 / 339 / 180	969 / 462 / 160	915 / 463 / 245	993 / 645 / 225	927 / 597 / 346	997 / 775 / 296	730 / 599 / 282	855 / 739 / 231
	3	944 / 567 / 175	988 / 764 / 155	929 / 498 / 239	1017 / 690 / 218	928 / 624 / 326	1034 / 829 / 287	750 / 628 / 268	924 / 791 / 223	948 / 604 / 170	997 / 811 / 151	963 / 546 / 239	1030 / 732 / 211	974 / 684 / 326	1057 / 876 / 277	792 / 669 / 260	941 / 807 / 208	952 / 641 / 165	972 / 827 / 141	970 / 578 / 232	1043 / 773 / 205	991 / 723 / 316	1079 / 921 / 267	811 / 688 / 245	987 / 849 / 201
Wind Speed [mph]		110								115															
100	1	894 / 253 / 189	933 / 360 / 175	891 / 351 / 266	944 / 495 / 245	865 / 458 / 375	940 / 622 / 336	681 / 490 / 327	753 / 625 / 275	890 / 269 / 185	933 / 380 / 170	889 / 372 / 259	946 / 522 / 239	872 / 484 / 366	951 / 655 / 326	700 / 519 / 320	781 / 659 / 268								
	2	933 / 360 / 175	1004 / 503 / 160	944 / 504 / 245	1001 / 680 / 218	940 / 631 / 336	1013 / 814 / 287	753 / 634 / 275	896 / 777 / 223	933 / 380 / 170	1009 / 529 / 155	946 / 532 / 239	1008 / 714 / 211	951 / 663 / 326	1029 / 851 / 277	781 / 668 / 268	935 / 813 / 216								
	3	984 / 697 / 165	978 / 868 / 136	976 / 611 / 225	1054 / 812 / 198	1008 / 761 / 306	1099 / 963 / 257	852 / 724 / 238	1030 / 887 / 193	987 / 733 / 160	983 / 906 / 131	982 / 642 / 218	1064 / 849 / 191	1023 / 798 / 296	1116 / 1003 / 247	891 / 760 / 231	1070 / 924 / 186								
Wind Speed [mph]		120								130															
100	1	909 / 291 / 185	960 / 411 / 170	911 / 402 / 259	949 / 548 / 232	878 / 509 / 356	962 / 686 / 316	718 / 548 / 312	794 / 672 / 253	890 / 269 / 185	933 / 380 / 170	889 / 372 / 259	946 / 522 / 239	872 / 484 / 366	951 / 655 / 326	700 / 519 / 320	781 / 659 / 268								
	2	960 / 411 / 170	1013 / 554 / 151	949 / 558 / 232	1048 / 771 / 211	962 / 695 / 316	1042 / 885 / 267	794 / 682 / 253	972 / 847 / 208	933 / 380 / 170	1009 / 529 / 155	946 / 532 / 239	1008 / 714 / 211	951 / 663 / 326	1029 / 851 / 277	781 / 668 / 268	935 / 813 / 216								
	3	990 / 767 / 155	986 / 942 / 126	1019 / 693 / 218	1072 / 884 / 184	1037 / 833 / 287	1131 / 1039 / 237	928 / 794 / 223	1106 / 957 / 179	987 / 733 / 160	983 / 906 / 131	982 / 642 / 218	1064 / 849 / 191	1023 / 798 / 296	1116 / 1003 / 247	891 / 760 / 231	1070 / 924 / 186								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	905 / 306 / 180	959 / 431 / 165	909 / 423 / 252	979 / 591 / 232	909 / 549 / 356	972 / 715 / 306	718 / 563 / 297	827 / 702 / 245	920 / 345 / 175	986 / 482 / 160	929 / 475 / 245	981 / 641 / 218	920 / 597 / 336	1022 / 797 / 296	751 / 616 / 282	889 / 759 / 231	937 / 384 / 170	1014 / 534 / 155	950 / 527 / 239	1013 / 708 / 211	957 / 661 / 326	1035 / 848 / 277	767 / 647 / 260	944 / 809 / 216		
	2	959 / 431 / 165	1050 / 597 / 151	979 / 602 / 232	1054 / 804 / 205	972 / 725 / 306	1054 / 918 / 257	827 / 712 / 245	1007 / 879 / 201	986 / 482 / 160	1055 / 643 / 141	981 / 652 / 218	1063 / 863 / 191	1022 / 807 / 296	1070 / 974 / 237	889 / 770 / 231	1068 / 936 / 186	1014 / 534 / 155	1093 / 708 / 136	1013 / 721 / 211	1065 / 913 / 177	1035 / 859 / 277	1126 / 1064 / 227	944 / 821 / 216	1165 / 1023 / 179		
	3	991 / 801 / 151	988 / 975 / 122	1024 / 723 / 211	1079 / 916 / 177	1049 / 866 / 277	1143 / 1072 / 227	964 / 826 / 216	1139 / 987 / 171	992 / 862 / 141	985 / 1031 / 112	1066 / 806 / 205	1086 / 973 / 164	1068 / 924 / 257	1195 / 1124 / 208	1027 / 884 / 201	1249 / 1085 / 164	988 / 915 / 131	1021 / 1124 / 107	1070 / 858 / 191	1133 / 1062 / 157	1079 / 972 / 237	1293 / 1220 / 198	1080 / 933 / 186	1290 / 1123 / 149		
Wind Speed [mph]		170								180																	
100	1	953 / 423 / 165	1041 / 586 / 151	972 / 581 / 232	1044 / 776 / 205	993 / 726 / 316	1082 / 924 / 267	814 / 690 / 245	990 / 852 / 201	969 / 462 / 160	1068 / 638 / 146	993 / 634 / 225	1075 / 842 / 198	997 / 764 / 296	1083 / 961 / 247	855 / 728 / 231	1067 / 920 / 193										
	2	1041 / 586 / 151	1131 / 773 / 131	1044 / 790 / 205	1104 / 993 / 171	1042 / 902 / 257	1152 / 1097 / 208	990 / 864 / 201	1204 / 1060 / 164	1068 / 638 / 146	1168 / 836 / 126	1075 / 857 / 198	1094 / 1026 / 157	1083 / 974 / 247	1228 / 1173 / 198	1067 / 934 / 193	1286 / 1135 / 156										
	3	978 / 958 / 122	1004 / 1155 / 97	1067 / 901 / 177	1124 / 1096 / 143	1129 / 1053 / 227	1385 / 1309 / 188	1169 / 1012 / 179	1382 / 1205 / 141	1003 / 1033 / 117	1031 / 1231 / 93	1102 / 972 / 171	1161 / 1172 / 137	1202 / 1130 / 218	1469 / 1391 / 178	1199 / 1041 / 164	1466 / 1281 / 134										
Wind Speed [mph]		190								200																	
100	1	985 / 501 / 155	1094 / 689 / 141	1014 / 686 / 218	1066 / 875 / 184	1031 / 825 / 287	1123 / 1029 / 237	919 / 786 / 223	1096 / 948 / 179	1033 / 557 / 155	1119 / 738 / 136	1034 / 738 / 211	1092 / 935 / 177	1063 / 883 / 277	1115 / 1046 / 218	949 / 814 / 208	1162 / 1007 / 171										
	2	1094 / 689 / 141	1203 / 897 / 122	1066 / 891 / 184	1126 / 1094 / 150	1123 / 1043 / 237	1298 / 1242 / 188	1096 / 962 / 179	1364 / 1205 / 149	1119 / 738 / 136	1236 / 955 / 117	1092 / 952 / 177	1154 / 1159 / 143	1115 / 1060 / 218	1361 / 1305 / 178	1162 / 1022 / 171	1434 / 1270 / 141										
	3	982 / 1056 / 107	1053 / 1301 / 88	1135 / 1041 / 164	1201 / 1241 / 130	1216 / 1146 / 198	1544 / 1465 / 168	1274 / 1108 / 156	1542 / 1349 / 127	1001 / 1118 / 102	1071 / 1362 / 83	1114 / 1059 / 150	1259 / 1304 / 123	1279 / 1207 / 188	1609 / 1528 / 158	1343 / 1170 / 149	1607 / 1407 / 119										

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	504 / 372 / 39	613 / 478 / 32	520 / 478 / 41	609 / 586 / 33	627 / 552 / 42	756 / 685 / 34	621 / 510 / 46	751 / 632 / 37	527 / 394 / 37	637 / 502 / 31	542 / 504 / 39	647 / 627 / 32	651 / 577 / 40	778 / 709 / 32	646 / 533 / 44	796 / 673 / 36	548 / 415 / 36	659 / 524 / 30	562 / 529 / 38	666 / 650 / 31	673 / 600 / 38	820 / 750 / 32
Wind Speed [mph]		110								115															
0	1	568 / 435 / 35	678 / 543 / 28	581 / 551 / 36	682 / 670 / 29	709 / 636 / 37	834 / 766 / 30	704 / 587 / 41	857 / 729 / 33	586 / 453 / 33	712 / 574 / 28	597 / 571 / 34	715 / 706 / 28	726 / 654 / 35	871 / 803 / 29	740 / 620 / 39	896 / 764 / 32	ASCE Group Zone							
		Panal Angle		Mono Slope																					
		0 - 7.5		1 = 1																					
		7.5 - 15		2 = 2																					
		15 - 30		3 = 3																					
		30 - 45		1 = 1																					
				2 = 2																					
				3 = 3																					
Wind Speed [mph]		120								130															
0	1	602 / 470 / 32	726 / 589 / 26	612 / 589 / 33	725 / 719 / 27	759 / 688 / 34	906 / 838 / 28	754 / 635 / 37	933 / 799 / 31	586 / 453 / 33	712 / 574 / 28	597 / 571 / 34	715 / 706 / 28	726 / 654 / 35	871 / 803 / 29	740 / 620 / 39	896 / 764 / 32	ASCE Group Zone							
		Panal Angle		Mono Slope																					
		0 - 7.5		1 = 1																					
		7.5 - 15		2 = 2																					
		15 - 30		3 = 3																					
		30 - 45		1 = 1																					
				2 = 2																					
				3 = 3																					

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
0	1	630 / 496 / 31	758 / 618 / 25	639 / 619 / 32	754 / 751 / 26	769 / 700 / 32	940 / 871 / 27	787 / 664 / 36	969 / 831 / 30	669 / 533 / 29	817 / 672 / 24	674 / 660 / 30	807 / 811 / 24	827 / 758 / 31	999 / 930 / 25	849 / 721 / 34	1033 / 890 / 28	719 / 580 / 28	871 / 722 / 23	722 / 713 / 28	854 / 863 / 23	879 / 811 / 29	1046 / 978 / 23	905 / 772 / 32	1086 / 938 / 26	
	2	758 / 618 / 25	934 / 780 / 21	754 / 765 / 26	908 / 938 / 21	940 / 882 / 27	1149 / 1092 / 22	969 / 843 / 30	1146 / 1007 / 24	817 / 672 / 24	997 / 837 / 20	807 / 825 / 24	959 / 996 / 19	999 / 942 / 25	1202 / 1146 / 20	1033 / 903 / 28	1256 / 1107 / 23	871 / 722 / 23	1051 / 886 / 19	854 / 878 / 23	1043 / 1088 / 19	1046 / 991 / 23	1300 / 1243 / 19	1086 / 952 / 26	1298 / 1146 / 21	
	3	722 / 905 / 19	866 / 1102 / 15	871 / 881 / 23	1064 / 1091 / 19	1068 / 999 / 23	1327 / 1253 / 19	1109 / 958 / 26	1324 / 1153 / 21	794 / 1001 / 18	944 / 1206 / 14	926 / 941 / 21	1112 / 1145 / 17	1121 / 1052 / 21	1369 / 1295 / 17	1169 / 1013 / 24	1442 / 1259 / 20	828 / 1049 / 16	1018 / 1305 / 14	969 / 990 / 19	1203 / 1242 / 16	1215 / 1144 / 20	1469 / 1393 / 16	1270 / 1104 / 23	1553 / 1358 / 19	
	5	1	630 / 496 / 31	758 / 618 / 25	639 / 619 / 37	754 / 751 / 30	769 / 700 / 40	940 / 871 / 33	787 / 664 / 42	969 / 831 / 35	669 / 533 / 29	817 / 672 / 24	674 / 660 / 34	807 / 811 / 28	827 / 758 / 38	999 / 930 / 31	849 / 721 / 39	1033 / 890 / 32	719 / 580 / 28	871 / 722 / 23	722 / 713 / 33	854 / 863 / 26	879 / 811 / 36	1046 / 978 / 29	905 / 772 / 37	1086 / 938 / 30
	2	758 / 618 / 25	934 / 780 / 21	754 / 765 / 30	908 / 938 / 24	940 / 882 / 33	1149 / 1092 / 27	969 / 843 / 35	1146 / 1007 / 28	817 / 672 / 24	997 / 837 / 20	807 / 825 / 28	959 / 996 / 23	999 / 942 / 31	1202 / 1146 / 25	1033 / 903 / 32	1256 / 1107 / 26	871 / 722 / 23	1051 / 886 / 19	854 / 878 / 26	1043 / 1088 / 22	1046 / 991 / 29	1300 / 1243 / 24	1086 / 952 / 30	1298 / 1146 / 24	
	3	722 / 905 / 19	866 / 1102 / 15	871 / 881 / 26	1064 / 1091 / 22	1068 / 999 / 29	1327 / 1253 / 24	1109 / 958 / 30	1324 / 1153 / 24	794 / 1001 / 18	944 / 1206 / 14	926 / 941 / 24	1112 / 1145 / 20	1121 / 1052 / 26	1369 / 1295 / 22	1169 / 1013 / 28	1442 / 1259 / 23	828 / 1049 / 16	1018 / 1305 / 14	969 / 990 / 23	1203 / 1242 / 19	1215 / 1144 / 25	1469 / 1393 / 20	1270 / 1104 / 26	1553 / 1358 / 22	
	10	1	630 / 496 / 37	758 / 618 / 30	639 / 619 / 48	754 / 751 / 39	769 / 700 / 52	940 / 871 / 43	787 / 664 / 51	969 / 831 / 42	669 / 533 / 34	817 / 672 / 29	674 / 660 / 44	807 / 811 / 36	827 / 758 / 49	999 / 930 / 40	849 / 721 / 48	1033 / 890 / 39	719 / 580 / 33	871 / 722 / 27	722 / 713 / 42	854 / 863 / 34	879 / 811 / 46	1046 / 978 / 37	905 / 772 / 45	1086 / 938 / 36
	2	758 / 618 / 30	934 / 780 / 25	754 / 765 / 39	908 / 938 / 31	940 / 882 / 43	1149 / 1092 / 35	969 / 843 / 42	1146 / 1007 / 33	817 / 672 / 29	997 / 837 / 24	807 / 825 / 36	959 / 996 / 29	999 / 942 / 40	1202 / 1146 / 32	1033 / 903 / 39	1256 / 1107 / 32	871 / 722 / 27	1051 / 886 / 22	854 / 878 / 34	1043 / 1088 / 28	1046 / 991 / 37	1300 / 1243 / 31	1086 / 952 / 36	1298 / 1146 / 29	
	3	722 / 905 / 22	866 / 1102 / 18	871 / 881 / 34	1064 / 1091 / 28	1068 / 999 / 37	1327 / 1253 / 31	1109 / 958 / 36	1324 / 1153 / 29	794 / 1001 / 21	944 / 1206 / 17	926 / 941 / 31	1112 / 1145 / 25	1121 / 1052 / 34	1369 / 1295 / 28	1169 / 1013 / 33	1442 / 1259 / 28	828 / 1049 / 20	1018 / 1305 / 16	969 / 990 / 29	1203 / 1242 / 24	1215 / 1144 / 32	1469 / 1393 / 26	1270 / 1104 / 32	1553 / 1358 / 26	
Wind Speed [mph]		170								180																
0	1	745 / 607 / 25	919 / 766 / 21	764 / 761 / 27	892 / 906 / 21	924 / 856 / 27	1130 / 1059 / 22	953 / 817 / 30	1127 / 976 / 24	786 / 645 / 24	958 / 803 / 20	802 / 804 / 25	959 / 978 / 20	996 / 926 / 26	1209 / 1137 / 21	993 / 854 / 28	1206 / 1047 / 23									
	2	919 / 766 / 21	1092 / 925 / 17	892 / 922 / 21	1072 / 1122 / 17	1130 / 1074 / 22	1319 / 1264 / 17	1127 / 990 / 24	1390 / 1230 / 20	958 / 803 / 20	1171 / 996 / 16	959 / 996 / 20	1143 / 1200 / 16	1154 / 1100 / 20	1395 / 1340 / 16	1206 / 1063 / 23	1475 / 1307 / 19									
	3	892 / 1135 / 16	1087 / 1397 / 13	1046 / 1072 / 19	1220 / 1263 / 15	1305 / 1231 / 19	1560 / 1481 / 16	1302 / 1134 / 21	1655 / 1448 / 18	907 / 1158 / 14	1082 / 1393 / 12	1069 / 1099 / 17	1291 / 1339 / 14	1388 / 1312 / 18	1385 / 1208 / 20	1745 / 1529 / 17										
	5	1	745 / 607 / 25	919 / 766 / 21	764 / 761 / 31	892 / 906 / 24	924 / 856 / 33	1130 / 1059 / 27	953 / 817 / 35	1127 / 976 / 28	786 / 645 / 24	958 / 803 / 20	802 / 804 / 29	959 / 978 / 23	996 / 926 / 32	1209 / 1137 / 26	993 / 854 / 32	1206 / 1047 / 26								
	2	919 / 766 / 21	1092 / 925 / 17	892 / 922 / 24	1072 / 1122 / 20	1130 / 1074 / 27	1319 / 1264 / 22	1127 / 990 / 28	1390 / 1230 / 23	958 / 803 / 20	1171 / 996 / 16	959 / 996 / 23	1143 / 1200 / 19	1154 / 1100 / 25	1395 / 1340 / 20	1206 / 1063 / 26	1475 / 1307 / 22									
	3	892 / 1135 / 16	1087 / 1397 / 13	1046 / 1072 / 22	1220 / 1263 / 17	1305 / 1231 / 24	1560 / 1481 / 19	1302 / 1134 / 24	1655 / 1448 / 21	907 / 1158 / 14	1082 / 1393 / 12	1069 / 1099 / 20	1291 / 1339 / 16	1388 / 1312 / 23	1385 / 1208 / 23	1745 / 1529 / 19										
	10	1	745 / 607 / 30	919 / 766 / 25	764 / 761 / 40	892 / 906 / 31	924 / 856 / 43	1130 / 1059 / 35	953 / 817 / 42	1127 / 976 / 33	786 / 645 / 29	958 / 803 / 24	802 / 804 / 37	959 / 978 / 30	996 / 926 / 42	1209 / 1137 / 34	993 / 854 / 39	1206 / 1047 / 32								
	2	919 / 766 / 25	1092 / 925 / 20	892 / 922 / 31	1072 / 1122 / 25	1130 / 1074 / 35	1319 / 1264 / 28	1127 / 990 / 33	1390 / 1230 / 28	958 / 803 / 24	1171 / 996 / 20	959 / 996 / 30	1143 / 1200 / 24	1154 / 1100 / 32	1395 / 1340 / 26	1206 / 1063 / 32	1475 / 1307 / 26									
	3	892 / 1135 / 19	1087 / 1397 / 15	1046 / 1072 / 28	1220 / 1263 / 22	1305 / 1231 / 31	1560 / 1481 / 25	1302 / 1134 / 29	1655 / 1448 / 25	907 / 1158 / 17	1082 / 1393 / 14	1069 / 1099 / 25	1291 / 1339 / 21	1388 / 1312 / 29	1385 / 1208 / 28	1745 / 1529 / 23										
Wind Speed [mph]		190								200																
0	1	846 / 699 / 23	1027 / 865 / 19	833 / 839 / 23	1024 / 1048 / 19	1026 / 957 / 24	1223 / 1153 / 19	1063 / 917 / 27	1282 / 1115 / 22	878 / 729 / 22	1051 / 888 / 18	857 / 867 / 22	1038 / 1065 / 18	1089 / 1019 / 23	1286 / 1214 / 18	1086 / 939 / 25	1351 / 1177 / 21									
	2	1027 / 865 / 19	1246 / 1062 / 16	981 / 1022 / 19	1208 / 1271 / 16	1223 / 1168 / 19	1462 / 1406 / 16	1282 / 1131 / 22	1551 / 1376 / 18	1051 / 888 / 18	1316 / 1125 / 15	1038 / 1084 / 18	1266 / 1335 / 15	1286 / 1231 / 18	1618 / 1558 / 16	1351 / 1194 / 21	1616 / 1436 / 17									
	3	958 / 1226 / 14	1203 / 1553 / 12	1132 / 1167 / 16	1352 / 1405 / 13	1463 / 1386 / 17	1461 / 1276 / 19	1004 / 1288 / 13	1190 / 1230 / 16	1496 / 1557 / 13	1530 / 1451 / 16	1528 / 1336 / 18														
	5	1	846 / 699 / 23	1027 / 865 / 19	833 / 839 / 27	1024 / 1048 / 23	1026 / 957 / 30	1223 / 1153 / 24	1063 / 917 / 31	1282 / 1115 / 25	878 / 729 / 22	1051 / 888 / 18	857 / 867 / 25	1038 / 1065 / 21	1089 / 1019 / 29	1286 / 1214 / 23	1086 / 939 / 29	1351 / 1177 / 24								
	2	1027 / 865 / 19	1246 / 1062 / 16	981 / 1022 / 22	1208 / 1271 / 18	1223 / 1168 / 24	1462 / 1406 / 19	1282 / 1131 / 25	1551 / 1376 / 21	1051 / 888 / 18	1316 / 1125 / 15	1038 / 1084 / 21	1266 / 1335 / 17	1286 / 1231 / 23	1618 / 1558 / 19	1351 / 1194 / 24	1616 / 1436 / 19									
	3	958 / 1226 / 14	1203 / 1553 / 12	1132 / 1167 / 19	1352 / 1405 / 15	1463 / 1386 / 22	1461 / 1276 / 22	1004 / 1288 / 13	1190 / 1230 / 18	1496 / 1557 / 15	1530 / 1451 / 20	1528 / 1336 / 21														
	10	1	846 / 699 / 28	1027 / 865 / 23	833 / 839 / 35	1024 / 1048 / 29	1026 / 957 / 39	1223 / 1153 / 31	1063 / 917 / 38	1282 / 1115 / 31	878 / 729 / 26	1051 / 888 / 21	857 / 867 / 33	1038 / 1065 / 27	1089 / 1019 / 37	1286 / 1214 / 29	1086 / 939 / 35	1351 / 1177 / 29								
	2	1027 / 865 / 23	1246 / 1062 / 19	981 / 1022 / 28	1208 / 1271 / 23	1223 / 1168 / 31	1462 / 1406 / 25	1282 / 1131 / 31	1551 / 1376 / 25	1051 / 888 / 21	1316 / 1125 / 18	1038 / 1084 / 27	1266 / 1335 / 22	1286 / 1231 / 25	1618 / 1558 / 25	1351 / 1194 / 29	1616 / 1436 / 23									
	3	958 / 1226 / 16	1203 / 1553 / 14	1132 / 1167 / 24	1352 / 1405 / 20	1463 / 1386 / 28	1461 / 1276 / 26	1004 / 1288 / 15	1190 / 1230 / 23	1496 / 1557 / 20	1530 / 1451 / 26	1528 / 1336 / 25														

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	555 / 365 / 53	616 / 478 / 45	555 / 478 / 75	609 / 586 / 60	627 / 552 / 83	756 / 685 / 68	621 / 510 / 75	751 / 632 / 61	576 / 394 / 52	637 / 502 / 43	565 / 504 / 72	647 / 627 / 59	651 / 577 / 79	778 / 709 / 64	646 / 533 / 71	796 / 673 / 60	585 / 415 / 50	659 / 524 / 41	574 / 529 / 69	666 / 650 / 56	673 / 600 / 75	820 / 750 / 62	684 / 568 / 70	816 / 692 / 56
	2	616 / 478 / 45	724 / 586 / 36	609 / 597 / 60	722 / 729 / 49	756 / 694 / 68	903 / 845 / 55	751 / 641 / 61	930 / 807 / 51	637 / 502 / 43	767 / 625 / 35	630 / 623 / 57	762 / 774 / 47	778 / 718 / 64	951 / 893 / 53	796 / 683 / 60	947 / 824 / 48	659 / 524 / 41	786 / 645 / 33	648 / 645 / 54	776 / 792 / 44	820 / 760 / 62	959 / 904 / 49	816 / 702 / 56	993 / 866 / 46
	3	594 / 724 / 33	696 / 869 / 27	703 / 692 / 53	838 / 844 / 43	860 / 791 / 59	1031 / 962 / 47	856 / 729 / 53	1069 / 922 / 44	609 / 746 / 31	731 / 916 / 26	723 / 716 / 50	882 / 892 / 41	908 / 838 / 57	1080 / 1011 / 45	904 / 772 / 51	1122 / 970 / 43	640 / 789 / 31	763 / 960 / 25	762 / 759 / 49	889 / 903 / 38	921 / 853 / 53	1126 / 1056 / 44	950 / 814 / 49	1171 / 1015 / 41
20	1	590 / 352 / 58	665 / 478 / 51	606 / 478 / 89	631 / 586 / 71	627 / 552 / 103	756 / 685 / 84	621 / 510 / 87	751 / 632 / 72	608 / 379 / 57	674 / 502 / 49	614 / 504 / 85	655 / 627 / 70	651 / 577 / 98	778 / 709 / 79	646 / 533 / 83	796 / 673 / 70	626 / 407 / 56	682 / 524 / 47	621 / 529 / 82	666 / 650 / 66	673 / 600 / 93	820 / 750 / 77	684 / 568 / 81	816 / 692 / 66
	2	665 / 478 / 51	724 / 586 / 42	631 / 597 / 71	722 / 729 / 58	756 / 694 / 84	903 / 845 / 68	751 / 641 / 72	930 / 807 / 60	674 / 502 / 49	767 / 625 / 40	638 / 623 / 68	762 / 774 / 56	778 / 718 / 79	951 / 893 / 65	796 / 683 / 70	947 / 824 / 56	682 / 524 / 47	786 / 645 / 38	648 / 645 / 64	776 / 792 / 52	820 / 760 / 77	959 / 904 / 61	816 / 702 / 66	993 / 866 / 54
	3	598 / 724 / 38	696 / 869 / 30	703 / 692 / 63	838 / 844 / 51	860 / 791 / 72	1031 / 962 / 58	856 / 729 / 62	1069 / 922 / 52	609 / 746 / 36	731 / 916 / 29	723 / 716 / 59	882 / 892 / 49	908 / 838 / 70	1080 / 1011 / 56	904 / 772 / 60	1122 / 970 / 50	640 / 789 / 35	763 / 960 / 28	762 / 759 / 58	889 / 903 / 45	921 / 853 / 65	1126 / 1056 / 54	950 / 814 / 58	1171 / 1015 / 48
25	1	590 / 352 / 58	665 / 478 / 51	606 / 478 / 89	631 / 586 / 71	627 / 552 / 123	756 / 685 / 101	621 / 510 / 102	751 / 632 / 84	608 / 379 / 57	674 / 502 / 49	614 / 504 / 85	655 / 627 / 70	651 / 577 / 118	778 / 709 / 95	646 / 533 / 98	796 / 673 / 81	626 / 407 / 56	682 / 524 / 47	621 / 529 / 82	666 / 650 / 66	673 / 600 / 112	820 / 750 / 93	684 / 568 / 95	816 / 692 / 77
	2	665 / 478 / 51	724 / 586 / 42	631 / 597 / 71	722 / 729 / 58	756 / 694 / 101	903 / 845 / 81	751 / 641 / 84	930 / 807 / 70	674 / 502 / 49	767 / 625 / 40	638 / 623 / 68	762 / 774 / 56	778 / 718 / 95	951 / 893 / 79	796 / 683 / 81	947 / 824 / 65	682 / 524 / 47	786 / 645 / 38	648 / 645 / 64	776 / 792 / 52	820 / 760 / 77	959 / 904 / 61	816 / 702 / 66	993 / 866 / 54
	3	598 / 724 / 38	696 / 869 / 30	703 / 692 / 63	838 / 844 / 51	860 / 791 / 72	1031 / 962 / 58	856 / 729 / 62	1069 / 922 / 52	609 / 746 / 36	731 / 916 / 29	723 / 716 / 59	882 / 892 / 49	908 / 838 / 84	1080 / 1011 / 67	904 / 772 / 70	1122 / 970 / 58	640 / 789 / 35	763 / 960 / 28	762 / 759 / 58	889 / 903 / 45	921 / 853 / 79	1126 / 1056 / 65	950 / 814 / 68	1171 / 1015 / 56
Wind Speed [mph]		110								115															
15	1	593 / 435 / 48	678 / 543 / 39	581 / 551 / 66	682 / 670 / 53	709 / 636 / 74	834 / 766 / 59	704 / 587 / 66	857 / 729 / 55	599 / 453 / 46	712 / 574 / 38	597 / 571 / 63	715 / 706 / 52	726 / 654 / 70	871 / 803 / 57	740 / 620 / 65	896 / 764 / 53	ASCE Group Zone							
	2	678 / 543 / 39	825 / 680 / 32	682 / 682 / 53	812 / 831 / 43	834 / 776 / 59	999 / 944 / 47	857 / 739 / 55	1036 / 906 / 44	712 / 574 / 38	863 / 715 / 31	715 / 719 / 52	846 / 869 / 41	871 / 813 / 57	1036 / 981 / 45	896 / 776 / 53	1076 / 943 / 43	Panal Angle							
	3	670 / 830 / 30	793 / 1002 / 24	774 / 774 / 46	926 / 943 / 37	962 / 893 / 51	1167 / 1096 / 42	993 / 853 / 48	1217 / 1056 / 39	674 / 839 / 28	821 / 1039 / 23	808 / 812 / 44	960 / 980 / 36	1000 / 931 / 49	1204 / 1133 / 40	1035 / 891 / 46	1258 / 1093 / 38	Mono Slope							
20	1	632 / 426 / 54	687 / 543 / 45	627 / 551 / 78	682 / 670 / 63	709 / 636 / 91	834 / 766 / 72	704 / 587 / 77	857 / 729 / 64	649 / 453 / 53	712 / 574 / 44	631 / 571 / 75	715 / 706 / 61	726 / 654 / 86	871 / 803 / 70	740 / 620 / 75	896 / 764 / 62	0 - 7.5							
	2	687 / 543 / 45	825 / 680 / 37	682 / 682 / 63	812 / 831 / 51	834 / 776 / 72	999 / 944 / 58	857 / 739 / 64	1036 / 906 / 52	712 / 574 / 44	863 / 715 / 36	715 / 719 / 61	846 / 869 / 49	871 / 813 / 70	1036 / 981 / 56	896 / 776 / 62	1076 / 943 / 50	2 = 2							
	3	670 / 830 / 34	793 / 1002 / 27	774 / 774 / 54	926 / 943 / 44	962 / 893 / 63	1167 / 1096 / 52	993 / 853 / 56	1217 / 1056 / 46	674 / 839 / 32	821 / 1039 / 26	808 / 812 / 52	960 / 980 / 42	1000 / 931 / 61	1204 / 1133 / 49	1035 / 891 / 54	1258 / 1093 / 44	3 = 3							
25	1	632 / 426 / 54	687 / 543 / 45	627 / 551 / 78	682 / 670 / 63	709 / 636 / 109	834 / 766 / 87	704 / 587 / 91	857 / 729 / 75	649 / 453 / 53	712 / 574 / 44	631 / 571 / 75	715 / 706 / 61	726 / 654 / 104	871 / 803 / 84	740 / 620 / 88	896 / 764 / 72	7.5 - 15							
	2	687 / 543 / 45	825 / 680 / 37	682 / 682 / 63	812 / 831 / 51	834 / 776 / 87	999 / 944 / 70	857 / 739 / 75	1036 / 906 / 61	712 / 574 / 44	863 / 715 / 36	715 / 719 / 61	846 / 869 / 49	871 / 813 / 84	1036 / 981 / 67	896 / 776 / 72	1076 / 943 / 58	2 = 2							
	3	670 / 830 / 34	793 / 1002 / 27	774 / 774 / 54	926 / 943 / 44	962 / 893 / 76	1167 / 1096 / 62	993 / 853 / 65	1217 / 1056 / 54	674 / 839 / 32	821 / 1039 / 26	808 / 812 / 52	960 / 980 / 42	1000 / 931 / 73	1204 / 1133 / 59	1035 / 891 / 63	1258 / 1093 / 51	3 = 3							
Wind Speed [mph]		120								130															
15	1	605 / 470 / 44	726 / 589 / 36	612 / 589 / 60	725 / 719 / 49	759 / 688 / 68	906 / 838 / 55	754 / 635 / 61	933 / 799 / 51	599 / 453 / 46	712 / 574 / 38	597 / 571 / 63	715 / 706 / 52	726 / 654 / 70	871 / 803 / 57	740 / 620 / 65	896 / 764 / 53	ASCE Group Zone							
	2	726 / 589 / 36	900 / 748 / 31	725 / 732 / 49	878 / 905 / 40	906 / 849 / 55	1070 / 1015 / 44	933 / 810 / 51	1113 / 977 / 41	712 / 574 / 38	863 / 715 / 31	715 / 719 / 52	846 / 869 / 41	871 / 813 / 57	1036 / 981 / 45	896 / 776 / 53	1076 / 943 / 43	Panal Angle							
	3	699 / 873 / 27	845 / 1073 / 22	841 / 847 / 43	991 / 1014 / 34	1035 / 966 / 47	1235 / 1164 / 38	1073 / 926 / 44	1294 / 1126 / 36	674 / 839 / 28	821 / 1039 / 23	808 / 812 / 44	960 / 980 / 36	1000 / 931 / 49	1204 / 1133 / 40	1035 / 891 / 46	1258 / 1093 / 38	Mono Slope							
20	1	652 / 470 / 50	726 / 589 / 42	633 / 589 / 71	725 / 719 / 58	759 / 688 / 84	906 / 838 / 68	754 / 635 / 72	933 / 799 / 60	649 / 453 / 53	712 / 574 / 44	631 / 571 / 75	715 / 706 / 61	726 / 654 / 86	871 / 803 / 70	740 / 620 / 75	896 / 764 / 62	0 - 7.5							
	2	726 / 589 / 42	900 / 748 / 35	725 / 732 / 58	878 / 905 / 47	906 / 849 / 68	1070 / 1015 / 54	933 / 810 / 60	1113 / 977 / 48	712 / 574 / 44	863 / 715 / 36	715 / 719 / 61	846 / 869 / 49	871 / 813 / 70	1036 / 981 / 56	896 / 776 / 62	1076 / 943 / 50	2 = 2							
	3	699 / 873 / 30	845 / 1073 / 25	841 / 847 / 51	991 / 1014 / 40	1035 / 966 / 58	1235 / 1164 / 47	1073 / 926 / 52	1294 / 1126 / 42	674 / 839 / 32	821 / 1039 / 26	808 / 812 / 52	960 / 980 / 42	1000 / 931 / 61	1204 / 1133 / 49	1035 / 891 / 54	1258 / 1093 / 44	3 = 3							
25	1	652 / 470 / 50	726 / 589 / 42	633 / 589 / 71	725 / 719 / 58	759 / 688 / 101	906 / 838 / 81	754 / 635 / 84	933 / 799 / 70	649 / 453 / 53	712 / 574 / 44	631 / 571 / 75	715 / 706 / 61	726 / 654 / 104	871 / 803 / 84	740 / 620 / 88	896 / 764 / 72	7.5 - 15							
	2	726 / 589 / 42	900 / 748 / 35	725 / 732 / 58	878 / 905 / 47	906 / 849 / 81	1070 / 1015 / 65	933 / 810 / 70	1113 / 977 / 56	712 / 574 / 44	863 / 715 / 36	715 / 719 / 61	846 / 869 / 49	871 / 813 / 84	1036 / 981 / 67	896 / 776 / 72	1076 / 943 / 58	2 = 2							
	3	699 / 873 / 30	845 / 1073 / 25	841 / 847 / 51	991 / 1014 / 40	1035 / 966 / 58	1235 / 1164 / 47	1073 / 926 / 52	1294 / 1126 / 42	674 / 839 / 32	821 / 1039 / 26	808 / 812 / 52	960 / 980 / 42	1000 / 931 / 73	1204 / 1133 / 59	1035 / 891 / 63	1258 / 1093 / 51	3 = 3							

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	630 / 496 / 43	758 / 618 / 35	639 / 619 / 59	754 / 751 / 47	769 / 700 / 64	940 / 871 / 53	787 / 664 / 60	969 / 831 / 49	669 / 533 / 40	817 / 672 / 33	674 / 660 / 54	807 / 811 / 44	827 / 758 / 60	999 / 930 / 49	849 / 721 / 56	1033 / 890 / 46	719 / 580 / 38	871 / 722 / 31	722 / 713 / 52	854 / 863 / 41	879 / 811 / 57	1046 / 978 / 45	905 / 772 / 53	1086 / 938 / 43
	2	758 / 618 / 35	934 / 780 / 30	754 / 765 / 47	908 / 938 / 38	940 / 882 / 64	1149 / 1092 / 53	969 / 843 / 44	1146 / 1007 / 39	817 / 672 / 33	997 / 837 / 28	807 / 825 / 44	959 / 996 / 36	999 / 942 / 49	1202 / 1146 / 40	1033 / 903 / 46	1256 / 1107 / 38	871 / 722 / 31	1051 / 886 / 26	854 / 878 / 41	1043 / 1088 / 34	1046 / 991 / 45	1300 / 1243 / 38	1086 / 952 / 43	1298 / 1146 / 34
	3	722 / 905 / 26	866 / 1102 / 21	871 / 881 / 41	1064 / 1091 / 34	1068 / 999 / 45	1327 / 1253 / 38	1109 / 958 / 43	1324 / 1153 / 34	794 / 1001 / 25	944 / 1206 / 20	926 / 941 / 38	1112 / 1145 / 31	1121 / 1052 / 42	1369 / 1295 / 34	1169 / 1013 / 39	1442 / 1259 / 33	828 / 1049 / 23	1018 / 1305 / 19	969 / 990 / 36	1203 / 1242 / 30	1215 / 1144 / 40	1469 / 1393 / 32	1270 / 1104 / 38	1553 / 1358 / 31
20	1	669 / 496 / 49	758 / 618 / 40	649 / 619 / 70	754 / 751 / 56	769 / 700 / 79	940 / 871 / 65	787 / 664 / 70	969 / 831 / 58	685 / 533 / 46	817 / 672 / 38	674 / 660 / 64	807 / 811 / 52	827 / 758 / 75	999 / 930 / 61	849 / 721 / 66	1033 / 890 / 54	719 / 580 / 44	871 / 722 / 36	722 / 713 / 61	854 / 863 / 49	879 / 811 / 70	1046 / 978 / 56	905 / 772 / 62	1086 / 938 / 50
	2	758 / 618 / 40	934 / 780 / 34	754 / 765 / 56	908 / 938 / 45	940 / 882 / 65	1149 / 1092 / 54	969 / 843 / 58	1146 / 1007 / 46	817 / 672 / 38	997 / 837 / 32	807 / 825 / 52	959 / 996 / 42	999 / 942 / 61	1202 / 1146 / 49	1033 / 903 / 54	1256 / 1107 / 44	871 / 722 / 36	1051 / 886 / 29	854 / 878 / 49	1043 / 1088 / 40	1046 / 991 / 56	1300 / 1243 / 47	1086 / 952 / 50	1298 / 1146 / 40
	3	722 / 905 / 29	866 / 1102 / 24	871 / 881 / 49	1064 / 1091 / 40	1068 / 999 / 56	1327 / 1253 / 47	1109 / 958 / 50	1324 / 1153 / 40	794 / 1001 / 28	944 / 1206 / 23	926 / 941 / 45	1112 / 1145 / 37	1121 / 1052 / 52	1369 / 1295 / 42	1169 / 1013 / 46	1442 / 1259 / 38	828 / 1049 / 26	1018 / 1305 / 22	969 / 990 / 42	1203 / 1242 / 35	1215 / 1144 / 49	1469 / 1393 / 40	1270 / 1104 / 44	1553 / 1358 / 36
25	1	669 / 496 / 49	758 / 618 / 40	649 / 619 / 70	754 / 751 / 56	769 / 700 / 95	940 / 871 / 79	787 / 664 / 81	969 / 831 / 68	685 / 533 / 46	817 / 672 / 38	674 / 660 / 64	807 / 811 / 52	827 / 758 / 90	999 / 930 / 73	849 / 721 / 77	1033 / 890 / 63	719 / 580 / 44	871 / 722 / 36	722 / 713 / 61	854 / 863 / 49	879 / 811 / 84	1046 / 978 / 67	905 / 772 / 72	1086 / 938 / 58
	2	758 / 618 / 40	934 / 780 / 34	754 / 765 / 56	908 / 938 / 45	940 / 882 / 79	1149 / 1092 / 65	969 / 843 / 68	1146 / 1007 / 54	817 / 672 / 38	997 / 837 / 32	807 / 825 / 52	959 / 996 / 42	999 / 942 / 73	1202 / 1146 / 59	1033 / 903 / 63	1256 / 1107 / 51	871 / 722 / 36	1051 / 886 / 29	854 / 878 / 49	1043 / 1088 / 40	1046 / 991 / 67	1300 / 1243 / 56	1086 / 952 / 58	1298 / 1146 / 47
	3	722 / 905 / 29	866 / 1102 / 24	871 / 881 / 49	1064 / 1091 / 40	1068 / 999 / 67	1327 / 1253 / 56	1109 / 958 / 58	1324 / 1153 / 47	794 / 1001 / 28	944 / 1206 / 23	926 / 941 / 45	1112 / 1145 / 37	1121 / 1052 / 62	1369 / 1295 / 51	1169 / 1013 / 54	1442 / 1259 / 44	828 / 1049 / 26	1018 / 1305 / 22	969 / 990 / 42	1203 / 1242 / 35	1215 / 1144 / 59	1469 / 1393 / 48	1270 / 1104 / 51	1553 / 1358 / 42
Wind Speed [mph]		170								180															
15	1	745 / 607 / 35	919 / 766 / 30	764 / 761 / 49	892 / 906 / 38	924 / 856 / 53	1130 / 1059 / 44	953 / 817 / 49	1127 / 976 / 39	786 / 645 / 33	958 / 803 / 28	802 / 804 / 46	959 / 978 / 37	996 / 926 / 51	1209 / 1137 / 42	993 / 854 / 46	1206 / 1047 / 38								
	2	919 / 766 / 30	1092 / 925 / 24	892 / 922 / 38	1072 / 1122 / 31	1130 / 1074 / 44	1319 / 1264 / 34	1127 / 990 / 39	1390 / 1230 / 33	958 / 803 / 28	1171 / 996 / 23	959 / 996 / 37	1143 / 1200 / 30	1154 / 1100 / 40	1395 / 1340 / 32	1206 / 1063 / 38	1475 / 1307 / 31								
	3	892 / 1135 / 22	1087 / 1397 / 18	1046 / 1072 / 34	1220 / 1263 / 27	1305 / 1231 / 38	1560 / 1481 / 30	1302 / 1134 / 34	1655 / 1448 / 29	907 / 1158 / 20	1082 / 1393 / 16	1069 / 1099 / 31	1291 / 1339 / 25	1388 / 1312 / 36	1385 / 1208 / 33	1745 / 1529 / 28									
20	1	745 / 607 / 40	919 / 766 / 34	764 / 761 / 58	892 / 906 / 45	924 / 856 / 65	1130 / 1059 / 54	953 / 817 / 58	1127 / 976 / 46	786 / 645 / 38	958 / 803 / 32	802 / 804 / 54	959 / 978 / 44	996 / 926 / 63	1209 / 1137 / 52	993 / 854 / 54	1206 / 1047 / 44								
	2	919 / 766 / 34	1092 / 925 / 27	892 / 922 / 45	1072 / 1122 / 37	1130 / 1074 / 54	1319 / 1264 / 42	1127 / 990 / 46	1390 / 1230 / 38	958 / 803 / 32	1171 / 996 / 26	959 / 996 / 44	1143 / 1200 / 35	1154 / 1100 / 49	1395 / 1340 / 40	1206 / 1063 / 44	1475 / 1307 / 36								
	3	892 / 1135 / 25	1087 / 1397 / 20	1046 / 1072 / 40	1220 / 1263 / 32	1305 / 1231 / 47	1560 / 1481 / 38	1302 / 1134 / 40	1655 / 1448 / 34	907 / 1158 / 23	1082 / 1393 / 18	1069 / 1099 / 37	1291 / 1339 / 30	1388 / 1312 / 45	1385 / 1208 / 38	1745 / 1529 / 32									
25	1	745 / 607 / 40	919 / 766 / 34	764 / 761 / 58	892 / 906 / 45	924 / 856 / 79	1130 / 1059 / 65	953 / 817 / 68	1127 / 976 / 54	786 / 645 / 38	958 / 803 / 32	802 / 804 / 54	959 / 978 / 44	996 / 926 / 76	1209 / 1137 / 62	993 / 854 / 63	1206 / 1047 / 51								
	2	919 / 766 / 34	1092 / 925 / 27	892 / 922 / 45	1072 / 1122 / 37	1130 / 1074 / 65	1319 / 1264 / 51	1127 / 990 / 54	1390 / 1230 / 44	958 / 803 / 32	1171 / 996 / 26	959 / 996 / 44	1143 / 1200 / 35	1154 / 1100 / 59	1395 / 1340 / 48	1206 / 1063 / 51	1475 / 1307 / 42								
	3	892 / 1135 / 25	1087 / 1397 / 20	1046 / 1072 / 40	1220 / 1263 / 32	1305 / 1231 / 56	1560 / 1481 / 45	1302 / 1134 / 47	1655 / 1448 / 40	907 / 1158 / 23	1082 / 1393 / 18	1069 / 1099 / 37	1291 / 1339 / 30	1388 / 1312 / 54	1385 / 1208 / 44	1745 / 1529 / 38									
Wind Speed [mph]		190								200															
15	1	846 / 699 / 32	1027 / 865 / 27	833 / 839 / 43	1024 / 1048 / 36	1026 / 957 / 47	1223 / 1153 / 38	1063 / 917 / 44	1282 / 1115 / 36	878 / 729 / 31	1051 / 888 / 25	857 / 867 / 40	1038 / 1065 / 33	1089 / 1019 / 45	1286 / 1214 / 36	1086 / 939 / 41	1351 / 1177 / 34								
	2	1027 / 865 / 27	1246 / 1062 / 22	981 / 1022 / 34	1208 / 1271 / 28	1223 / 1168 / 38	1462 / 1406 / 30	1282 / 1131 / 36	1551 / 1376 / 29	1051 / 888 / 25	1316 / 1125 / 21	1038 / 1084 / 33	1266 / 1335 / 27	1286 / 1231 / 36	1618 / 1558 / 30	1351 / 1194 / 34	1616 / 1436 / 28								
	3	958 / 1226 / 19	1203 / 1553 / 16	1132 / 1167 / 30	1352 / 1405 / 24	1463 / 1386 / 34	1461 / 1276 / 31	1004 / 1288 / 18	1190 / 1230 / 28	1496 / 1557 / 24	1530 / 1451 / 32	1528 / 1336 / 29													
20	1	846 / 699 / 37	1027 / 865 / 30	833 / 839 / 51	1024 / 1048 / 42	1026 / 957 / 58	1223 / 1153 / 47	1063 / 917 / 52	1282 / 1115 / 42	878 / 729 / 35	1051 / 888 / 28	857 / 867 / 47	1038 / 1065 / 39	1089 / 1019 / 56	1286 / 1214 / 45	1086 / 939 / 48	1351 / 1177 / 40								
	2	1027 / 865 / 30	1246 / 1062 / 25	981 / 1022 / 40	1208 / 1271 / 33	1223 / 1168 / 47	1462 / 1406 / 38	1282 / 1131 / 42	1551 / 1376 / 34	1051 / 888 / 28	1316 / 1125 / 24	1038 / 1084 / 39	1266 / 1335 / 32	1286 / 1231 / 45	1618 / 1558 / 38	1351 / 1194 / 40	1616 / 1436 / 32								
	3	958 / 1226 / 22	1203 / 1553 / 18	1132 / 1167 / 35	1352 / 1405 / 28	1463 / 1386 / 42	1461 / 1276 / 36	1004 / 1288 / 20	1190 / 1230 / 33	1496 / 1557 / 28	1530 / 1451 / 40	1528 / 1336 / 34													
25	1	846 / 699 / 37	1027 / 865 / 30	833 / 839 / 51	1024 / 1048 / 42	1026 / 957 / 70	1223 / 1153 / 56	1063 / 917 / 61	1282 / 1115 / 49	878 / 729 / 35	1051 / 888 / 28	857 / 867 / 47	1038 / 1065 / 39	1089 / 1019 / 67	1286 / 1214 / 54	1086 / 939 / 56	1351 / 1177 / 47								
	2	1027 / 865 / 30	1246 / 1062 / 25	981 / 1022 / 40	1208 / 1271 / 33	1223 / 1168 / 47	1462 / 1406 / 45	1282 / 1131 / 49	1551 / 1376 / 40	1051 / 888 / 28	1316 / 1125 / 24	1038 / 1084 / 39	1266 / 1335 / 32	1286 / 1231 / 45	1618 / 1558 / 45	1351 / 1194 / 47	1616 / 1436 / 38								
	3	958 / 1226 / 22	1203 / 1553 / 18	1132 / 1167 / 35	1352 / 1405 / 28	1463 / 1386 / 51	1461 / 1276 / 42	1004 / 1288 / 20	1190 / 1230 / 33	1496 / 1557 / 28	1530 / 1451 / 48	1528 / 1336 / 40													

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105											
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45					
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge				
30	1	608 / 345 / 61	676 / 468 / 54	621 / 469 / 94	653 / 586 / 77	641 / 552 / 144	756 / 685 / 118	621 / 510 / 117	751 / 632 / 96	625 / 372 / 60	700 / 502 / 53	641 / 504 / 92	676 / 627 / 75	651 / 577 / 138	778 / 709 / 111	646 / 533 / 112	796 / 673 / 93	642 / 399 / 58	706 / 524 / 50	647 / 529 / 89	681 / 650 / 72	673 / 600 / 131	820 / 750 / 108	684 / 568 / 109	816 / 692 / 88				
	2	676 / 468 / 54	729 / 586 / 44	653 / 597 / 77	722 / 729 / 62	756 / 694 / 118	903 / 845 / 95	751 / 641 / 96	930 / 807 / 80	700 / 502 / 53	767 / 625 / 43	659 / 623 / 74	762 / 774 / 60	778 / 718 / 111	951 / 893 / 92	796 / 683 / 93	947 / 824 / 75	706 / 524 / 50	786 / 645 / 41	663 / 645 / 70	776 / 792 / 57	820 / 760 / 108	959 / 904 / 85	816 / 702 / 88	993 / 866 / 72				
	3	617 / 724 / 41	696 / 869 / 32	703 / 692 / 68	838 / 844 / 55	860 / 791 / 102	1031 / 962 / 82	856 / 729 / 83	1069 / 922 / 70	618 / 746 / 38	731 / 916 / 31	723 / 716 / 64	882 / 892 / 53	908 / 838 / 98	1080 / 1011 / 79	904 / 772 / 80	1122 / 970 / 67	640 / 789 / 37	763 / 960 / 30	762 / 759 / 62	889 / 903 / 49	921 / 853 / 92	1126 / 1056 / 76	950 / 814 / 77	1171 / 1015 / 64				
35	1	636 / 338 / 65	697 / 457 / 57	646 / 459 / 105	684 / 586 / 88	668 / 552 / 165	756 / 685 / 135	621 / 510 / 132	751 / 632 / 108	652 / 364 / 64	718 / 491 / 56	664 / 494 / 103	707 / 627 / 86	677 / 577 / 157	778 / 709 / 127	646 / 533 / 126	796 / 673 / 105	667 / 391 / 62	740 / 524 / 55	668 / 517 / 98	710 / 650 / 81	684 / 600 / 150	820 / 750 / 124	684 / 568 / 123	816 / 692 / 99				
	2	697 / 457 / 57	759 / 586 / 48	684 / 597 / 88	724 / 729 / 71	756 / 694 / 135	903 / 845 / 109	751 / 641 / 108	930 / 807 / 90	718 / 491 / 56	785 / 625 / 47	689 / 623 / 84	762 / 774 / 69	778 / 718 / 127	951 / 893 / 105	796 / 683 / 105	947 / 824 / 84	740 / 524 / 55	788 / 645 / 44	692 / 645 / 79	776 / 792 / 64	820 / 760 / 124	959 / 904 / 98	816 / 702 / 99	993 / 866 / 81				
	3	644 / 724 / 44	696 / 869 / 35	727 / 692 / 77	838 / 844 / 62	860 / 791 / 116	1031 / 962 / 94	856 / 729 / 93	1069 / 922 / 78	643 / 746 / 42	731 / 916 / 34	731 / 716 / 73	882 / 892 / 60	908 / 838 / 113	1080 / 1011 / 90	904 / 772 / 90	1122 / 970 / 75	661 / 789 / 40	763 / 960 / 33	762 / 759 / 71	889 / 903 / 56	921 / 853 / 105	1126 / 1056 / 86	950 / 814 / 87	1171 / 1015 / 72				
40	1	663 / 331 / 112	715 / 447 / 98	670 / 450 / 150	716 / 586 / 128	694 / 552 / 190	756 / 685 / 156	621 / 510 / 147	751 / 632 / 121	677 / 357 / 109	735 / 479 / 96	672 / 473 / 144	737 / 627 / 125	702 / 577 / 181	778 / 709 / 147	646 / 533 / 141	796 / 673 / 117	676 / 375 / 105	755 / 511 / 93	688 / 506 / 140	739 / 650 / 119	708 / 600 / 173	820 / 750 / 143	684 / 568 / 137	816 / 692 / 111				
	2	715 / 447 / 98	788 / 586 / 84	716 / 597 / 128	750 / 729 / 103	756 / 694 / 156	903 / 845 / 125	751 / 641 / 121	930 / 807 / 101	735 / 479 / 96	814 / 625 / 82	719 / 623 / 122	774 / 774 / 100	778 / 718 / 147	951 / 893 / 121	796 / 683 / 117	947 / 824 / 94	755 / 511 / 93	815 / 645 / 78	720 / 645 / 116	776 / 792 / 94	820 / 760 / 143	959 / 904 / 113	816 / 702 / 111	993 / 866 / 91				
	3	672 / 724 / 78	702 / 869 / 62	755 / 692 / 112	838 / 844 / 91	860 / 791 / 134	1031 / 962 / 108	856 / 729 / 104	1069 / 922 / 87	669 / 746 / 73	731 / 916 / 59	757 / 716 / 106	882 / 892 / 88	908 / 838 / 130	1080 / 1011 / 104	904 / 772 / 101	1122 / 970 / 84	686 / 789 / 71	763 / 960 / 57	780 / 759 / 103	889 / 903 / 81	921 / 853 / 121	1126 / 1056 / 100	950 / 814 / 97	1171 / 1015 / 81				
Wind Speed [mph]		110								115																			
30	1	645 / 417 / 56	710 / 543 / 48	651 / 551 / 85	684 / 670 / 68	709 / 636 / 128	834 / 766 / 102	704 / 587 / 104	857 / 729 / 85	662 / 444 / 55	731 / 574 / 47	654 / 571 / 81	715 / 706 / 66	726 / 654 / 121	871 / 803 / 98	740 / 620 / 101	896 / 764 / 83	ASCE Group Zone											
	2	710 / 543 / 48	825 / 680 / 40	684 / 682 / 68	812 / 831 / 55	834 / 776 / 102	999 / 944 / 82	857 / 739 / 85	1036 / 906 / 70	731 / 574 / 47	863 / 715 / 38	715 / 719 / 66	846 / 869 / 53	871 / 813 / 98	1036 / 981 / 79	896 / 776 / 83	1076 / 943 / 67									Panal Angle		Mono Slope	
	3	670 / 830 / 36	793 / 1002 / 29	774 / 774 / 59	926 / 943 / 47	962 / 893 / 89	1167 / 1096 / 72	993 / 853 / 75	1217 / 1056 / 62	674 / 839 / 34	821 / 1039 / 28	808 / 812 / 57	960 / 980 / 45	1000 / 931 / 85	1204 / 1133 / 69	1035 / 891 / 72	1258 / 1093 / 59												
35	1	668 / 408 / 60	742 / 543 / 52	685 / 551 / 96	711 / 670 / 77	709 / 636 / 146	834 / 766 / 116	704 / 587 / 117	857 / 729 / 96	684 / 434 / 59	762 / 574 / 51	687 / 571 / 92	730 / 706 / 75	726 / 654 / 139	871 / 803 / 113	740 / 620 / 114	896 / 764 / 93	7.5 - 15		2 = 2									
	2	742 / 543 / 52	825 / 680 / 43	711 / 682 / 77	812 / 831 / 62	834 / 776 / 116	999 / 944 / 94	857 / 739 / 96	1036 / 906 / 78	762 / 574 / 51	863 / 715 / 42	730 / 719 / 75	846 / 869 / 60	871 / 813 / 113	1036 / 981 / 90	896 / 776 / 93	1076 / 943 / 75					15 - 30		2 = 2					
	3	677 / 830 / 39	793 / 1002 / 31	774 / 774 / 67	926 / 943 / 54	962 / 893 / 101	1167 / 1096 / 83	993 / 853 / 84	1217 / 1056 / 69	674 / 839 / 37	821 / 1039 / 30	808 / 812 / 64	960 / 980 / 52	1000 / 931 / 98	1204 / 1133 / 79	1035 / 891 / 81	1258 / 1093 / 66	30 - 45		1 = 1									
40	1	690 / 400 / 102	774 / 543 / 91	704 / 539 / 137	739 / 670 / 112	731 / 636 / 169	834 / 766 / 134	704 / 587 / 131	857 / 729 / 107	704 / 424 / 100	793 / 574 / 89	719 / 571 / 134	757 / 706 / 109	733 / 654 / 160	871 / 803 / 130	740 / 620 / 127	896 / 764 / 104					30 - 45		2 = 2					
	2	774 / 543 / 91	838 / 680 / 75	739 / 682 / 112	812 / 831 / 91	834 / 776 / 134	999 / 944 / 108	857 / 739 / 107	1036 / 906 / 87	793 / 574 / 89	863 / 715 / 73	757 / 719 / 109	846 / 869 / 88	871 / 813 / 130	1036 / 981 / 104	896 / 776 / 104	1076 / 943 / 84	15 - 30		3 = 3									
	3	702 / 830 / 68	793 / 1002 / 55	776 / 774 / 97	926 / 943 / 78	962 / 893 / 117	1167 / 1096 / 95	993 / 853 / 94	1217 / 1056 / 77	692 / 839 / 64	821 / 1039 / 53	808 / 812 / 94	960 / 980 / 75	1000 / 931 / 113	1204 / 1133 / 91	1035 / 891 / 91	1258 / 1093 / 74					30 - 45		3 = 3					
Wind Speed [mph]		120								130																			
30	1	678 / 470 / 54	731 / 589 / 44	655 / 589 / 77	725 / 719 / 62	759 / 688 / 118	906 / 838 / 95	754 / 635 / 96	933 / 799 / 80	662 / 444 / 55	731 / 574 / 47	654 / 571 / 81	715 / 706 / 66	726 / 654 / 121	871 / 803 / 98	740 / 620 / 101	896 / 764 / 83	ASCE Group Zone											
	2	731 / 589 / 44	900 / 748 / 37	725 / 732 / 62	878 / 905 / 51	906 / 849 / 95	1070 / 1015 / 76	933 / 810 / 80	1113 / 977 / 64	731 / 574 / 47	863 / 715 / 38	715 / 719 / 66	846 / 869 / 53	871 / 813 / 98	1036 / 981 / 79	896 / 776 / 83	1076 / 943 / 67									Panal Angle		Mono Slope	
	3	699 / 873 / 32	845 / 1073 / 27	841 / 847 / 55	991 / 1014 / 44	1035 / 966 / 82	1235 / 1164 / 66	1073 / 926 / 70	1294 / 1126 / 56	674 / 839 / 34	821 / 1039 / 28	808 / 812 / 57	960 / 980 / 45	1000 / 931 / 85	1204 / 1133 / 69	1035 / 891 / 72	1258 / 1093 / 59												
35	1	698 / 459 / 57	761 / 589 / 48	686 / 589 / 88	727 / 719 / 71	759 / 688 / 135	906 / 838 / 109	754 / 635 / 108	933 / 799 / 90	684 / 434 / 59	762 / 574 / 51	687 / 571 / 92	730 / 706 / 75	726 / 654 / 139	871 / 803 / 113	740 / 620 / 114	896 / 764 / 93	7.5 - 15		2 = 2									
	2	761 / 589 / 48	900 / 748 / 40	727 / 732 / 71	878 / 905 / 58	906 / 849 / 109	1070 / 1015 / 86	933 / 810 / 90	1113 / 977 / 72	762 / 574 / 51	863 / 715 / 42	730 / 719 / 75	846 / 869 / 60	871 / 813 / 113	1036 / 981 / 90	896 / 776 / 93	1076 / 943 / 75					15 - 30		2 = 2					
	3	699 / 873 / 35	845 / 1073 / 29	841 / 847 / 62	991 / 1014 / 49	1035 / 966 / 94	1235 / 1164 / 75	1073 / 926 / 78	1294 / 1126 / 63	674 / 839 / 37	821 / 1039 / 30	808 / 812 / 64	960 / 980 / 52	1000 / 931 / 98	1204 / 1133 / 79	1035 / 891 / 81	1258 / 1093 / 66	30 - 45		3 = 3									
40	1	717 / 449 / 98	791 / 589 / 84	717 / 589 / 128	752 / 719 / 103	759 / 688 / 156	906 / 838 / 125	754 / 635 / 121	933 / 799 / 101	704 / 424 / 100	793 / 574 / 89	719 / 571 / 134	757 / 706 / 109	733 / 654 / 160	871 / 803 / 130	740 / 620 / 127	896 / 764 / 104					30 - 45		2 = 2					
	2	791 / 589 / 84	900 / 748 / 71	752 / 732 / 103	878 / 905 / 84	906 / 849 / 125	1070 / 1015 / 100	933 / 810 / 101	1113 / 977 / 81	793 / 574 / 89	863 / 715 / 73	757 / 719 / 109	846 / 869 / 88	871 / 813 / 130	1036 / 981 / 104	896 / 776 / 104	1076 / 943 / 84	15 - 30		3 = 3									
	3	704 / 873 / 62	845 / 1073 / 50	841 / 847 / 91	991 / 1014 / 72	1035 / 966 / 108	1235 / 1164 / 87	1073 / 926 / 87	1294 / 1126 / 71	692 / 839 / 64	821 / 1039 / 53	808 / 812 / 94	960 / 980 / 75	1000 / 931 / 113	1204 / 1133 / 91	1035 / 891 / 91	1258 / 1093 / 74					30 - 45		3 = 3					

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
		30	1	694 / 496 / 53	758 / 618 / 43	671 / 619 / 75	754 / 751 / 60	769 / 700 / 111	940 / 871 / 92	787 / 664 / 93	969 / 831 / 77	708 / 533 / 49	817 / 672 / 41	683 / 660 / 70	807 / 811 / 57	827 / 758 / 105	999 / 930 / 85	849 / 721 / 88	1033 / 890 / 72	736 / 580 / 47	871 / 722 / 38	722 / 713 / 66	854 / 863 / 53	879 / 811 / 98	1046 / 978 / 79	905 / 772 / 83	1086 / 938 / 67
	2	758 / 618 / 43	934 / 780 / 36	754 / 765 / 60	908 / 938 / 49	940 / 882 / 92	1149 / 1092 / 76	969 / 843 / 77	1146 / 1007 / 62	817 / 672 / 41	997 / 837 / 34	807 / 825 / 57	959 / 996 / 45	999 / 942 / 85	1202 / 1146 / 69	1033 / 903 / 72	1256 / 1107 / 59	871 / 722 / 38	1051 / 886 / 31	854 / 878 / 53	1043 / 1088 / 44	1046 / 991 / 79	1300 / 1243 / 66	1086 / 952 / 67	1298 / 1146 / 54		
	3	722 / 905 / 31	866 / 1102 / 25	871 / 881 / 53	1064 / 1091 / 44	1068 / 999 / 79	1327 / 1253 / 66	1109 / 958 / 67	1324 / 1153 / 54	794 / 1001 / 30	944 / 1206 / 24	926 / 941 / 49	1112 / 1145 / 40	1121 / 1052 / 72	1369 / 1295 / 59	1169 / 1013 / 62	1442 / 1259 / 51	828 / 1049 / 28	1018 / 1305 / 23	969 / 990 / 45	1203 / 1242 / 38	1215 / 1144 / 69	1469 / 1393 / 56	1270 / 1104 / 59	1553 / 1358 / 48		
	1	713 / 485 / 56	779 / 618 / 47	701 / 619 / 86	754 / 751 / 69	769 / 700 / 127	940 / 871 / 105	787 / 664 / 105	969 / 831 / 87	741 / 533 / 53	817 / 672 / 44	711 / 660 / 79	807 / 811 / 64	827 / 758 / 120	999 / 930 / 98	849 / 721 / 99	1033 / 890 / 81	767 / 580 / 51	871 / 722 / 42	735 / 713 / 75	854 / 863 / 60	879 / 811 / 113	1046 / 978 / 90	905 / 772 / 93	1086 / 938 / 75		
	2	779 / 618 / 47	934 / 780 / 39	754 / 765 / 69	908 / 938 / 56	940 / 882 / 105	1149 / 1092 / 86	969 / 843 / 87	1146 / 1007 / 69	817 / 672 / 44	997 / 837 / 37	807 / 825 / 64	959 / 996 / 52	999 / 942 / 98	1202 / 1146 / 79	1033 / 903 / 81	1256 / 1107 / 66	871 / 722 / 42	1051 / 886 / 34	854 / 878 / 60	1043 / 1088 / 49	1046 / 991 / 90	1300 / 1243 / 75	1086 / 952 / 75	1298 / 1146 / 60		
	3	722 / 905 / 34	866 / 1102 / 28	871 / 881 / 60	1064 / 1091 / 49	1068 / 999 / 90	1327 / 1253 / 75	1109 / 958 / 75	1324 / 1153 / 60	794 / 1001 / 33	944 / 1206 / 26	926 / 941 / 56	1112 / 1145 / 45	1121 / 1052 / 83	1369 / 1295 / 68	1169 / 1013 / 69	1442 / 1259 / 57	828 / 1049 / 30	1018 / 1305 / 25	969 / 990 / 52	1203 / 1242 / 43	1215 / 1144 / 79	1469 / 1393 / 64	1270 / 1104 / 66	1553 / 1358 / 54		
	1	730 / 473 / 96	807 / 618 / 82	732 / 619 / 125	767 / 751 / 100	769 / 700 / 147	940 / 871 / 121	787 / 664 / 117	969 / 831 / 97	755 / 520 / 91	839 / 672 / 78	739 / 660 / 116	807 / 811 / 94	827 / 758 / 138	999 / 930 / 113	849 / 721 / 111	1033 / 890 / 91	778 / 565 / 87	871 / 722 / 73	762 / 713 / 109	854 / 863 / 88	879 / 811 / 130	1046 / 978 / 104	905 / 772 / 104	1086 / 938 / 84		
	2	807 / 618 / 82	934 / 780 / 68	767 / 765 / 100	908 / 938 / 81	940 / 882 / 121	1149 / 1092 / 100	969 / 843 / 97	1146 / 1007 / 77	839 / 672 / 78	997 / 837 / 64	807 / 825 / 94	959 / 996 / 75	999 / 942 / 113	1202 / 1146 / 91	1033 / 903 / 91	1256 / 1107 / 74	871 / 722 / 73	1051 / 886 / 59	854 / 878 / 88	1043 / 1088 / 72	1046 / 991 / 104	1300 / 1243 / 87	1086 / 952 / 84	1298 / 1146 / 67		
	3	722 / 905 / 59	866 / 1102 / 48	871 / 881 / 88	1064 / 1091 / 72	1068 / 999 / 104	1327 / 1253 / 87	1109 / 958 / 84	1324 / 1153 / 67	794 / 1001 / 57	944 / 1206 / 46	926 / 941 / 81	1112 / 1145 / 66	1121 / 1052 / 95	1369 / 1295 / 78	1169 / 1013 / 77	1442 / 1259 / 64	828 / 1049 / 53	1018 / 1305 / 44	969 / 990 / 75	1203 / 1242 / 63	1215 / 1144 / 91	1469 / 1393 / 74	1270 / 1104 / 74	1553 / 1358 / 61		
Wind Speed [mph]		170								180																	
30	1	745 / 607 / 43	919 / 766 / 36	764 / 761 / 62	892 / 906 / 49	924 / 856 / 92	1130 / 1059 / 76	953 / 817 / 77	1127 / 976 / 62	786 / 645 / 41	958 / 803 / 34	802 / 804 / 59	959 / 978 / 47	996 / 926 / 89	1209 / 1137 / 72	993 / 854 / 72	1206 / 1047 / 59										
	2	919 / 766 / 36	1092 / 925 / 29	892 / 922 / 49	1072 / 1122 / 40	1130 / 1074 / 76	1319 / 1264 / 59	1127 / 990 / 62	1390 / 1230 / 51	958 / 803 / 34	1171 / 996 / 28	959 / 996 / 47	1143 / 1200 / 38	1154 / 1100 / 69	1395 / 1340 / 56	1206 / 1063 / 59	1475 / 1307 / 48										
	3	892 / 1135 / 27	1087 / 1397 / 22	1046 / 1072 / 44	1220 / 1263 / 34	1305 / 1231 / 66	1560 / 1481 / 53	1302 / 1134 / 54	1655 / 1448 / 46	907 / 1158 / 24	1082 / 1393 / 19	1069 / 1099 / 40	1291 / 1339 / 32	1388 / 1312 / 62		1385 / 1208 / 51	1745 / 1529 / 43										
35	1	769 / 607 / 47	919 / 766 / 39	764 / 761 / 71	892 / 906 / 56	924 / 856 / 105	1130 / 1059 / 86	953 / 817 / 87	1127 / 976 / 69	788 / 645 / 44	958 / 803 / 37	802 / 804 / 67	959 / 978 / 54	996 / 926 / 101	1209 / 1137 / 83	993 / 854 / 81	1206 / 1047 / 66										
	2	919 / 766 / 39	1092 / 925 / 31	892 / 922 / 56	1072 / 1122 / 45	1130 / 1074 / 86	1319 / 1264 / 68	1127 / 990 / 69	1390 / 1230 / 57	958 / 803 / 37	1171 / 996 / 30	959 / 996 / 54	1143 / 1200 / 43	1154 / 1100 / 79	1395 / 1340 / 64	1206 / 1063 / 66	1475 / 1307 / 54										
	3	892 / 1135 / 29	1087 / 1397 / 24	1046 / 1072 / 49	1220 / 1263 / 39	1305 / 1231 / 75	1560 / 1481 / 60	1302 / 1134 / 60	1655 / 1448 / 51	907 / 1158 / 26	1082 / 1393 / 21	1069 / 1099 / 45	1291 / 1339 / 37	1388 / 1312 / 71		1385 / 1208 / 57	1745 / 1529 / 48										
40	1	798 / 607 / 82	919 / 766 / 68	782 / 761 / 103	892 / 906 / 81	924 / 856 / 121	1130 / 1059 / 100	953 / 817 / 97	1127 / 976 / 77	815 / 645 / 78	958 / 803 / 64	802 / 804 / 97	959 / 978 / 78	996 / 926 / 117	1209 / 1137 / 95	993 / 854 / 91	1206 / 1047 / 74										
	2	919 / 766 / 68	1092 / 925 / 55	892 / 922 / 81	1072 / 1122 / 66	1130 / 1074 / 100	1319 / 1264 / 78	1127 / 990 / 77	1390 / 1230 / 64	958 / 803 / 64	1171 / 996 / 53	959 / 996 / 78	1143 / 1200 / 63	1154 / 1100 / 91	1395 / 1340 / 74	1206 / 1063 / 74	1475 / 1307 / 61										
	3	892 / 1135 / 50	1087 / 1397 / 41	1046 / 1072 / 72	1220 / 1263 / 56	1305 / 1231 / 87	1560 / 1481 / 69	1302 / 1134 / 67	1655 / 1448 / 57	907 / 1158 / 46	1082 / 1393 / 37	1069 / 1099 / 66	1291 / 1339 / 53	1388 / 1312 / 82		1385 / 1208 / 64	1745 / 1529 / 54										
Wind Speed [mph]		190								200																	
30	1	846 / 699 / 40	1027 / 865 / 32	833 / 839 / 55	1024 / 1048 / 45	1026 / 957 / 82	1223 / 1153 / 66	1063 / 917 / 70	1282 / 1115 / 56	878 / 729 / 37	1051 / 888 / 30	857 / 867 / 51	1038 / 1065 / 42	1089 / 1019 / 79	1286 / 1214 / 62	1086 / 939 / 64	1351 / 1177 / 54										
	2	1027 / 865 / 32	1246 / 1062 / 27	981 / 1022 / 44	1208 / 1271 / 36	1223 / 1168 / 66	1462 / 1406 / 53	1282 / 1131 / 56	1551 / 1376 / 46	1051 / 888 / 30	1316 / 1125 / 25	1038 / 1084 / 42	1266 / 1335 / 34	1286 / 1231 / 62	1618 / 1558 / 53	1351 / 1194 / 54	1616 / 1436 / 43										
	3	958 / 1226 / 23	1203 / 1553 / 19	1132 / 1167 / 38	1352 / 1405 / 30	1463 / 1386 / 59		1461 / 1276 / 48		1004 / 1288 / 22		1190 / 1230 / 36	1496 / 1557 / 30	1530 / 1451 / 56		1528 / 1336 / 46											
35	1	846 / 699 / 43	1027 / 865 / 35	833 / 839 / 62	1024 / 1048 / 52	1026 / 957 / 94	1223 / 1153 / 75	1063 / 917 / 78	1282 / 1115 / 63	878 / 729 / 40	1051 / 888 / 33	857 / 867 / 58	1038 / 1065 / 47	1089 / 1019 / 90	1286 / 1214 / 71	1086 / 939 / 72	1351 / 1177 / 60										
	2	1027 / 865 / 35	1246 / 1062 / 29	981 / 1022 / 49	1208 / 1271 / 41	1223 / 1168 / 75	1462 / 1406 / 60	1282 / 1131 / 63	1551 / 1376 / 51	1051 / 888 / 33	1316 / 1125 / 28	1038 / 1084 / 47	1266 / 1335 / 39	1286 / 1231 / 71	1618 / 1558 / 60	1351 / 1194 / 60	1616 / 1436 / 48										
	3	958 / 1226 / 25	1203 / 1553 / 21	1132 / 1167 / 43	1352 / 1405 / 35	1463 / 1386 / 68		1461 / 1276 / 54		1004 / 1288 / 24		1190 / 1230 / 41	1496 / 1557 / 35	1530 / 1451 / 64		1528 / 1336 / 51											
40	1	854 / 699 / 75	1027 / 865 / 62	833 / 839 / 91	1024 / 1048 / 75	1026 / 957 / 108	1223 / 1153 / 87	1063 / 917 / 87	1282 / 1115 / 71	878 / 729 / 71	1051 / 888 / 57	857 / 867 / 84	1038 / 1065 / 69	1089 / 1019 / 104	1286 / 1214 / 82	1086 / 939 / 81	1351 / 1177 / 67										
	2	1027 / 865 / 62	1246 / 1062 / 50	981 / 1022 / 72	1208 / 1271 / 60	1223 / 1168 / 87	1462 / 1406 / 69	1282 / 1131 / 71	1551 / 1376 / 57	1051 / 888 / 57	1316 / 1125 / 48	1038 / 1084 / 69	1266 / 1335 / 56	1286 / 1231 / 82	1618 / 1558 / 69	1351 / 1194 / 67	1616 / 1436 / 54										
	3	958 / 1226 / 44	1203 / 1553 / 37	1132 / 1167 / 63	1352 / 1405 / 50	1463 / 1386 / 78		1461 / 1276 / 61		1004 / 1288 / 41		1190 / 1230 / 60	1496 / 1557 / 50	1530 / 1451 / 74		1528 / 1336 / 57											

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	688 / 325 / 120	732 / 437 / 105	692 / 440 / 161	747 / 586 / 141	705 / 539 / 205	773 / 685 / 171	621 / 510 / 162	751 / 632 / 133	700 / 350 / 117	751 / 468 / 102	707 / 473 / 158	768 / 627 / 137	728 / 577 / 200	778 / 709 / 162	646 / 533 / 155	796 / 673 / 129	698 / 366 / 112	769 / 499 / 100	706 / 495 / 151	768 / 650 / 130	733 / 600 / 190	820 / 750 / 157	684 / 568 / 151	816 / 692 / 122	
	2	732 / 437 / 105	818 / 586 / 92	747 / 597 / 141	775 / 729 / 113	773 / 694 / 171	903 / 845 / 138	751 / 641 / 133	930 / 807 / 111	751 / 468 / 102	843 / 625 / 90	749 / 623 / 134	798 / 774 / 110	778 / 718 / 162	951 / 893 / 133	796 / 683 / 129	947 / 824 / 103	769 / 499 / 100	842 / 645 / 85	748 / 645 / 127	794 / 792 / 103	820 / 760 / 157	959 / 904 / 124	816 / 702 / 122	993 / 866 / 100	
	3	699 / 724 / 85	723 / 869 / 67	782 / 692 / 124	838 / 844 / 100	860 / 791 / 148	1031 / 962 / 119	856 / 729 / 114	1069 / 922 / 96	695 / 746 / 80	742 / 916 / 65	783 / 716 / 117	882 / 892 / 96	908 / 838 / 143	1080 / 1011 / 114	904 / 772 / 111	1122 / 970 / 92	711 / 789 / 77	763 / 960 / 63	805 / 759 / 113	889 / 903 / 89	921 / 853 / 133	1126 / 1056 / 110	950 / 814 / 107	1171 / 1015 / 89	
50	1	711 / 318 / 127	766 / 437 / 114	712 / 431 / 172	778 / 586 / 153	731 / 539 / 223	795 / 685 / 187	621 / 510 / 177	751 / 632 / 145	722 / 342 / 124	784 / 468 / 111	726 / 463 / 168	778 / 611 / 146	736 / 564 / 213	798 / 709 / 177	646 / 533 / 169	796 / 673 / 141	734 / 366 / 122	801 / 499 / 108	740 / 495 / 164	797 / 650 / 142	757 / 600 / 208	824 / 750 / 172	684 / 568 / 165	816 / 692 / 133	
	2	766 / 437 / 114	848 / 586 / 100	778 / 597 / 153	800 / 729 / 123	795 / 694 / 187	903 / 845 / 151	751 / 641 / 145	930 / 807 / 121	784 / 468 / 111	848 / 608 / 95	778 / 623 / 146	823 / 774 / 120	798 / 718 / 177	951 / 893 / 146	796 / 683 / 141	947 / 824 / 113	801 / 499 / 108	870 / 645 / 92	776 / 645 / 138	817 / 792 / 112	824 / 760 / 172	959 / 904 / 135	816 / 702 / 133	993 / 866 / 109	
	3	726 / 724 / 92	745 / 869 / 73	809 / 692 / 135	855 / 844 / 109	860 / 791 / 161	1031 / 962 / 130	856 / 729 / 125	1069 / 922 / 105	721 / 746 / 87	763 / 916 / 71	809 / 716 / 127	882 / 892 / 105	908 / 838 / 156	1080 / 1011 / 125	904 / 772 / 121	1122 / 970 / 101	736 / 789 / 84	779 / 960 / 68	830 / 759 / 123	889 / 903 / 97	921 / 853 / 146	1126 / 1056 / 120	950 / 814 / 117	1171 / 1015 / 97	
60	1	753 / 304 / 141	794 / 416 / 125	748 / 412 / 191	800 / 558 / 170	748 / 514 / 250	839 / 685 / 220	621 / 510 / 207	751 / 632 / 170	762 / 327 / 138	808 / 445 / 122	759 / 442 / 187	816 / 596 / 165	767 / 550 / 244	840 / 709 / 208	646 / 533 / 198	796 / 673 / 165	770 / 350 / 135	822 / 474 / 119	770 / 472 / 183	833 / 633 / 161	786 / 585 / 238	864 / 750 / 202	684 / 568 / 193	816 / 692 / 155	
	2	794 / 416 / 125	883 / 571 / 113	800 / 568 / 170	850 / 729 / 144	839 / 694 / 220	903 / 845 / 177	751 / 641 / 170	930 / 807 / 141	808 / 445 / 122	904 / 608 / 110	816 / 607 / 165	871 / 774 / 139	840 / 718 / 208	951 / 893 / 171	796 / 683 / 165	947 / 824 / 132	822 / 474 / 119	924 / 645 / 107	833 / 645 / 161	863 / 792 / 131	864 / 760 / 202	959 / 904 / 159	816 / 702 / 155	993 / 866 / 127	
	3	781 / 724 / 107	788 / 869 / 85	864 / 692 / 157	900 / 844 / 126	879 / 791 / 189	1031 / 962 / 153	856 / 729 / 146	1069 / 922 / 123	772 / 746 / 100	804 / 916 / 82	861 / 716 / 148	923 / 892 / 122	908 / 838 / 183	1080 / 1011 / 147	904 / 772 / 141	1122 / 970 / 118	785 / 789 / 97	819 / 960 / 79	880 / 759 / 144	910 / 903 / 113	921 / 853 / 171	1126 / 1056 / 141	950 / 814 / 137	1171 / 1015 / 113	
Wind Speed [mph]		110								115																
45	1	710 / 391 / 110	786 / 529 / 97	720 / 527 / 147	766 / 670 / 124	754 / 636 / 186	834 / 766 / 148	704 / 587 / 144	857 / 729 / 118	722 / 415 / 107	804 / 559 / 95	735 / 558 / 144	784 / 706 / 120	755 / 654 / 176	871 / 803 / 143	740 / 620 / 140	896 / 764 / 114	ASCE Group Zone								
	2	786 / 529 / 97	864 / 680 / 82	766 / 682 / 124	814 / 831 / 100	834 / 776 / 148	999 / 944 / 119	857 / 739 / 118	1036 / 906 / 96	804 / 559 / 95	886 / 715 / 80	784 / 719 / 120	846 / 869 / 96	871 / 813 / 143	1036 / 981 / 114	896 / 776 / 114	1076 / 943 / 92	0 - 7.5	Mono Slope		1 = 1		2 = 2		3 = 3	
	3	726 / 830 / 75	793 / 1002 / 60	800 / 774 / 106	926 / 943 / 86	962 / 893 / 129	1167 / 1096 / 105	993 / 853 / 103	1217 / 1056 / 85	714 / 839 / 70	821 / 1039 / 58	819 / 812 / 103	960 / 980 / 83	1000 / 931 / 124	1204 / 1133 / 100	1035 / 891 / 100	1258 / 1093 / 81		7.5 - 15	Mono Slope		1 = 1		2 = 2		3 = 3
1	745 / 391 / 119	797 / 516 / 103	753 / 527 / 161	794 / 670 / 135	778 / 636 / 203	834 / 766 / 161	704 / 587 / 157	857 / 729 / 129	757 / 415 / 116	812 / 545 / 100	767 / 558 / 157	810 / 706 / 131	778 / 654 / 192	871 / 803 / 156	740 / 620 / 153	896 / 764 / 125	15 - 30			Mono Slope		1 = 1		2 = 2		3 = 3
2	797 / 516 / 103	891 / 680 / 89	794 / 682 / 135	836 / 831 / 109	834 / 776 / 161	999 / 944 / 130	857 / 739 / 129	1036 / 906 / 105	812 / 545 / 100	911 / 715 / 87	810 / 719 / 131	854 / 869 / 105	871 / 813 / 156	1036 / 981 / 125	896 / 776 / 125	1076 / 943 / 101		30 - 45		Mono Slope		1 = 1		2 = 2		3 = 3
3	750 / 830 / 81	793 / 1002 / 65	824 / 774 / 116	926 / 943 / 94	962 / 893 / 140	1167 / 1096 / 115	993 / 853 / 113	1217 / 1056 / 93	737 / 839 / 76	821 / 1039 / 62	841 / 812 / 112	960 / 980 / 90	1000 / 931 / 135	1204 / 1133 / 109	1035 / 891 / 109	1258 / 1093 / 89										
1	779 / 373 / 132	835 / 502 / 116	781 / 502 / 178	848 / 670 / 157	805 / 620 / 232	859 / 766 / 189	704 / 587 / 151	857 / 729 / 151	787 / 396 / 129	848 / 530 / 113	791 / 531 / 174	864 / 706 / 152	823 / 654 / 226	880 / 803 / 183	740 / 620 / 179	896 / 764 / 146										
60	2	835 / 502 / 116	944 / 680 / 104	848 / 682 / 157	880 / 831 / 126	859 / 776 / 189	999 / 944 / 153	857 / 739 / 151	1036 / 906 / 123	848 / 530 / 113	963 / 715 / 100	864 / 719 / 152	897 / 869 / 122	880 / 813 / 183	1036 / 981 / 147	896 / 776 / 146	1076 / 943 / 118									
	3	798 / 830 / 94	831 / 1002 / 75	871 / 774 / 135	929 / 943 / 109	962 / 893 / 165	1167 / 1096 / 135	993 / 853 / 132	1217 / 1056 / 109	781 / 839 / 88	842 / 1039 / 72	887 / 812 / 131	960 / 980 / 105	1000 / 931 / 159	1204 / 1133 / 128	1035 / 891 / 127	1258 / 1093 / 104									
	Wind Speed [mph]		120								130															
45	1	734 / 439 / 105	820 / 589 / 92	749 / 589 / 141	777 / 719 / 113	775 / 688 / 171	906 / 838 / 138	754 / 635 / 133	933 / 799 / 111	722 / 415 / 107	804 / 559 / 95	735 / 558 / 144	784 / 706 / 120	755 / 654 / 176	871 / 803 / 143	740 / 620 / 140	896 / 764 / 114									
	2	820 / 589 / 92	905 / 748 / 77	777 / 732 / 113	878 / 905 / 93	906 / 849 / 138	1070 / 1015 / 110	933 / 810 / 111	1113 / 977 / 89	804 / 559 / 95	886 / 715 / 80	784 / 719 / 120	846 / 869 / 96	871 / 813 / 143	1036 / 981 / 114	896 / 776 / 114	1076 / 943 / 92									
	3	725 / 873 / 67	845 / 1073 / 55	841 / 847 / 100	991 / 1014 / 79	1035 / 966 / 119	1235 / 1164 / 95	1073 / 926 / 96	1294 / 1126 / 78	714 / 839 / 70	821 / 1039 / 58	819 / 812 / 103	960 / 980 / 83	1000 / 931 / 124	1204 / 1133 / 100	1035 / 891 / 100	1258 / 1093 / 81									
50	1	768 / 439 / 114	850 / 589 / 100	780 / 589 / 153	802 / 719 / 123	797 / 688 / 187	906 / 838 / 151	754 / 635 / 145	933 / 799 / 121	757 / 415 / 116	812 / 545 / 100	767 / 558 / 157	810 / 706 / 131	778 / 654 / 192	871 / 803 / 156	740 / 620 / 153	896 / 764 / 125									
	2	850 / 589 / 100	930 / 748 / 84	802 / 732 / 123	878 / 905 / 101	906 / 849 / 151	1070 / 1015 / 120	933 / 810 / 121	1113 / 977 / 97	812 / 545 / 100	911 / 715 / 87	810 / 719 / 131	854 / 869 / 105	871 / 813 / 156	1036 / 981 / 125	896 / 776 / 125	1076 / 943 / 101									
	3	747 / 873 / 73	845 / 1073 / 60	858 / 847 / 109	991 / 1014 / 86	1035 / 966 / 130	1235 / 1164 / 104	1073 / 926 / 105	1294 / 1126 / 85	737 / 839 / 76	821 / 1039 / 62	841 / 812 / 112	960 / 980 / 90	1000 / 931 / 135	1204 / 1133 / 109	1035 / 891 / 109	1258 / 1093 / 89									
60	1	796 / 418 / 125	885 / 573 / 113	801 / 560 / 170	852 / 719 / 144	841 / 688 / 220	906 / 838 / 177	754 / 635 / 170	933 / 799 / 141	787 / 396 / 129	848 / 530 / 113	791 / 531 / 174	864 / 706 / 152	823 / 654 / 226	880 / 803 / 183	740 / 620 / 179	896 / 764 / 146									
	2	885 / 573 / 113	980 / 748 / 97	852 / 732 / 144	911 / 905 / 118	906 / 849 / 177	1070 / 1015 / 141	933 / 810 / 113	1113 / 977 / 113	848 / 530 / 113	963 / 715 / 100	864 / 719 / 152	897 / 869 / 122	880 / 813 / 183	1036 / 981 / 147	896 / 776 / 146	1076 / 943 / 118									
	3	790 / 873 / 85	851 / 1073 / 69	902 / 847 / 126	991 / 1014 / 100	1035 / 966 / 153	1235 / 1164 / 122	1073 / 926 / 123	1294 / 1126 / 99	781 / 839 / 88	842 / 1039 / 72	887 / 812 / 131	960 / 980 / 105	1000 / 931 / 159	1204 / 1133 / 128	1035 / 891 / 127	1258 / 1093 / 104									

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																		
Wind Speed [mph]		140								150								160										
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45				
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge			
45	1	746/462/102	836/618/90	762/619/137	792/751/110	771/700/162	940/871/133	787/664/129	969/831/107	787/520/100	866/672/85	767/660/127	818/811/103	827/758/152	999/930/124	849/721/122	1033/890/100	808/565/95	892/722/80	789/713/120	854/863/96	879/811/143	1046/978/114	905/772/114	1086/938/92			
	2	836/618/90	934/780/75	792/765/110	908/938/89	940/882/133	1149/1092/110	969/843/107	1146/1007/85	866/672/85	997/837/70	818/825/103	959/996/83	999/942/124	1202/1146/100	1033/903/100	1256/1107/81	892/722/80	1051/886/65	854/878/96	1043/1088/79	1046/991/114	1300/1243/95	1086/952/92	1298/1146/74			
	3	735/905/65	866/1102/53	871/881/96	1064/1091/79	1068/999/114	1327/1253/95	1109/958/92	1324/1153/74	794/1001/63	944/1206/50	926/941/89	1112/1145/72	1121/1052/105	1369/1295/86	1169/1013/85	1442/1259/70	828/1049/58	1018/1305/48	969/990/83	1203/1242/69	1215/1144/100	1469/1393/81	1270/1104/81	1553/1358/67			
50	1	779/462/111	865/618/98	793/619/150	816/751/120	792/700/177	940/871/146	787/664/141	969/831/117	799/507/106	893/672/92	796/660/138	841/811/112	827/758/166	999/930/135	849/721/133	1033/890/109	817/550/100	917/722/87	815/713/131	860/863/105	879/811/156	1046/978/125	905/772/125	1086/938/101			
	2	865/618/98	948/780/81	816/765/120	908/938/97	940/882/146	1149/1092/120	969/843/117	1146/1007/93	893/672/92	997/837/76	841/825/112	959/996/90	999/942/135	1202/1146/109	1033/903/109	1256/1107/89	917/722/87	1051/886/71	860/878/105	1043/1088/86	1046/991/125	1300/1243/104	1086/952/101	1298/1146/81			
	3	756/905/71	866/1102/57	873/881/105	1064/1091/86	1068/999/125	1327/1253/104	1109/958/101	1324/1153/81	802/1001/68	944/1206/54	926/941/97	1112/1145/79	1121/1052/115	1369/1295/94	1169/1013/93	1442/1259/77	828/1049/62	1018/1305/52	969/990/90	1203/1242/75	1215/1144/109	1469/1393/89	1270/1104/89	1553/1358/73			
60	1	803/439/122	897/600/110	811/588/165	865/751/139	833/700/208	940/871/171	787/664/165	969/831/137	839/494/119	920/652/104	852/660/161	886/811/131	862/758/195	999/930/159	849/721/155	1033/890/127	853/535/113	969/722/100	869/713/152	903/863/122	886/811/183	1046/978/147	905/772/146	1086/938/118			
	2	897/600/110	996/780/94	865/765/139	924/938/113	940/882/171	1149/1092/141	969/843/137	1146/1007/109	920/652/104	1024/837/88	886/825/131	959/996/105	999/942/159	1202/1146/128	1033/903/127	1256/1107/104	969/722/100	1051/886/82	903/878/122	1043/1088/100	1046/991/147	1300/1243/122	1086/952/118	1298/1146/94			
	3	798/905/82	866/1102/66	916/881/122	1064/1091/100	1068/999/147	1327/1253/122	1109/958/118	1324/1153/94	842/1001/79	944/1206/63	938/941/113	1112/1145/92	1121/1052/135	1369/1295/110	1169/1013/109	1442/1259/90	848/1049/72	1018/1305/60	969/990/105	1203/1242/87	1215/1144/128	1469/1393/104	1270/1104/104	1553/1358/85			
Wind Speed [mph]		170								180																		
45	1	827/607/90	919/766/75	807/761/113	892/906/89	924/856/133	1130/1059/110	953/817/107	1127/976/85	842/645/85	958/803/70	821/804/106	959/978/86	996/926/129	1209/1137/105	993/854/100	1206/1047/81											
	2	919/766/75	1092/925/60	892/922/89	1072/1122/72	1130/1074/110	1319/1264/86	1127/990/85	1390/1230/70	958/803/70	1171/996/58	959/996/86	1143/1200/69	1154/1100/100	1395/1340/81	1206/1063/81	1475/1307/67											
	3	892/1135/55	1087/1397/45	1046/1072/79	1220/1263/62	1305/1231/95	1560/1481/76	1302/1134/74	1655/1448/63	907/1158/50	1082/1393/40	1069/1099/72	1291/1339/59	1388/1312/91		1385/1208/70	1745/1529/59											
50	1	856/607/98	937/766/81	832/761/123	892/906/97	924/856/146	1130/1059/120	953/817/117	1127/976/93	870/645/92	958/803/76	844/804/116	959/978/94	996/926/140	1209/1137/115	993/854/109	1206/1047/89											
	2	937/766/81	1092/925/65	892/922/97	1072/1122/79	1130/1074/120	1319/1264/94	1127/990/93	1390/1230/77	958/803/76	1171/996/62	959/996/94	1143/1200/75	1154/1100/109	1395/1340/89	1206/1063/89	1475/1307/73											
	3	892/1135/60	1087/1397/49	1046/1072/86	1220/1263/68	1305/1231/104	1560/1481/83	1302/1134/81	1655/1448/69	907/1158/54	1082/1393/44	1069/1099/79	1291/1339/64	1388/1312/99		1385/1208/77	1745/1529/65											
60	1	888/590/110	985/766/94	882/761/144	913/906/113	924/856/171	1130/1059/141	953/817/137	1127/976/109	924/645/107	995/803/88	892/804/135	959/978/109	996/926/165	1209/1137/135	993/854/127	1206/1047/104											
	2	985/766/94	1092/925/75	913/922/113	1072/1122/92	1130/1074/141	1319/1264/110	1127/990/109	1390/1230/90	995/803/88	1171/996/72	959/996/109	1143/1200/87	1154/1100/128	1395/1340/104	1206/1063/104	1475/1307/85											
	3	892/1135/69	1087/1397/57	1046/1072/100	1220/1263/79	1305/1231/122	1560/1481/98	1302/1134/94	1655/1448/80	907/1158/63	1082/1393/50	1069/1099/92	1291/1339/74	1388/1312/116		1385/1208/90	1745/1529/76											
Wind Speed [mph]		190								200																		
45	1	881/699/82	1027/865/67	833/839/100	1024/1048/83	1026/957/119	1223/1153/95	1063/917/96	1282/1115/78	889/729/77	1051/888/63	857/867/93	1038/1065/76	1089/1019/114	1286/1214/91	1086/939/89	1351/1177/74											
	2	1027/865/67	1246/1062/55	981/1022/79	1208/1271/65	1223/1168/95	1462/1406/76	1282/1131/78	1551/1376/63	1051/888/63	1316/1125/53	1038/1084/76	1266/1335/62	1286/1231/91	1618/1558/76	1351/1194/74	1616/1436/59											
	3	958/1226/48	1203/1553/40	1132/1167/69	1352/1405/55	1463/1386/86		1461/1276/67		1004/1288/45		1190/1230/65	1496/1557/55	1530/1451/81		1528/1336/63												
50	1	907/699/89	1027/865/73	852/839/109	1024/1048/90	1026/957/130	1223/1153/104	1063/917/105	1282/1115/85	914/729/84	1051/888/68	857/867/101	1038/1065/82	1089/1019/125	1286/1214/99	1086/939/97	1351/1177/81											
	2	1027/865/73	1246/1062/60	981/1022/86	1208/1271/71	1223/1168/104	1462/1406/83	1282/1131/85	1551/1376/69	1051/888/68	1316/1125/57	1038/1084/82	1266/1335/68	1286/1231/99	1618/1558/83	1351/1194/81	1616/1436/65											
	3	958/1226/52	1203/1553/44	1132/1167/75	1352/1405/60	1463/1386/94		1461/1276/73		1004/1288/49		1190/1230/71	1496/1557/60	1530/1451/89		1528/1336/69												
60	1	931/678/100	1036/865/85	896/839/126	1024/1048/105	1026/957/153	1223/1153/122	1063/917/123	1282/1115/99	964/729/97	1051/888/79	895/867/118	1038/1065/96	1089/1019/147	1286/1214/116	1086/939/113	1351/1177/94											
	2	1036/865/85	1246/1062/69	981/1022/100	1208/1271/83	1223/1168/122	1462/1406/98	1282/1131/99	1551/1376/80	1051/888/79	1316/1125/66	1038/1084/96	1266/1335/79	1286/1231/116	1618/1558/98	1351/1194/94	1616/1436/76											
	3	958/1226/60	1203/1553/50	1132/1167/87	1352/1405/70	1463/1386/110		1461/1276/85		1004/1288/57		1190/1230/83	1496/1557/70	1530/1451/104		1528/1336/80												

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		70	1	789 / 291 / 153	837 / 406 / 139	778 / 394 / 209	837 / 544 / 189	778 / 502 / 282	858 / 666 / 247	630 / 510 / 237	751 / 632 / 194	795 / 312 / 150	848 / 434 / 136	805 / 432 / 209	851 / 580 / 184	796 / 536 / 275	882 / 709 / 240	646 / 533 / 226	796 / 673 / 189	801 / 334 / 146	860 / 461 / 132	814 / 461 / 204	865 / 616 / 179	813 / 570 / 268	905 / 750 / 233	684 / 568 / 221
2	837 / 406 / 139		915 / 555 / 125	837 / 553 / 189	900 / 729 / 164	858 / 675 / 247	931 / 845 / 205	751 / 641 / 194	930 / 807 / 162	848 / 434 / 136	933 / 591 / 121	851 / 591 / 184	920 / 774 / 159	882 / 718 / 240	959 / 893 / 198	796 / 683 / 189	947 / 824 / 151	860 / 461 / 132	950 / 626 / 118	865 / 627 / 179	909 / 792 / 149	905 / 760 / 233	959 / 904 / 183	816 / 702 / 178	993 / 866 / 146	
3	835 / 724 / 121		832 / 869 / 96	894 / 673 / 174	944 / 844 / 144	917 / 791 / 219	1031 / 962 / 176	856 / 729 / 167	1069 / 922 / 140	823 / 746 / 114	846 / 916 / 93	913 / 716 / 169	966 / 892 / 139	944 / 838 / 212	1080 / 1011 / 169	904 / 772 / 162	1122 / 970 / 135	835 / 789 / 111	859 / 960 / 89	931 / 759 / 164	950 / 903 / 129	936 / 853 / 198	1126 / 1056 / 162	950 / 814 / 156	1171 / 1015 / 130	
80	1	818 / 277 / 164	876 / 395 / 152	822 / 384 / 229	872 / 529 / 207	807 / 489 / 312	901 / 666 / 280	652 / 510 / 267	751 / 632 / 219	842 / 305 / 164	885 / 422 / 148	828 / 412 / 223	883 / 564 / 201	822 / 522 / 304	923 / 709 / 272	662 / 533 / 255	796 / 673 / 213	845 / 326 / 160	894 / 449 / 144	834 / 439 / 218	894 / 599 / 195	837 / 555 / 296	945 / 750 / 264	687 / 568 / 249	816 / 692 / 200	
	2	876 / 395 / 152	943 / 539 / 136	872 / 539 / 207	951 / 729 / 184	901 / 675 / 280	967 / 845 / 232	751 / 641 / 219	930 / 807 / 182	885 / 422 / 148	958 / 573 / 132	883 / 575 / 201	969 / 774 / 179	923 / 718 / 272	993 / 893 / 224	796 / 683 / 213	947 / 824 / 170	894 / 449 / 144	973 / 607 / 128	894 / 610 / 195	954 / 792 / 168	945 / 760 / 264	979 / 904 / 208	816 / 702 / 200	993 / 866 / 164	
	3	890 / 724 / 136	875 / 869 / 108	920 / 654 / 190	988 / 844 / 162	955 / 791 / 248	1031 / 962 / 200	856 / 729 / 188	1069 / 922 / 158	875 / 746 / 128	888 / 916 / 104	936 / 695 / 184	1009 / 892 / 156	981 / 838 / 240	1080 / 1011 / 192	904 / 772 / 182	1122 / 970 / 152	885 / 789 / 124	899 / 960 / 100	951 / 736 / 179	990 / 903 / 145	970 / 853 / 224	1126 / 1056 / 184	950 / 814 / 176	1171 / 1015 / 146	
90	1	862 / 271 / 177	913 / 385 / 164	863 / 375 / 248	903 / 515 / 223	833 / 476 / 340	917 / 647 / 304	675 / 510 / 297	751 / 632 / 243	863 / 290 / 173	919 / 411 / 159	867 / 401 / 242	912 / 549 / 217	846 / 509 / 331	937 / 688 / 295	684 / 533 / 284	796 / 673 / 236	887 / 318 / 173	926 / 436 / 155	871 / 427 / 236	948 / 599 / 217	882 / 555 / 331	956 / 727 / 286	708 / 568 / 277	816 / 692 / 223	
	2	913 / 385 / 164	968 / 523 / 146	903 / 524 / 223	971 / 707 / 198	917 / 656 / 304	1002 / 845 / 259	751 / 641 / 243	930 / 807 / 203	919 / 411 / 159	981 / 556 / 142	912 / 559 / 217	986 / 750 / 192	937 / 697 / 295	1027 / 893 / 250	796 / 683 / 236	947 / 824 / 189	926 / 436 / 155	992 / 588 / 137	948 / 610 / 217	1000 / 792 / 186	956 / 737 / 286	1011 / 904 / 233	816 / 702 / 223	993 / 866 / 182	
	3	945 / 724 / 151	918 / 869 / 120	943 / 635 / 205	1032 / 844 / 180	993 / 791 / 277	1054 / 962 / 224	856 / 729 / 209	1069 / 922 / 176	926 / 746 / 142	930 / 916 / 115	986 / 695 / 205	1051 / 892 / 174	1018 / 838 / 268	1080 / 1011 / 215	904 / 772 / 203	1122 / 970 / 169	935 / 789 / 137	939 / 960 / 111	1000 / 736 / 198	1029 / 903 / 161	1005 / 853 / 250	1126 / 1056 / 206	950 / 814 / 196	1171 / 1015 / 162	
70	1	806 / 355 / 143	870 / 489 / 128	823 / 490 / 199	878 / 652 / 174	829 / 604 / 261	897 / 766 / 219	704 / 587 / 210	857 / 729 / 173	832 / 386 / 143	881 / 515 / 125	831 / 518 / 194	917 / 706 / 174	845 / 637 / 254	916 / 803 / 212	740 / 620 / 205	896 / 764 / 167									
	2	870 / 489 / 128	967 / 660 / 114	878 / 663 / 174	925 / 831 / 144	897 / 776 / 219	999 / 944 / 176	857 / 739 / 173	1036 / 906 / 140	881 / 515 / 125	982 / 692 / 111	917 / 719 / 174	939 / 869 / 139	916 / 813 / 212	1036 / 981 / 169	896 / 776 / 167	1076 / 943 / 135									
	3	846 / 830 / 107	870 / 1002 / 86	918 / 774 / 154	967 / 943 / 124	962 / 893 / 190	1167 / 1096 / 155	993 / 853 / 151	1217 / 1056 / 124	826 / 839 / 100	879 / 1039 / 82	933 / 812 / 149	981 / 980 / 119	1000 / 931 / 183	1204 / 1133 / 148	1035 / 891 / 146	1258 / 1093 / 119									
80	1	849 / 346 / 156	902 / 475 / 140	862 / 478 / 218	932 / 652 / 195	851 / 588 / 288	935 / 766 / 248	704 / 587 / 237	857 / 729 / 194	852 / 367 / 152	937 / 515 / 140	868 / 505 / 212	943 / 686 / 190	865 / 619 / 280	953 / 803 / 240	740 / 620 / 231	896 / 764 / 188									
	2	902 / 475 / 140	986 / 639 / 124	932 / 663 / 195	969 / 831 / 162	935 / 776 / 248	999 / 944 / 200	857 / 739 / 194	1036 / 906 / 158	937 / 515 / 140	999 / 670 / 120	943 / 698 / 190	982 / 869 / 156	953 / 813 / 240	1036 / 981 / 192	896 / 776 / 188	1076 / 943 / 152									
	3	894 / 830 / 120	909 / 1002 / 96	965 / 774 / 173	1005 / 943 / 140	991 / 893 / 216	1167 / 1096 / 176	993 / 853 / 170	1217 / 1056 / 140	871 / 839 / 112	916 / 1039 / 92	979 / 812 / 168	1018 / 980 / 134	1010 / 931 / 208	1204 / 1133 / 168	1035 / 891 / 164	1258 / 1093 / 134									
90	1	888 / 338 / 168	931 / 462 / 151	897 / 465 / 236	957 / 633 / 211	895 / 588 / 322	973 / 766 / 277	713 / 587 / 263	857 / 729 / 216	889 / 357 / 164	965 / 501 / 151	901 / 492 / 229	965 / 666 / 205	908 / 619 / 313	990 / 803 / 268	740 / 620 / 257	896 / 764 / 209									
	2	931 / 462 / 151	1036 / 639 / 137	957 / 644 / 211	1013 / 831 / 180	973 / 776 / 277	1030 / 944 / 224	857 / 739 / 216	1036 / 906 / 176	965 / 501 / 151	1047 / 670 / 133	965 / 678 / 205	1025 / 869 / 174	990 / 813 / 268	1047 / 981 / 215	896 / 776 / 209	1076 / 943 / 169									
	3	942 / 830 / 133	947 / 1002 / 106	1013 / 774 / 192	1043 / 943 / 155	1024 / 893 / 241	1167 / 1096 / 197	993 / 853 / 189	1217 / 1056 / 155	916 / 839 / 124	953 / 1039 / 102	1024 / 812 / 186	1054 / 980 / 149	1042 / 931 / 233	1204 / 1133 / 188	1035 / 891 / 182	1258 / 1093 / 149									
70	1	838 / 407 / 139	917 / 557 / 125	839 / 546 / 189	903 / 719 / 164	861 / 669 / 247	934 / 838 / 205	754 / 635 / 194	933 / 799 / 162	832 / 386 / 143	881 / 515 / 125	831 / 518 / 194	917 / 706 / 174	845 / 637 / 254	916 / 803 / 212	740 / 620 / 205	896 / 764 / 167									
	2	917 / 557 / 125	997 / 724 / 107	903 / 732 / 164	952 / 905 / 134	934 / 849 / 205	1070 / 1015 / 162	933 / 810 / 162	1113 / 977 / 130	881 / 515 / 125	982 / 692 / 111	917 / 719 / 174	939 / 869 / 139	916 / 813 / 212	1036 / 981 / 169	896 / 776 / 167	1076 / 943 / 135									
	3	834 / 873 / 96	886 / 1073 / 79	946 / 847 / 144	993 / 1014 / 114	1035 / 966 / 176	1235 / 1164 / 141	1073 / 926 / 140	1294 / 1126 / 113	826 / 839 / 100	879 / 1039 / 82	933 / 812 / 149	981 / 980 / 119	1000 / 931 / 183	1204 / 1133 / 148	1035 / 891 / 146	1258 / 1093 / 119									
80	1	878 / 397 / 152	945 / 541 / 136	873 / 532 / 207	953 / 719 / 184	903 / 669 / 280	970 / 838 / 232	754 / 635 / 219	933 / 799 / 182	852 / 367 / 152	937 / 515 / 140	868 / 505 / 212	943 / 686 / 190	865 / 619 / 280	953 / 803 / 240	740 / 620 / 231	896 / 764 / 188									
	2	945 / 541 / 136	1045 / 724 / 120	953 / 732 / 184	993 / 905 / 151	970 / 849 / 232	1070 / 1015 / 184	933 / 810 / 182	1113 / 977 / 146	937 / 515 / 140	999 / 670 / 120	943 / 698 / 190	982 / 869 / 156	953 / 813 / 240	1036 / 981 / 192	896 / 776 / 188	1076 / 943 / 152									
	3	877 / 873 / 108	921 / 1073 / 88	991 / 847 / 162	1028 / 1014 / 129	1035 / 966 / 200	1235 / 1164 / 160	1073 / 926 / 158	1294 / 1126 / 128	871 / 839 / 112	916 / 1039 / 92	979 / 812 / 168	1018 / 980 / 134	1010 / 931 / 208	1204 / 1133 / 168	1035 / 891 / 164	1258 / 1093 / 134									
90	1	914 / 386 / 164	970 / 525 / 146	904 / 517 / 223	973 / 697 / 198	919 / 650 / 304	1005 / 838 / 259	754 / 635 / 243	933 / 799 / 203	889 / 357 / 164	965 / 501 / 151	901 / 492 / 229	965 / 666 / 205	908 / 619 / 313	990 / 803 / 268	740 / 620 / 257	896 / 764 / 209									
	2	970 / 525 / 146	1057 / 700 / 128	973 / 710 / 198	1035 / 905 / 168	1005 / 849 / 259	1070 / 1015 / 206	933 / 810 / 203	1113 / 977 / 162	965 / 501 / 151	1047 / 670 / 133	965 / 678 / 205	1025 / 869 / 174	990 / 813 / 268	1047 / 981 / 215	896 / 776 / 209	1076 / 943 / 169									
	3	921 / 873 / 120	957 / 1073 / 98	1035 / 847 / 180	1064 / 1014 / 143	1057 / 966 / 224	1235 / 1164 / 179	1073 / 926 / 176	1294 / 1126 / 142	916 / 839 / 124	953 / 1039 / 102	1024 / 812 / 186	1054 / 980 / 149	1042 / 931 / 233	1204 / 1133 / 188	1035 / 891 / 182	1258 / 1093 / 149									

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																						
Wind Speed [mph]		140								150								160														
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45								
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
70	1	844 / 428 / 136	926 / 583 / 121	846 / 573 / 184	914 / 751 / 159	875 / 700 / 240	950 / 871 / 198	787 / 664 / 189	969 / 831 / 156	877 / 481 / 132	944 / 633 / 114	884 / 643 / 179	932 / 811 / 149	901 / 758 / 226	999 / 930 / 183	849 / 721 / 178	1033 / 890 / 146	885 / 521 / 125	988 / 699 / 111	896 / 693 / 169	945 / 863 / 139	923 / 811 / 212	1046 / 978 / 169	905 / 772 / 167	1086 / 938 / 135							
	80	1	881 / 417 / 148	952 / 566 / 132	878 / 558 / 201	962 / 751 / 179	917 / 700 / 272	985 / 871 / 224	787 / 664 / 213	969 / 831 / 176	911 / 468 / 144	995 / 633 / 128	913 / 625 / 195	978 / 811 / 168	940 / 758 / 256	1009 / 930 / 208	849 / 721 / 200	1033 / 890 / 164	915 / 506 / 136	1005 / 677 / 120	948 / 693 / 190	988 / 863 / 156	959 / 811 / 240	1046 / 978 / 192	905 / 772 / 188	1086 / 938 / 152						
		90	1	915 / 406 / 159	975 / 549 / 142	907 / 542 / 217	1011 / 751 / 198	930 / 679 / 295	1019 / 871 / 250	787 / 664 / 236	969 / 831 / 196	942 / 455 / 155	1014 / 613 / 137	938 / 607 / 211	1024 / 811 / 186	980 / 758 / 286	1041 / 930 / 233	849 / 721 / 223	1033 / 890 / 182	969 / 506 / 151	1053 / 677 / 133	970 / 672 / 205	1031 / 863 / 174	996 / 811 / 268	1054 / 978 / 215	905 / 772 / 209	1086 / 938 / 169					
			70	1	918 / 573 / 121	1033 / 766 / 107	933 / 761 / 164	952 / 906 / 129	939 / 856 / 198	1130 / 1059 / 162	953 / 817 / 156	1127 / 976 / 124	950 / 626 / 118	1040 / 803 / 100	939 / 804 / 154	992 / 978 / 124	996 / 926 / 190	1209 / 1137 / 155	993 / 854 / 146	1206 / 1047 / 119	910 / 1158 / 72	1082 / 1393 / 57	1069 / 1099 / 105	1291 / 1339 / 85	1388 / 1312 / 134	1385 / 1208 / 1385	1745 / 1529 / 1745	1529 / 87				
				80	1	944 / 556 / 132	1045 / 741 / 116	953 / 738 / 179	992 / 906 / 145	973 / 856 / 224	1130 / 1059 / 184	953 / 817 / 176	1127 / 976 / 140	973 / 607 / 128	1085 / 803 / 112	986 / 804 / 173	1030 / 978 / 140	1017 / 926 / 216	1209 / 1137 / 176	993 / 854 / 164	1206 / 1047 / 134	973 / 607 / 1085	1085 / 803 / 112	986 / 804 / 173	1030 / 978 / 140	1017 / 926 / 216	1209 / 1137 / 176	993 / 854 / 164	1206 / 1047 / 134			
					90	1	997 / 556 / 146	1092 / 741 / 128	1002 / 738 / 198	1032 / 906 / 161	1007 / 856 / 250	1130 / 1059 / 206	953 / 817 / 196	1127 / 976 / 155	992 / 588 / 137	1089 / 775 / 120	1033 / 804 / 192	1068 / 978 / 155	1050 / 926 / 241	1209 / 1137 / 197	993 / 854 / 182	1206 / 1047 / 149	992 / 588 / 1089	1089 / 775 / 120	1033 / 804 / 192	1068 / 978 / 155	1050 / 926 / 241	1209 / 1137 / 197	993 / 854 / 182	1206 / 1047 / 149		
						70	1	982 / 678 / 114	1080 / 865 / 96	940 / 839 / 144	1029 / 1048 / 119	1026 / 957 / 176	1223 / 1153 / 141	1063 / 917 / 140	1282 / 1115 / 113	1014 / 729 / 111	1075 / 888 / 89	937 / 867 / 134	1038 / 1065 / 110	1089 / 1019 / 169	1286 / 1214 / 134	1086 / 939 / 130	1351 / 1177 / 108	1014 / 729 / 1075	1075 / 888 / 89	937 / 867 / 134	1038 / 1065 / 110	1089 / 1019 / 169	1286 / 1214 / 134	1086 / 939 / 130	1351 / 1177 / 108	
							80	1	1001 / 657 / 124	1123 / 865 / 108	985 / 839 / 162	1066 / 1048 / 134	1026 / 957 / 200	1223 / 1153 / 160	1063 / 917 / 158	1282 / 1115 / 128	1029 / 706 / 120	1115 / 888 / 100	978 / 867 / 151	1052 / 1065 / 123	1089 / 1019 / 192	1286 / 1214 / 152	1086 / 939 / 146	1351 / 1177 / 122	1029 / 706 / 1115	1115 / 888 / 100	978 / 867 / 151	1052 / 1065 / 123	1089 / 1019 / 192	1286 / 1214 / 152	1086 / 939 / 146	1351 / 1177 / 122
								90	1	1017 / 635 / 133	1123 / 833 / 115	1029 / 839 / 180	1102 / 1048 / 149	1050 / 957 / 224	1223 / 1153 / 179	1063 / 917 / 176	1282 / 1115 / 142	1042 / 682 / 128	1155 / 888 / 111	1019 / 867 / 168	1085 / 1065 / 137	1089 / 1019 / 215	1286 / 1214 / 170	1086 / 939 / 162	1351 / 1177 / 135	1042 / 682 / 1155	1155 / 888 / 111	1019 / 867 / 168	1085 / 1065 / 137	1089 / 1019 / 215	1286 / 1214 / 170	1086 / 939 / 162

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	903 / 264 / 189	946 / 374 / 175	901 / 366 / 266	931 / 501 / 239	879 / 476 / 375	931 / 628 / 326	697 / 510 / 327	753 / 632 / 268	902 / 283 / 185	950 / 399 / 170	903 / 391 / 259	965 / 549 / 239	891 / 509 / 366	948 / 667 / 316	705 / 533 / 312	796 / 673 / 260	925 / 310 / 185	954 / 424 / 165	904 / 416 / 252	973 / 582 / 232	902 / 540 / 356	995 / 727 / 316	729 / 568 / 305	816 / 692 / 245
	2	946 / 374 / 175	990 / 507 / 155	931 / 510 / 239	1020 / 707 / 218	931 / 637 / 326	1038 / 845 / 287	753 / 641 / 268	930 / 807 / 223	950 / 399 / 170	1032 / 556 / 155	965 / 559 / 239	1033 / 750 / 211	948 / 676 / 316	1062 / 893 / 277	796 / 683 / 260	947 / 824 / 208	954 / 424 / 165	1042 / 588 / 151	973 / 592 / 232	1046 / 792 / 205	995 / 737 / 316	1043 / 904 / 257	816 / 702 / 245	993 / 866 / 201
	3	970 / 703 / 160	962 / 869 / 131	994 / 635 / 225	1076 / 844 / 198	998 / 766 / 296	1085 / 962 / 247	856 / 729 / 231	1069 / 922 / 193	978 / 746 / 155	971 / 916 / 126	1005 / 674 / 218	1094 / 892 / 191	1019 / 810 / 287	1109 / 1011 / 237	904 / 772 / 223	1122 / 970 / 186	985 / 789 / 151	979 / 960 / 122	1016 / 713 / 211	1069 / 903 / 177	1039 / 853 / 277	1131 / 1056 / 227	950 / 814 / 216	1171 / 1015 / 179
Wind Speed [mph]		110								115															
100	1	924 / 329 / 180	986 / 462 / 165	930 / 453 / 252	979 / 614 / 225	913 / 571 / 346	1011 / 766 / 306	733 / 587 / 290	857 / 729 / 238	923 / 347 / 175	989 / 486 / 160	932 / 478 / 245	985 / 646 / 218	923 / 601 / 336	1027 / 803 / 296	755 / 620 / 282	896 / 764 / 231	924 / 329 / 180	986 / 462 / 165	930 / 453 / 252	979 / 614 / 225	913 / 571 / 346	1011 / 766 / 306	733 / 587 / 290	857 / 729 / 238
	2	986 / 462 / 165	1051 / 618 / 146	979 / 625 / 225	1057 / 831 / 198	1011 / 776 / 306	1061 / 944 / 247	857 / 739 / 238	1036 / 906 / 193	989 / 486 / 160	1059 / 648 / 141	985 / 657 / 218	1067 / 869 / 191	1027 / 813 / 296	1076 / 981 / 237	896 / 776 / 231	1076 / 943 / 186	986 / 462 / 165	1051 / 618 / 146	979 / 625 / 225	1057 / 831 / 198	1011 / 776 / 306	1061 / 944 / 247	857 / 739 / 238	1036 / 906 / 193
	3	991 / 830 / 146	986 / 1002 / 117	1026 / 750 / 205	1081 / 943 / 171	1057 / 893 / 267	1167 / 1096 / 218	993 / 853 / 208	1217 / 1056 / 171	961 / 839 / 136	990 / 1039 / 112	1070 / 812 / 205	1091 / 980 / 164	1074 / 931 / 257	1204 / 1133 / 208	1035 / 891 / 201	1258 / 1093 / 164	991 / 830 / 146	986 / 1002 / 117	1026 / 750 / 205	1081 / 943 / 171	1057 / 893 / 267	1167 / 1096 / 218	993 / 853 / 208	1217 / 1056 / 171
Wind Speed [mph]		120								130															
100	1	947 / 376 / 175	992 / 509 / 155	933 / 503 / 239	1022 / 697 / 218	933 / 631 / 326	1041 / 838 / 287	755 / 635 / 268	933 / 799 / 223	923 / 347 / 175	989 / 486 / 160	932 / 478 / 245	985 / 646 / 218	923 / 601 / 336	1027 / 803 / 296	755 / 620 / 282	896 / 764 / 231	947 / 376 / 175	992 / 509 / 155	933 / 503 / 239	1022 / 697 / 218	933 / 631 / 326	1041 / 838 / 287	755 / 635 / 268	933 / 799 / 223
	2	992 / 509 / 155	1103 / 700 / 141	1022 / 710 / 218	1076 / 905 / 184	1041 / 849 / 287	1088 / 1015 / 227	933 / 810 / 223	1113 / 977 / 179	989 / 486 / 160	1059 / 648 / 141	985 / 657 / 218	1067 / 869 / 191	1027 / 813 / 296	1076 / 981 / 237	896 / 776 / 231	1076 / 943 / 186	992 / 509 / 155	1103 / 700 / 141	1022 / 710 / 218	1076 / 905 / 184	1041 / 849 / 287	1088 / 1015 / 227	933 / 810 / 223	1113 / 977 / 179
	3	964 / 873 / 131	992 / 1073 / 107	1079 / 847 / 198	1099 / 1014 / 157	1088 / 966 / 247	1235 / 1164 / 198	1073 / 926 / 193	1294 / 1126 / 156	961 / 839 / 136	990 / 1039 / 112	1070 / 812 / 205	1091 / 980 / 164	1074 / 931 / 257	1204 / 1133 / 208	1035 / 891 / 201	1258 / 1093 / 164	964 / 873 / 131	992 / 1073 / 107	1079 / 847 / 198	1099 / 1014 / 157	1088 / 966 / 247	1235 / 1164 / 198	1073 / 926 / 193	1294 / 1126 / 156

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																														
Wind Speed [mph]		140								150								160																		
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45												
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge											
100	1	946 / 394 / 170	1026 / 549 / 155	961 / 542 / 239	1027 / 728 / 211	971 / 679 / 326	1053 / 871 / 277	787 / 664 / 260	969 / 831 / 216	970 / 442 / 165	1029 / 593 / 146	961 / 589 / 225	1069 / 811 / 205	987 / 735 / 306	1073 / 930 / 257	849 / 721 / 245	1033 / 890 / 201	994 / 491 / 160	1064 / 654 / 141	989 / 652 / 218	1073 / 863 / 191	1033 / 811 / 296	1083 / 978 / 237	905 / 772 / 231	1086 / 938 / 186											
	2	1026 / 549 / 155	1110 / 728 / 136	1027 / 741 / 211	1083 / 938 / 177	1053 / 882 / 277	1149 / 1092 / 227	969 / 843 / 216	1146 / 1007 / 171	1029 / 593 / 146	1161 / 807 / 131	1069 / 825 / 205	1090 / 996 / 164	1073 / 942 / 257	1202 / 1146 / 208	1033 / 903 / 201	1256 / 1107 / 164	1064 / 654 / 141	1165 / 852 / 122	1073 / 878 / 191	1138 / 1088 / 157	1083 / 991 / 237	1300 / 1243 / 198	1086 / 952 / 186	1298 / 1146 / 149											
	3	965 / 905 / 126	991 / 1102 / 102	1086 / 881 / 191	1154 / 1091 / 157	1100 / 999 / 237	1327 / 1253 / 198	1109 / 958 / 186	1324 / 1153 / 149	1003 / 1001 / 122	1034 / 1206 / 97	1096 / 941 / 177	1159 / 1145 / 143	1121 / 1052 / 218	1369 / 1295 / 178	1169 / 1013 / 171	1442 / 1259 / 141	996 / 1049 / 112	1073 / 1305 / 93	1098 / 990 / 164	1212 / 1242 / 137	1215 / 1144 / 208	1469 / 1393 / 168	1270 / 1104 / 164	1553 / 1358 / 134											
Wind Speed [mph]		170								180																										
100	1	1018 / 539 / 155	1099 / 715 / 136	1018 / 715 / 211	1071 / 906 / 177	1041 / 856 / 277	1134 / 1059 / 227	953 / 817 / 216	1127 / 976 / 171	1042 / 588 / 151	1133 / 775 / 131	1046 / 778 / 205	1106 / 978 / 171	1083 / 926 / 267	1209 / 1137 / 218	993 / 854 / 201	1206 / 1047 / 164	1099 / 715 / 136	1210 / 925 / 117	1071 / 922 / 177	1129 / 1122 / 143	1134 / 1074 / 227	1319 / 1264 / 178	1127 / 990 / 171	1390 / 1230 / 141	1133 / 775 / 131	1253 / 996 / 112	1106 / 996 / 171	1166 / 1200 / 137	1154 / 1100 / 208	1395 / 1340 / 168	1206 / 1063 / 164	1475 / 1307 / 134			
	2	1099 / 715 / 136	1210 / 925 / 117	1071 / 922 / 177	1129 / 1122 / 143	1134 / 1074 / 227	1319 / 1264 / 178	1127 / 990 / 171	1390 / 1230 / 141	1006 / 1158 / 97	1082 / 1393 / 78	1126 / 1099 / 143	1291 / 1339 / 116	1388 / 1312 / 188		1385 / 1208 / 141	1745 / 1529 / 119																			
	3	1027 / 1135 / 107	1108 / 1397 / 88	1140 / 1072 / 157	1220 / 1263 / 123	1305 / 1231 / 198	1560 / 1481 / 158	1302 / 1134 / 149	1655 / 1448 / 127																											
Wind Speed [mph]		190								200																										
100	1	1066 / 635 / 146	1165 / 833 / 126	1073 / 839 / 198	1139 / 1048 / 164	1080 / 957 / 247	1223 / 1153 / 198	1063 / 917 / 193	1282 / 1115 / 156	1088 / 682 / 141	1196 / 888 / 122	1060 / 867 / 184	1119 / 1065 / 150	1116 / 1019 / 237	1286 / 1214 / 188	1086 / 939 / 179	1351 / 1177 / 149	1165 / 833 / 126	1293 / 1062 / 107	1092 / 1022 / 157	1208 / 1271 / 130	1223 / 1168 / 198	1462 / 1406 / 158	1282 / 1131 / 156	1551 / 1376 / 127	1196 / 888 / 122	1329 / 1125 / 102	1119 / 1084 / 150	1266 / 1335 / 123	1286 / 1231 / 188	1618 / 1558 / 158	1351 / 1194 / 149	1616 / 1436 / 119			
	2	1165 / 833 / 126	1293 / 1062 / 107	1092 / 1022 / 157	1208 / 1271 / 130	1223 / 1168 / 198	1462 / 1406 / 158	1282 / 1131 / 156	1551 / 1376 / 127	1046 / 1288 / 88		1190 / 1230 / 130	1496 / 1557 / 109	1530 / 1451 / 168		1528 / 1336 / 127																				
	3	1028 / 1226 / 93	1203 / 1553 / 78	1158 / 1167 / 137	1352 / 1405 / 109	1463 / 1386 / 178		1461 / 1276 / 134																												

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		0	1	541 / 408 / 37	653 / 517 / 30	556 / 520 / 38	661 / 644 / 31	667 / 593 / 39	793 / 724 / 32	661 / 548 / 43	812 / 688 / 35	554 / 422 / 35	677 / 541 / 29	566 / 535 / 36	683 / 669 / 30	691 / 619 / 37	838 / 768 / 31	703 / 586 / 42	834 / 708 / 33	587 / 453 / 34	698 / 562 / 28	599 / 572 / 35	700 / 691 / 28	730 / 658 / 36	853 / 786 / 29
2	653 / 517 / 30		782 / 640 / 25	644 / 639 / 31	775 / 789 / 25	793 / 734 / 32	963 / 906 / 26	812 / 698 / 35	995 / 867 / 29	677 / 541 / 29	828 / 681 / 24	664 / 663 / 29	818 / 836 / 24	838 / 779 / 31	1011 / 955 / 25	834 / 719 / 33	1008 / 881 / 27	698 / 562 / 28	846 / 700 / 23	700 / 703 / 28	829 / 851 / 23	853 / 796 / 29	1057 / 1001 / 24	878 / 759 / 32	1054 / 923 / 26
3	639 / 786 / 23		767 / 964 / 19	737 / 732 / 27	893 / 905 / 22	922 / 852 / 28	1088 / 1019 / 22	918 / 785 / 30	1132 / 979 / 25	652 / 806 / 21	772 / 974 / 17	778 / 777 / 26	937 / 954 / 21	936 / 868 / 26	1136 / 1066 / 21	967 / 830 / 29	1184 / 1027 / 24	684 / 850 / 21	804 / 1017 / 16	792 / 795 / 24	980 / 999 / 20	980 / 912 / 25	1179 / 1109 / 20	1014 / 872 / 28	1232 / 1070 / 23
5	1	541 / 408 / 37	653 / 517 / 30	556 / 520 / 45	661 / 644 / 36	667 / 593 / 47	793 / 724 / 38	661 / 548 / 48	812 / 688 / 40	554 / 422 / 35	677 / 541 / 29	566 / 535 / 42	683 / 669 / 34	691 / 619 / 44	838 / 768 / 37	703 / 586 / 46	834 / 708 / 37	587 / 453 / 34	698 / 562 / 28	599 / 572 / 41	700 / 691 / 33	730 / 658 / 43	853 / 786 / 34	725 / 607 / 44	878 / 748 / 36
	2	653 / 517 / 30	782 / 640 / 25	644 / 639 / 35	775 / 789 / 29	793 / 734 / 38	963 / 906 / 31	812 / 698 / 40	995 / 867 / 33	677 / 541 / 29	828 / 681 / 24	664 / 663 / 34	818 / 836 / 28	838 / 779 / 37	1011 / 955 / 30	834 / 719 / 37	1008 / 881 / 30	698 / 562 / 28	846 / 700 / 23	700 / 703 / 33	829 / 851 / 26	853 / 796 / 34	1057 / 1001 / 29	878 / 759 / 36	1054 / 923 / 29
	3	639 / 786 / 23	767 / 964 / 19	737 / 732 / 31	893 / 905 / 25	922 / 852 / 33	1088 / 1019 / 26	918 / 785 / 34	1132 / 979 / 28	652 / 806 / 21	772 / 974 / 17	778 / 777 / 30	937 / 954 / 24	936 / 868 / 31	1136 / 1066 / 25	967 / 830 / 33	1184 / 1027 / 27	684 / 850 / 21	804 / 1017 / 16	792 / 795 / 28	980 / 999 / 23	980 / 912 / 30	1179 / 1109 / 24	1014 / 872 / 32	1232 / 1070 / 26
10	1	541 / 408 / 44	653 / 517 / 36	556 / 520 / 58	661 / 644 / 47	667 / 593 / 60	793 / 724 / 48	661 / 548 / 57	812 / 688 / 47	554 / 422 / 41	677 / 541 / 34	566 / 535 / 54	683 / 669 / 44	691 / 619 / 57	838 / 768 / 47	703 / 586 / 56	834 / 708 / 45	587 / 453 / 40	698 / 562 / 33	599 / 572 / 53	700 / 691 / 42	730 / 658 / 55	853 / 786 / 44	725 / 607 / 53	878 / 748 / 43
	2	653 / 517 / 36	782 / 640 / 29	644 / 639 / 46	775 / 789 / 37	793 / 734 / 48	963 / 906 / 39	812 / 698 / 47	995 / 867 / 39	677 / 541 / 34	828 / 681 / 29	664 / 663 / 43	818 / 836 / 36	838 / 779 / 47	1011 / 955 / 38	834 / 719 / 45	1008 / 881 / 36	698 / 562 / 33	846 / 700 / 27	700 / 703 / 42	829 / 851 / 34	853 / 796 / 44	1057 / 1001 / 37	878 / 759 / 43	1054 / 923 / 35
	3	639 / 786 / 27	767 / 964 / 22	737 / 732 / 40	893 / 905 / 33	922 / 852 / 42	1088 / 1019 / 34	918 / 785 / 40	1132 / 979 / 34	652 / 806 / 25	772 / 974 / 20	778 / 777 / 39	937 / 954 / 31	936 / 868 / 39	1136 / 1066 / 32	967 / 830 / 39	1184 / 1027 / 32	684 / 850 / 25	804 / 1017 / 20	792 / 795 / 36	980 / 999 / 30	980 / 912 / 38	1179 / 1109 / 31	1014 / 872 / 38	1232 / 1070 / 31

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	669 / 534 / 29	818 / 673 / 24	675 / 661 / 30	808 / 811 / 24	828 / 759 / 31	1000 / 931 / 25	850 / 722 / 34	1034 / 891 / 28	707 / 571 / 27	880 / 729 / 23	708 / 700 / 27	862 / 871 / 23	888 / 819 / 29	1057 / 988 / 23	884 / 755 / 31	1097 / 948 / 26	758 / 618 / 25	935 / 780 / 21	754 / 752 / 26	908 / 923 / 21	940 / 871 / 27	1150 / 1079 / 22

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		15	1	583 / 408 / 51	653 / 517 / 42	572 / 520 / 71	661 / 644 / 57	667 / 593 / 73	793 / 724 / 58	661 / 548 / 66	812 / 688 / 55	582 / 422 / 48	677 / 541 / 40	570 / 535 / 66	683 / 669 / 54	691 / 619 / 69	838 / 768 / 57	703 / 586 / 65	834 / 708 / 52	603 / 453 / 47	698 / 562 / 38	599 / 572 / 65	700 / 691 / 52	730 / 658 / 67	853 / 786 / 53
25	1	614 / 392 / 56	682 / 517 / 48	621 / 520 / 84	661 / 644 / 68	667 / 593 / 87	793 / 724 / 70	661 / 548 / 76	812 / 688 / 63	634 / 422 / 55	691 / 541 / 46	616 / 535 / 78	683 / 669 / 64	691 / 619 / 83	838 / 768 / 68	703 / 586 / 74	834 / 708 / 59	641 / 443 / 53	698 / 562 / 44	636 / 572 / 77	700 / 691 / 61	730 / 658 / 81	853 / 786 / 64	725 / 607 / 70	878 / 748 / 57
	15	1	612 / 473 / 45	735 / 596 / 37	618 / 594 / 62	736 / 730 / 50	748 / 677 / 64	893 / 825 / 51	743 / 625 / 58	920 / 787 / 49	625 / 491 / 43	751 / 612 / 35	634 / 614 / 59	747 / 744 / 47	785 / 714 / 62	931 / 863 / 50	780 / 658 / 57	960 / 823 / 47	ASCE Group Zone						
2		735 / 596 / 37	887 / 737 / 31	714 / 721 / 49	865 / 892 / 40	893 / 836 / 51	1100 / 1043 / 43	920 / 798 / 49	1096 / 962 / 39	751 / 612 / 35	926 / 772 / 30	747 / 758 / 47	899 / 930 / 38	931 / 874 / 50	1139 / 1082 / 41	960 / 835 / 47	1135 / 998 / 37	ASCE Group Zone							
15	1	655 / 519 / 42	785 / 643 / 34	647 / 630 / 56	778 / 779 / 46	796 / 727 / 58	967 / 898 / 48	815 / 691 / 55	999 / 858 / 45	625 / 491 / 43	751 / 612 / 35	634 / 614 / 59	747 / 744 / 47	785 / 714 / 62	931 / 863 / 50	780 / 658 / 57	960 / 823 / 47								
	2	785 / 643 / 34	963 / 806 / 29	778 / 793 / 46	931 / 965 / 37	967 / 910 / 48	1173 / 1117 / 39	999 / 871 / 45	1223 / 1077 / 37	751 / 612 / 35	926 / 772 / 30	747 / 758 / 47	899 / 930 / 38	931 / 874 / 50	1139 / 1082 / 41	960 / 835 / 47	1135 / 998 / 37	ASCE Group Zone							

Panal Angle	ASCE Group Zone	
	Mono Slope	
0 - 7.5	1 = 1	
	2 = 2	
	3 = 3	
7.5 - 15	1 = 1	
	2 = 2	
15 - 30	1 = 1	
	2 = 2	
30 - 45	1 = 1	
	2 = 2	
	3 = 3	

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72"$	64" to 71"	48" to 63"	$x \leq 47"$
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		15	1	669/534/40	818/673/33	675/661/54	808/811/44	828/759/57	1000/931/46	850/722/53	1034/891/44	707/571/37	880/729/31	708/700/50	862/871/41	888/819/53	1057/988/43	884/755/49	1097/948/41	758/618/35	935/780/30	754/752/47	908/923/38	940/871/50	1150/1079/41
15	2	818/673/33	998/838/28	808/826/44	960/997/36	1000/943/46	1203/1147/37	1034/904/44	1257/1108/36	880/729/31	1061/895/26	862/887/41	1007/1051/33	1057/1001/43	1313/1256/36	1097/962/41	1310/1158/33	935/780/30	1111/942/24	908/939/38	1091/1143/31	1150/1093/41	1343/1287/32	1146/1008/37	1415/1252/31
15	3	795/1002/25	945/1208/20	926/942/38	1114/1146/31	1122/1053/39	1370/1297/32	1170/1014/37	1444/1260/31	836/1060/23	1028/1318/19	979/1000/36	1215/1255/30	1227/1156/37	1484/1407/30	1224/1064/34	1481/1295/28	866/1103/21	1045/1343/17	1065/1092/34	1242/1286/27	1328/1253/36	1587/1508/29	1325/1154/33	1585/1388/26

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	615 / 392 / 56	683 / 517 / 48	622 / 520 / 84	663 / 644 / 68	667 / 593 / 121	793 / 724 / 98	661 / 548 / 100	812 / 688 / 83	636 / 422 / 55	692 / 541 / 46	617 / 535 / 79	683 / 669 / 65	691 / 619 / 115	838 / 768 / 95	703 / 586 / 98	834 / 708 / 78	642 / 443 / 53	699 / 562 / 44	638 / 572 / 77	700 / 691 / 61	730 / 658 / 113	853 / 786 / 89	725 / 607 / 93	878 / 748 / 76
	2	683 / 517 / 48	782 / 640 / 39	646 / 639 / 67	775 / 789 / 54	793 / 734 / 98	963 / 906 / 80	812 / 698 / 83	995 / 867 / 68	692 / 541 / 46	828 / 681 / 38	664 / 663 / 63	818 / 836 / 53	838 / 779 / 95	1011 / 955 / 77	834 / 719 / 78	1008 / 881 / 64	699 / 562 / 44	846 / 700 / 36	700 / 703 / 61	829 / 851 / 49	853 / 796 / 89	1057 / 1001 / 74	878 / 759 / 76	1054 / 923 / 61
	3	639 / 786 / 36	767 / 964 / 29	737 / 732 / 58	893 / 905 / 47	922 / 852 / 86	1088 / 1019 / 68	918 / 785 / 71	1132 / 979 / 59	652 / 806 / 34	772 / 974 / 27	778 / 777 / 56	937 / 954 / 46	936 / 868 / 80	1136 / 1066 / 65	967 / 830 / 68	1184 / 1027 / 56	684 / 850 / 33	804 / 1017 / 26	792 / 795 / 53	980 / 999 / 44	980 / 912 / 77	1179 / 1109 / 62	1014 / 872 / 66	1232 / 1070 / 54
	1	638 / 384 / 60	714 / 517 / 52	655 / 520 / 93	689 / 644 / 75	667 / 593 / 139	793 / 724 / 112	661 / 548 / 112	812 / 688 / 93	657 / 414 / 58	722 / 541 / 50	648 / 535 / 87	695 / 669 / 72	691 / 619 / 132	838 / 768 / 108	703 / 586 / 110	834 / 708 / 88	662 / 434 / 56	727 / 562 / 48	668 / 572 / 85	700 / 691 / 68	730 / 658 / 128	853 / 786 / 102	725 / 607 / 104	878 / 748 / 85
	2	714 / 517 / 52	782 / 640 / 43	671 / 639 / 73	775 / 789 / 60	793 / 734 / 112	963 / 906 / 91	812 / 698 / 93	995 / 867 / 77	722 / 541 / 50	828 / 681 / 42	677 / 663 / 70	818 / 836 / 58	838 / 779 / 108	1011 / 955 / 88	834 / 719 / 88	1008 / 881 / 71	727 / 562 / 48	846 / 700 / 39	700 / 703 / 68	829 / 851 / 54	853 / 796 / 102	1057 / 1001 / 85	878 / 759 / 85	1054 / 923 / 69
	3	646 / 786 / 39	767 / 964 / 32	737 / 732 / 64	893 / 905 / 52	922 / 852 / 98	1088 / 1019 / 78	918 / 785 / 80	1132 / 979 / 66	652 / 806 / 37	772 / 974 / 29	778 / 777 / 62	937 / 954 / 50	936 / 868 / 91	1136 / 1066 / 75	967 / 830 / 77	1184 / 1027 / 63	684 / 850 / 35	804 / 1017 / 28	792 / 795 / 58	980 / 999 / 48	980 / 912 / 88	1179 / 1109 / 71	1014 / 872 / 74	1232 / 1070 / 61
	1	659 / 377 / 63	727 / 505 / 55	673 / 510 / 102	716 / 644 / 85	687 / 593 / 156	793 / 724 / 125	661 / 548 / 125	812 / 688 / 104	677 / 405 / 62	751 / 541 / 54	678 / 535 / 98	720 / 669 / 80	695 / 619 / 148	838 / 768 / 122	703 / 586 / 122	834 / 708 / 98	679 / 425 / 59	755 / 562 / 51	697 / 572 / 96	723 / 691 / 76	730 / 658 / 144	853 / 786 / 114	725 / 607 / 116	878 / 748 / 94
	2	727 / 505 / 55	794 / 640 / 46	697 / 639 / 83	775 / 789 / 67	793 / 734 / 125	963 / 906 / 103	812 / 698 / 104	995 / 867 / 85	751 / 541 / 54	828 / 681 / 45	701 / 663 / 78	818 / 836 / 65	838 / 779 / 122	1011 / 955 / 99	834 / 719 / 98	1008 / 881 / 79	755 / 562 / 51	846 / 700 / 42	723 / 703 / 76	829 / 851 / 61	853 / 796 / 114	1057 / 1001 / 95	878 / 759 / 94	1054 / 923 / 76
	3	669 / 786 / 42	767 / 964 / 34	738 / 732 / 72	893 / 905 / 59	922 / 852 / 110	1088 / 1019 / 88	918 / 785 / 88	1132 / 979 / 73	667 / 806 / 40	772 / 974 / 32	778 / 777 / 70	937 / 954 / 57	936 / 868 / 103	1136 / 1066 / 84	967 / 830 / 85	1184 / 1027 / 70	685 / 850 / 38	804 / 1017 / 30	792 / 795 / 65	980 / 999 / 55	980 / 912 / 99	1179 / 1109 / 80	1014 / 872 / 82	1232 / 1070 / 67
Wind Speed [mph]		110								115															
30	1	662 / 473 / 52	735 / 596 / 43	643 / 594 / 73	736 / 730 / 60	748 / 677 / 107	893 / 825 / 86	743 / 625 / 88	920 / 787 / 73	667 / 491 / 49	751 / 612 / 41	646 / 614 / 70	747 / 744 / 56	785 / 714 / 104	931 / 863 / 83	780 / 658 / 85	960 / 823 / 71	ASCE Group Zone							
	2	735 / 596 / 43	887 / 737 / 35	714 / 721 / 58	865 / 892 / 47	893 / 836 / 86	1100 / 1043 / 71	920 / 798 / 73	1096 / 962 / 59	751 / 612 / 41	926 / 772 / 34	747 / 758 / 56	899 / 930 / 46	931 / 874 / 83	1139 / 1082 / 68	960 / 835 / 71	1135 / 998 / 56	Panal Angle							
	3	715 / 892 / 32	833 / 1057 / 25	829 / 835 / 51	1019 / 1042 / 42	1020 / 952 / 74	1217 / 1147 / 59	1058 / 912 / 64	1275 / 1109 / 51	743 / 931 / 31	858 / 1092 / 24	864 / 873 / 49	1054 / 1081 / 40	1058 / 989 / 71	1315 / 1241 / 59	1099 / 949 / 61	1312 / 1143 / 49	Mono Slope							
	1	680 / 463 / 55	750 / 596 / 46	671 / 594 / 81	736 / 730 / 66	748 / 677 / 122	893 / 825 / 98	743 / 625 / 99	920 / 787 / 82	698 / 491 / 54	751 / 612 / 44	673 / 614 / 77	747 / 744 / 62	785 / 714 / 118	931 / 863 / 95	780 / 658 / 96	960 / 823 / 80	0 - 7.5							
	2	750 / 596 / 46	887 / 737 / 38	714 / 721 / 64	865 / 892 / 52	893 / 836 / 81	1100 / 1043 / 81	920 / 798 / 82	1096 / 962 / 66	751 / 612 / 44	926 / 772 / 37	747 / 758 / 62	899 / 930 / 50	931 / 874 / 95	1139 / 1082 / 78	960 / 835 / 80	1135 / 998 / 63	7.5 - 15							
	3	715 / 892 / 34	833 / 1057 / 27	829 / 835 / 56	1019 / 1042 / 47	1020 / 952 / 85	1217 / 1147 / 68	1058 / 912 / 71	1275 / 1109 / 58	743 / 931 / 33	858 / 1092 / 26	864 / 873 / 54	1054 / 1081 / 45	1058 / 989 / 81	1315 / 1241 / 68	1099 / 949 / 69	1312 / 1143 / 55	15 - 30							
	1	696 / 452 / 58	777 / 596 / 50	700 / 594 / 91	743 / 730 / 74	748 / 677 / 137	893 / 825 / 110	743 / 625 / 110	920 / 787 / 91	713 / 480 / 56	777 / 612 / 47	701 / 614 / 87	747 / 744 / 70	785 / 714 / 133	931 / 863 / 107	780 / 658 / 107	960 / 823 / 88	30 - 45							
	2	777 / 596 / 50	887 / 737 / 41	722 / 721 / 72	865 / 892 / 59	893 / 836 / 110	1100 / 1043 / 91	920 / 798 / 91	1096 / 962 / 73	777 / 612 / 47	926 / 772 / 40	747 / 758 / 70	899 / 930 / 57	931 / 874 / 107	1139 / 1082 / 88	960 / 835 / 88	1135 / 998 / 70								
	3	715 / 892 / 37	833 / 1057 / 29	829 / 835 / 63	1019 / 1042 / 52	1020 / 952 / 95	1217 / 1147 / 76	1058 / 912 / 79	1275 / 1109 / 64	743 / 931 / 36	858 / 1092 / 28	864 / 873 / 61	1054 / 1081 / 50	1058 / 989 / 91	1315 / 1241 / 76	1099 / 949 / 76	1312 / 1143 / 61								
Wind Speed [mph]		120								130															
30	1	685 / 519 / 48	785 / 643 / 39	648 / 630 / 67	778 / 779 / 54	796 / 727 / 98	967 / 898 / 80	815 / 691 / 83	999 / 858 / 68	667 / 491 / 49	751 / 612 / 41	646 / 614 / 70	747 / 744 / 56	785 / 714 / 104	931 / 863 / 83	780 / 658 / 85	960 / 823 / 71								
	2	785 / 643 / 39	963 / 806 / 33	778 / 793 / 54	931 / 965 / 44	967 / 910 / 80	1173 / 1117 / 65	999 / 871 / 68	1223 / 1077 / 56	751 / 612 / 41	926 / 772 / 34	747 / 758 / 56	899 / 930 / 46	931 / 874 / 83	1139 / 1082 / 68	960 / 835 / 71	1135 / 998 / 56								
	3	741 / 931 / 28	924 / 1178 / 24	896 / 909 / 47	1086 / 1116 / 39	1092 / 1023 / 68	1346 / 1272 / 57	1136 / 983 / 59	1343 / 1171 / 47	743 / 931 / 31	858 / 1092 / 24	864 / 873 / 49	1054 / 1081 / 40	1058 / 989 / 71	1315 / 1241 / 59	1099 / 949 / 61	1312 / 1143 / 49								
	1	716 / 519 / 52	785 / 643 / 43	673 / 630 / 73	778 / 779 / 60	796 / 727 / 112	967 / 898 / 91	815 / 691 / 93	999 / 858 / 77	698 / 491 / 54	751 / 612 / 44	673 / 614 / 77	747 / 744 / 62	785 / 714 / 118	931 / 863 / 95	780 / 658 / 96	960 / 823 / 80								
	2	785 / 643 / 43	963 / 806 / 35	778 / 793 / 60	931 / 965 / 48	967 / 910 / 91	1173 / 1117 / 75	999 / 871 / 77	1223 / 1077 / 63	751 / 612 / 44	926 / 772 / 37	747 / 758 / 62	899 / 930 / 50	931 / 874 / 95	1139 / 1082 / 78	960 / 835 / 80	1135 / 998 / 63								
	3	741 / 931 / 31	924 / 1178 / 26	896 / 909 / 52	1086 / 1116 / 43	1092 / 1023 / 78	1346 / 1272 / 64	1136 / 983 / 66	1343 / 1171 / 52	743 / 931 / 33	858 / 1092 / 26	864 / 873 / 54	1054 / 1081 / 45	1058 / 989 / 81	1315 / 1241 / 68	1099 / 949 / 69	1312 / 1143 / 55								
	1	729 / 507 / 55	796 / 643 / 46	699 / 630 / 83	778 / 779 / 67	796 / 727 / 125	967 / 898 / 103	815 / 691 / 104	999 / 858 / 85	713 / 480 / 56	777 / 612 / 47	701 / 614 / 87	747 / 744 / 70	785 / 714 / 133	931 / 863 / 107	780 / 658 / 107	960 / 823 / 88								
	2	796 / 643 / 46	963 / 806 / 38	778 / 793 / 67	931 / 965 / 55	967 / 910 / 103	1173 / 1117 / 84	999 / 871 / 85	1223 / 1077 / 70	777 / 612 / 47	926 / 772 / 40	747 / 758 / 70	899 / 930 / 57	931 / 874 / 107	1139 / 1082 / 88	960 / 835 / 88	1135 / 998 / 70								
	3	741 / 931 / 33	924 / 1178 / 28	896 / 909 / 59	1086 / 1116 / 48	1092 / 1023 / 88	1346 / 1272 / 72	1136 / 983 / 73	1343 / 1171 / 58	743 / 931 / 36	858 / 1092 / 28	864 / 873 / 61	1054 / 1081 / 50	1058 / 989 / 91	1315 / 1241 / 76	1099 / 949 / 76	1312 / 1143 / 61								

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft	83in x 41.5in	Load: Up / Down / Side , lbs	150																160												
Wind Speed [mph]		140																150								160							
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
	30	1	687 / 534 / 46	818 / 673 / 38	675 / 661 / 65	808 / 811 / 53	828 / 759 / 95	1000 / 931 / 77	850 / 722 / 81	1034 / 891 / 66	707 / 571 / 43	880 / 729 / 36	708 / 700 / 60	862 / 871 / 49	888 / 819 / 89	1057 / 988 / 71	884 / 755 / 73	1097 / 948 / 61	758 / 618 / 41	935 / 780 / 34	754 / 752 / 56	908 / 923 / 46	940 / 871 / 83	1150 / 1079 / 68	970 / 832 / 71	1146 / 993 / 56							

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	3 = 3
	1 = 1
30 - 45	2 = 2
	3 = 3
	1 = 1

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, inft(m).
 h=Mean roof height, inft(m).
 Θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
45	1	756 / 521 / 91	839 / 673 / 78	740 / 661 / 116	808 / 811 / 94	828 / 759 / 138	1000 / 931 / 113	850 / 722 / 111	1034 / 891 / 91	783 / 571 / 87	880 / 729 / 73	745 / 700 / 106	862 / 871 / 88	888 / 819 / 130	1057 / 988 / 104	884 / 755 / 101	1097 / 948 / 84	808 / 618 / 82	935 / 780 / 68	767 / 752 / 100	908 / 923 / 81	940 / 871 / 121	1150 / 1079 / 100	970 / 832 / 97	1146 / 993 / 77		
	2	839 / 673 / 78	998 / 838 / 64	808 / 826 / 94	960 / 997 / 75	1000 / 943 / 113	1203 / 1147 / 91	1034 / 904 / 91	1257 / 1108 / 74	880 / 729 / 73	1061 / 895 / 59	862 / 887 / 88	1007 / 1051 / 69	1057 / 1001 / 104	1313 / 1256 / 87	1097 / 962 / 84	1310 / 1158 / 67	935 / 780 / 68	1111 / 942 / 55	908 / 939 / 81	1091 / 1143 / 66	1150 / 1093 / 100	1343 / 1287 / 78	1146 / 1008 / 77	1415 / 1252 / 64		
	3	795 / 1002 / 57	945 / 1208 / 46	926 / 942 / 81	1114 / 1146 / 66	1122 / 1053 / 95	1370 / 1297 / 78	1170 / 1014 / 77	1444 / 1260 / 64	836 / 1060 / 53	1028 / 1318 / 44	979 / 1000 / 75	1215 / 1255 / 63	1227 / 1156 / 91	1484 / 1407 / 74	1224 / 1064 / 71	1481 / 1295 / 57	866 / 1103 / 48	1045 / 1343 / 39	1065 / 1092 / 72	1242 / 1286 / 56	1328 / 1253 / 87	1587 / 1508 / 69	1325 / 1154 / 67	1585 / 1388 / 54		
50	1	784 / 521 / 99	864 / 673 / 84	765 / 661 / 126	816 / 811 / 102	828 / 759 / 151	1000 / 931 / 123	850 / 722 / 121	1034 / 891 / 99	810 / 571 / 94	895 / 729 / 79	768 / 700 / 116	862 / 871 / 95	888 / 819 / 141	1057 / 988 / 113	884 / 755 / 110	1097 / 948 / 91	833 / 618 / 89	935 / 780 / 74	789 / 752 / 109	908 / 923 / 88	940 / 871 / 132	1150 / 1079 / 109	970 / 832 / 106	1146 / 993 / 84		
	2	864 / 673 / 84	998 / 838 / 69	816 / 826 / 102	960 / 997 / 82	1000 / 943 / 123	1203 / 1147 / 99	1034 / 904 / 99	1257 / 1108 / 81	895 / 729 / 79	1061 / 895 / 64	862 / 887 / 95	1007 / 1051 / 113	1057 / 1001 / 141	1313 / 1256 / 94	1097 / 962 / 91	1310 / 1158 / 73	935 / 780 / 74	1111 / 942 / 59	908 / 939 / 88	1091 / 1143 / 72	1150 / 1093 / 109	1343 / 1287 / 85	1146 / 1008 / 84	1415 / 1252 / 70		
	3	795 / 1002 / 62	945 / 1208 / 50	926 / 942 / 88	1114 / 1146 / 72	1122 / 1053 / 104	1370 / 1297 / 85	1170 / 1014 / 84	1444 / 1260 / 70	836 / 1060 / 57	1028 / 1318 / 47	979 / 1000 / 82	1215 / 1255 / 68	1227 / 1156 / 99	1484 / 1407 / 80	1224 / 1064 / 77	1481 / 1295 / 62	866 / 1103 / 52	1045 / 1343 / 42	1065 / 1092 / 78	1242 / 1286 / 61	1328 / 1253 / 94	1587 / 1508 / 76	1325 / 1154 / 73	1585 / 1388 / 59		
60	1	820 / 508 / 111	912 / 673 / 97	815 / 661 / 146	856 / 811 / 118	836 / 759 / 176	1000 / 931 / 143	850 / 722 / 141	1034 / 891 / 115	842 / 556 / 106	941 / 729 / 91	814 / 700 / 134	880 / 871 / 111	888 / 819 / 165	1057 / 988 / 132	884 / 755 / 128	1097 / 948 / 107	860 / 601 / 100	965 / 780 / 86	833 / 752 / 126	908 / 923 / 103	940 / 871 / 154	1150 / 1079 / 126	970 / 832 / 124	1146 / 993 / 98		
	2	912 / 673 / 97	998 / 838 / 80	856 / 826 / 118	960 / 997 / 95	1000 / 943 / 143	1203 / 1147 / 115	1034 / 904 / 115	1257 / 1108 / 94	941 / 729 / 91	1061 / 895 / 74	880 / 887 / 111	1007 / 1051 / 87	1057 / 1001 / 132	1313 / 1256 / 110	1097 / 962 / 107	1310 / 1158 / 85	965 / 780 / 86	1111 / 942 / 69	908 / 939 / 103	1091 / 1143 / 83	1150 / 1093 / 126	1343 / 1287 / 99	1146 / 1008 / 98	1415 / 1252 / 81		
	3	816 / 1002 / 71	945 / 1208 / 57	926 / 942 / 103	1114 / 1146 / 83	1122 / 1053 / 121	1370 / 1297 / 99	1170 / 1014 / 98	1444 / 1260 / 81	836 / 1060 / 66	1028 / 1318 / 54	979 / 1000 / 95	1215 / 1255 / 79	1227 / 1156 / 115	1484 / 1407 / 94	1224 / 1064 / 90	1481 / 1295 / 73	866 / 1103 / 60	1045 / 1343 / 49	1065 / 1092 / 91	1242 / 1286 / 71	1328 / 1253 / 110	1587 / 1508 / 88	1325 / 1154 / 85	1585 / 1388 / 68		
Wind Speed [mph]		170								180																	
45	1	829 / 661 / 78	982 / 824 / 64	795 / 797 / 94	983 / 1003 / 78	983 / 915 / 113	1183 / 1113 / 91	1017 / 875 / 91	1236 / 1074 / 74	847 / 700 / 73	1019 / 859 / 59	858 / 866 / 91	1011 / 1036 / 72	1057 / 987 / 108	1261 / 1189 / 87	1054 / 910 / 84	1321 / 1150 / 71										
	2	982 / 824 / 64	1200 / 1021 / 53	944 / 980 / 75	1171 / 1230 / 63	1183 / 1128 / 91	1430 / 1373 / 74	1236 / 1089 / 74	1512 / 1340 / 61	1019 / 859 / 59	1226 / 1046 / 48	1011 / 1054 / 72	1245 / 1311 / 60	1261 / 1205 / 87	1507 / 1450 / 69	1321 / 1167 / 71	1599 / 1420 / 57										
	3	929 / 1187 / 46	1108 / 1428 / 37	1095 / 1127 / 66	1322 / 1372 / 53	1347 / 1274 / 78		1420 / 1239 / 64		988 / 1265 / 44		1167 / 1204 / 63	1394 / 1449 / 50	1425 / 1350 / 74		1506 / 1316 / 61											
50	1	854 / 661 / 84	982 / 824 / 69	806 / 797 / 102	983 / 1003 / 85	983 / 915 / 123	1183 / 1113 / 99	1017 / 875 / 99	1236 / 1074 / 81	870 / 700 / 79	1019 / 859 / 64	858 / 866 / 99	1011 / 1036 / 78	1057 / 987 / 118	1261 / 1189 / 94	1054 / 910 / 91	1321 / 1150 / 77										
	2	982 / 824 / 69	1200 / 1021 / 57	944 / 980 / 82	1171 / 1230 / 68	1183 / 1128 / 99	1430 / 1373 / 80	1236 / 1089 / 81	1512 / 1340 / 66	1019 / 859 / 64	1226 / 1046 / 52	1011 / 1054 / 78	1245 / 1311 / 65	1261 / 1205 / 94	1507 / 1450 / 76	1321 / 1167 / 77	1599 / 1420 / 62										
	3	929 / 1187 / 50	1108 / 1428 / 40	1095 / 1127 / 72	1322 / 1372 / 58	1347 / 1274 / 85		1420 / 1239 / 70		988 / 1265 / 47		1167 / 1204 / 68	1394 / 1449 / 55	1425 / 1350 / 80		1506 / 1316 / 66											
60	1	902 / 661 / 97	982 / 824 / 80	846 / 797 / 118	983 / 1003 / 99	983 / 915 / 143	1183 / 1113 / 115	1017 / 875 / 115	1236 / 1074 / 94	915 / 700 / 91	1019 / 859 / 74	886 / 866 / 114	1011 / 1036 / 91	1057 / 987 / 137	1261 / 1189 / 110	1054 / 910 / 107	1321 / 1150 / 90										
	2	982 / 824 / 80	1200 / 1021 / 66	944 / 980 / 95	1171 / 1230 / 79	1183 / 1128 / 115	1430 / 1373 / 94	1236 / 1089 / 94	1512 / 1340 / 77	1019 / 859 / 74	1226 / 1046 / 60	1011 / 1054 / 91	1245 / 1311 / 75	1261 / 1205 / 110	1507 / 1450 / 88	1321 / 1167 / 90	1599 / 1420 / 73										
	3	929 / 1187 / 57	1108 / 1428 / 46	1095 / 1127 / 83	1322 / 1372 / 67	1347 / 1274 / 99		1420 / 1239 / 81		988 / 1265 / 54		1167 / 1204 / 79	1394 / 1449 / 63	1425 / 1350 / 94		1506 / 1316 / 77											
Wind Speed [mph]		190								200																	
45	1	880 / 732 / 68	1090 / 922 / 57	888 / 900 / 84	1076 / 1105 / 69	1082 / 1013 / 100	1333 / 1260 / 82	1126 / 974 / 81	1401 / 1221 / 67	940 / 786 / 66	1157 / 982 / 55	945 / 961 / 81	1136 / 1170 / 66	1145 / 1075 / 95	1398 / 1323 / 78	1194 / 1035 / 77	1473 / 1286 / 64										
	2	1090 / 922 / 57	1299 / 1111 / 46	1076 / 1125 / 69	1313 / 1385 / 56	1333 / 1277 / 82		1401 / 1239 / 67	1676 / 1489 / 54	1157 / 982 / 55	1365 / 1171 / 44	1136 / 1191 / 66	1372 / 1450 / 53	1398 / 1341 / 78		1473 / 1305 / 64											
	3	1041 / 1336 / 41		1233 / 1276 / 60		1493 / 1417 / 69		1584 / 1386 / 57		1088 / 1400 / 39		1293 / 1340 / 56		1653 / 1571 / 69		1651 / 1446 / 54											
50	1	881 / 732 / 74	1090 / 922 / 62	888 / 900 / 92	1076 / 1105 / 75	1082 / 1013 / 109	1333 / 1260 / 90	1126 / 974 / 88	1401 / 1221 / 73	940 / 786 / 72	1157 / 982 / 59	945 / 961 / 88	1136 / 1170 / 72	1145 / 1075 / 104	1398 / 1323 / 85	1194 / 1035 / 84	1473 / 1286 / 70										
	2	1090 / 922 / 62	1299 / 1111 / 50	1076 / 1125 / 75	1313 / 1385 / 61	1333 / 1277 / 90		1401 / 1239 / 73	1676 / 1489 / 59	1157 / 982 / 59	1365 / 1171 / 47	1136 / 1191 / 72	1372 / 1450 / 58	1398 / 1341 / 85		1473 / 1305 / 70											
	3	1041 / 1336 / 45		1233 / 1276 / 65		1493 / 1417 / 76		1584 / 1386 / 62		1088 / 1400 / 42		1293 / 1340 / 61		1653 / 1571 / 76		1651 / 1446 / 59											
60	1	924 / 732 / 86	1090 / 922 / 71	891 / 900 / 107	1076 / 1105 / 87	1082 / 1013 / 126	1333 / 1260 / 104	1126 / 974 / 102	1401 / 1221 / 85	960 / 786 / 83	1157 / 982 / 69	945 / 961 / 103	1136 / 1170 / 83	1145 / 1075 / 121	1398 / 1323 / 99	1194 / 1035 / 98	1473 / 1286 / 81										
	2	1090 / 922 / 71	1299 / 1111 / 57	1076 / 1125 / 87	1313 / 1385 / 71	1333 / 1277 / 104		1401 / 1239 / 85	1676 / 1489 / 68	1157 / 982 / 69	1365 / 1171 / 54	1136 / 1191 / 83	1372 / 1450 / 67	1398 / 1341 / 99		1473 / 1305 / 81											
	3	1041 / 1336 / 52		1233 / 1276 / 75		1493 / 1417 / 88		1584 / 1386 / 73		1088 / 1400 / 49		1293 / 1340 / 71		1653 / 1571 / 88		1651 / 1446 / 68											

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	3 = 3
	1 = 1
30 - 45	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95										100										105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge							
		70	1	775 / 337 / 139	821 / 457 / 123	772 / 455 / 189	829 / 611 / 166	781 / 564 / 246	853 / 724 / 208	661 / 548 / 199	812 / 688 / 165	785 / 362 / 136	836 / 488 / 120	784 / 488 / 184	847 / 651 / 162	802 / 603 / 240	879 / 768 / 202	703 / 586 / 194	834 / 708 / 156	795 / 387 / 133	851 / 519 / 116	797 / 520 / 180	865 / 691 / 157	822 / 640 / 234	875 / 786 / 190	725 / 607 / 185	878 / 748 / 151				
Wind Speed [mph]		110										115																			
70	1	804 / 411 / 129	890 / 564 / 116	809 / 552 / 175	882 / 730 / 153	843 / 677 / 227	897 / 825 / 183	743 / 625 / 175	920 / 787 / 146	814 / 435 / 126	905 / 595 / 113	820 / 583 / 171	871 / 744 / 144	862 / 714 / 221	931 / 863 / 177	780 / 658 / 170	960 / 823 / 141	ASCE Group Zone													
70	2	890 / 564 / 116	982 / 737 / 100	856 / 721 / 148	911 / 892 / 121	897 / 836 / 183	1100 / 1043 / 152	920 / 798 / 146	1096 / 962 / 117	905 / 595 / 113	1001 / 772 / 97	871 / 758 / 144	927 / 930 / 117	931 / 874 / 177	1139 / 1082 / 145	960 / 835 / 141	1135 / 998 / 112	Mono Slope													
	3	822 / 892 / 91	849 / 1057 / 71	903 / 835 / 130	1019 / 1042 / 108	1020 / 952 / 158	1217 / 1147 / 127	1058 / 912 / 127	1275 / 1109 / 102	833 / 931 / 87	858 / 1092 / 68	919 / 873 / 126	1054 / 1081 / 103	1058 / 989 / 152	1315 / 1241 / 127	1099 / 949 / 122	1312 / 1143 / 97														
80	1	840 / 401 / 141	915 / 549 / 127	839 / 538 / 191	928 / 730 / 171	857 / 659 / 250	928 / 825 / 208	743 / 625 / 197	920 / 787 / 164	847 / 424 / 137	928 / 578 / 123	849 / 568 / 186	914 / 744 / 161	875 / 693 / 243	948 / 863 / 200	780 / 658 / 191	960 / 823 / 159	1 = 1													
80	2	915 / 549 / 127	993 / 713 / 109	900 / 721 / 166	947 / 892 / 136	928 / 836 / 172	1100 / 1043 / 172	920 / 798 / 164	1096 / 962 / 131	928 / 578 / 123	1009 / 747 / 105	914 / 758 / 161	962 / 930 / 131	948 / 874 / 200	1139 / 1082 / 165	960 / 835 / 159	1135 / 998 / 126											2 = 2			
	3	862 / 892 / 101	881 / 1057 / 80	942 / 835 / 146	1029 / 1042 / 121	1020 / 952 / 179	1217 / 1147 / 143	1058 / 912 / 142	1275 / 1109 / 115	872 / 931 / 98	888 / 1092 / 76	957 / 873 / 141	1054 / 1081 / 116	1058 / 989 / 172	1315 / 1241 / 143	1099 / 949 / 137	1312 / 1143 / 110														
90	1	873 / 391 / 152	938 / 533 / 136	867 / 523 / 207	945 / 708 / 184	896 / 659 / 280	960 / 825 / 232	743 / 625 / 219	920 / 787 / 182	878 / 413 / 148	948 / 561 / 132	874 / 552 / 201	957 / 744 / 179	912 / 693 / 272	978 / 863 / 224	780 / 658 / 213	960 / 823 / 176	3 = 3													
90	2	938 / 533 / 136	1036 / 713 / 120	945 / 721 / 184	984 / 892 / 151	960 / 836 / 232	1100 / 1043 / 192	920 / 798 / 182	1096 / 962 / 146	948 / 561 / 132	1050 / 747 / 116	957 / 758 / 179	997 / 930 / 145	978 / 874 / 224	1139 / 1082 / 184	960 / 835 / 176	1135 / 998 / 140														
	3	902 / 892 / 112	912 / 1057 / 88	981 / 835 / 162	1062 / 1042 / 134	1020 / 952 / 200	1217 / 1147 / 160	1058 / 912 / 158	1275 / 1109 / 128	910 / 931 / 108	918 / 1092 / 84	995 / 873 / 156	1076 / 1081 / 129	1058 / 989 / 192	1315 / 1241 / 160	1099 / 949 / 152	1312 / 1143 / 122														
Wind Speed [mph]		120										130																			
70	1	822 / 459 / 123	919 / 624 / 110	831 / 613 / 166	884 / 779 / 139	855 / 727 / 208	967 / 898 / 171	815 / 691 / 165	999 / 858 / 136	814 / 435 / 126	905 / 595 / 113	820 / 583 / 171	871 / 744 / 144	862 / 714 / 221	931 / 863 / 177	780 / 658 / 170	960 / 823 / 141	1 = 1													
70	2	919 / 624 / 110	1019 / 806 / 94	884 / 793 / 139	941 / 965 / 112	967 / 910 / 171	1173 / 1117 / 139	999 / 871 / 136	1223 / 1077 / 112	905 / 595 / 113	1001 / 772 / 97	871 / 758 / 144	927 / 930 / 117	931 / 874 / 177	1139 / 1082 / 145	960 / 835 / 141	1135 / 998 / 112														
	3	811 / 931 / 81	924 / 1178 / 68	934 / 909 / 121	1086 / 1116 / 99	1092 / 1023 / 145	1346 / 1272 / 120	1136 / 983 / 117	1343 / 1171 / 93	833 / 931 / 87	858 / 1092 / 68	919 / 873 / 126	1054 / 1081 / 103	1058 / 989 / 152	1315 / 1241 / 127	1099 / 949 / 122	1312 / 1143 / 97														
80	1	854 / 447 / 134	939 / 606 / 119	881 / 613 / 186	926 / 779 / 156	891 / 727 / 236	967 / 898 / 193	815 / 691 / 186	999 / 858 / 153	847 / 424 / 137	928 / 578 / 123	849 / 568 / 186	914 / 744 / 161	875 / 693 / 243	948 / 863 / 200	780 / 658 / 191	960 / 823 / 159	2 = 2													
80	2	939 / 606 / 119	1060 / 806 / 105	926 / 793 / 156	975 / 965 / 126	967 / 910 / 193	1173 / 1117 / 158	999 / 871 / 153	1223 / 1077 / 126	928 / 578 / 123	1009 / 747 / 105	914 / 758 / 161	962 / 930 / 131	948 / 874 / 200	1139 / 1082 / 165	960 / 835 / 159	1135 / 998 / 126														
	3	846 / 931 / 91	937 / 1178 / 76	971 / 909 / 136	1086 / 1116 / 111	1092 / 1023 / 165	1346 / 1272 / 136	1136 / 983 / 131	1343 / 1171 / 104	872 / 931 / 98	888 / 1092 / 76	957 / 873 / 141	1054 / 1081 / 116	1058 / 989 / 172	1315 / 1241 / 143	1099 / 949 / 137	1312 / 1143 / 110														
90	1	882 / 435 / 144	957 / 588 / 128	906 / 597 / 201	968 / 779 / 173	927 / 727 / 264	995 / 898 / 216	815 / 691 / 206	999 / 858 / 170	878 / 413 / 148	948 / 561 / 132	874 / 552 / 201	957 / 744 / 179	912 / 693 / 272	978 / 863 / 224	780 / 658 / 213	960 / 823 / 176	3 = 3													
90	2	957 / 588 / 128	1063 / 778 / 112	968 / 793 / 173	1008 / 965 / 140	995 / 910 / 216	1173 / 1117 / 176	999 / 871 / 170	1223 / 1077 / 140	948 / 561 / 132	1050 / 747 / 116	957 / 758 / 179	997 / 930 / 145	978 / 874 / 224	1139 / 1082 / 184	960 / 835 / 176	1135 / 998 / 140														
	3	882 / 931 / 100	967 / 1178 / 84	1007 / 909 / 151	1088 / 1116 / 123	1092 / 1023 / 184	1346 / 1272 / 152	1136 / 983 / 146	1343 / 1171 / 116	910 / 931 / 108	918 / 1092 / 84	995 / 873 / 156	1076 / 1081 / 129	1058 / 989 / 192	1315 / 1241 / 160	1099 / 949 / 152	1312 / 1143 / 122														

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								83in x 41.5in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge					
		70	1	853 / 495 / 123	932 / 653 / 107	865 / 661 / 166	897 / 811 / 135	871 / 759 / 202	1000 / 931 / 164	850 / 722 / 160	1034 / 891 / 131	870 / 541 / 116	956 / 707 / 100	860 / 700 / 153	918 / 871 / 126	901 / 819 / 190	1057 / 988 / 152	884 / 755 / 146	1097 / 948 / 122	910 / 601 / 113	1007 / 780 / 97	876 / 752 / 144	933 / 923 / 117	940 / 871 / 177	1150 / 1079 / 145	970 / 832 / 141	1146 / 993 / 112	932 / 653 / 107	865 / 661 / 166	897 / 811 / 135	871 / 759 / 202	1000 / 931 / 164	850 / 722 / 160	1034 / 891 / 131	870 / 541 / 116	956 / 707 / 100	860 / 700 / 153	918 / 871 / 126	901 / 819 / 190	1057 / 988 / 152	884 / 755 / 146	1097 / 948 / 122	910 / 601 / 113	1007 / 780 / 97	876 / 752 / 144	933 / 923 / 117	940 / 871 / 177	1150 / 1079 / 145	970 / 832 / 141

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimension used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		83in x 41.5in		Load: Up / Down / Side , lbs																											
Wind Speed [mph]		95								100								105															
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
100	1	870 / 306 / 171	932 / 433 / 158	876 / 423 / 239	927 / 578 / 215	862 / 536 / 327	960 / 724 / 292	689 / 548 / 274	812 / 688 / 227	873 / 328 / 166	941 / 462 / 153	882 / 452 / 233	938 / 615 / 209	877 / 571 / 318	983 / 768 / 283	715 / 586 / 267	834 / 708 / 214	899 / 359 / 166	949 / 490 / 149	887 / 481 / 227	950 / 652 / 202	892 / 606 / 309	973 / 786 / 265	725 / 607 / 254	878 / 748 / 207								
	2	932 / 433 / 158	1000 / 585 / 140	927 / 588 / 215	1008 / 789 / 190	960 / 734 / 292	1021 / 906 / 239	812 / 698 / 227	995 / 867 / 187	941 / 462 / 153	1015 / 621 / 136	938 / 626 / 209	1026 / 836 / 184	983 / 779 / 283	1047 / 955 / 230	834 / 719 / 214	1008 / 881 / 174	949 / 490 / 149	1029 / 656 / 131	950 / 663 / 202	1007 / 851 / 172	973 / 796 / 265	1070 / 1001 / 221	878 / 759 / 207	1054 / 923 / 167								
	3	943 / 786 / 140	952 / 964 / 114	976 / 710 / 196	1041 / 905 / 166	1013 / 852 / 256	1088 / 1019 / 203	918 / 785 / 194	1132 / 979 / 160	924 / 806 / 131	927 / 974 / 105	992 / 753 / 190	1061 / 954 / 160	1001 / 868 / 239	1136 / 1066 / 195	967 / 830 / 187	1184 / 1027 / 154	933 / 850 / 127	936 / 1017 / 101	1007 / 795 / 184	1079 / 999 / 153	1023 / 912 / 230	1179 / 1109 / 186	1014 / 872 / 180	1232 / 1070 / 147								
Wind Speed [mph]		110								115																							
100	1	902 / 380 / 162	957 / 517 / 145	893 / 509 / 221	960 / 687 / 196	907 / 640 / 300	991 / 825 / 256	743 / 625 / 240	920 / 787 / 200	905 / 402 / 158	995 / 561 / 145	923 / 552 / 221	1001 / 744 / 196	921 / 673 / 292	1009 / 863 / 247	780 / 658 / 234	960 / 823 / 194	902 / 380 / 162	957 / 517 / 145	893 / 509 / 221	960 / 687 / 196	907 / 640 / 300	991 / 825 / 256	743 / 625 / 240	920 / 787 / 200	905 / 402 / 158	995 / 561 / 145	923 / 552 / 221	1001 / 744 / 196	921 / 673 / 292	1009 / 863 / 247	780 / 658 / 234	960 / 823 / 194
	2	957 / 517 / 145	1042 / 689 / 127	960 / 699 / 196	1021 / 892 / 166	991 / 836 / 256	1100 / 1043 / 212	920 / 798 / 200	1096 / 962 / 160	995 / 561 / 145	1092 / 747 / 127	1001 / 758 / 196	1032 / 930 / 160	1009 / 874 / 247	1139 / 1082 / 203	960 / 835 / 194	1135 / 998 / 154	957 / 517 / 145	1042 / 689 / 127	960 / 699 / 196	1021 / 892 / 166	991 / 836 / 256	1100 / 1043 / 212	920 / 798 / 200	1096 / 962 / 160	995 / 561 / 145	1092 / 747 / 127	1001 / 758 / 196	1032 / 930 / 160	1009 / 874 / 247	1139 / 1082 / 203	960 / 835 / 194	1135 / 998 / 154
	3	942 / 892 / 123	943 / 1057 / 97	1021 / 835 / 178	1094 / 1042 / 147	1042 / 952 / 221	1217 / 1147 / 177	1058 / 912 / 174	1275 / 1109 / 140	949 / 931 / 118	948 / 1092 / 92	1033 / 873 / 172	1107 / 1081 / 141	1060 / 989 / 212	1315 / 1241 / 177	1099 / 949 / 167	1312 / 1143 / 134	942 / 892 / 123	943 / 1057 / 97	1021 / 835 / 178	1094 / 1042 / 147	1042 / 952 / 221	1217 / 1147 / 177	1058 / 912 / 174	1275 / 1109 / 140	949 / 931 / 118	948 / 1092 / 92	1033 / 873 / 172	1107 / 1081 / 141	1060 / 989 / 212	1315 / 1241 / 177	1099 / 949 / 167	1312 / 1143 / 134
Wind Speed [mph]		120								130																							
100	1	933 / 435 / 158	1002 / 588 / 140	929 / 580 / 215	1010 / 779 / 190	934 / 705 / 283	1024 / 898 / 239	815 / 691 / 227	999 / 858 / 187	905 / 402 / 158	995 / 561 / 145	923 / 552 / 221	1001 / 744 / 196	921 / 673 / 292	1009 / 863 / 247	780 / 658 / 234	960 / 823 / 194	933 / 435 / 158	1002 / 588 / 140	929 / 580 / 215	1010 / 779 / 190	934 / 705 / 283	1024 / 898 / 239	815 / 691 / 227	999 / 858 / 187	905 / 402 / 158	995 / 561 / 145	923 / 552 / 221	1001 / 744 / 196	921 / 673 / 292	1009 / 863 / 247	780 / 658 / 234	960 / 823 / 194
	2	1002 / 588 / 140	1103 / 778 / 123	1010 / 793 / 190	1042 / 965 / 153	1024 / 910 / 239	1173 / 1117 / 195	999 / 871 / 187	1223 / 1077 / 154	995 / 561 / 145	1092 / 747 / 127	1001 / 758 / 196	1032 / 930 / 160	1009 / 874 / 247	1139 / 1082 / 203	960 / 835 / 194	1135 / 998 / 154	1002 / 588 / 140	1103 / 778 / 123	1010 / 793 / 190	1042 / 965 / 153	1024 / 910 / 239	1173 / 1117 / 195	999 / 871 / 187	1223 / 1077 / 154	995 / 561 / 145	1092 / 747 / 127	1001 / 758 / 196	1032 / 930 / 160	1009 / 874 / 247	1139 / 1082 / 203	960 / 835 / 194	1135 / 998 / 154
	3	918 / 931 / 110	997 / 1178 / 92	1044 / 909 / 166	1117 / 1116 / 135	1092 / 1023 / 203	1346 / 1272 / 168	1136 / 983 / 160	1343 / 1171 / 127	949 / 931 / 118	948 / 1092 / 92	1033 / 873 / 172	1107 / 1081 / 141	1060 / 989 / 212	1315 / 1241 / 177	1099 / 949 / 167	1312 / 1143 / 134	918 / 931 / 110	997 / 1178 / 92	1044 / 909 / 166	1117 / 1116 / 135	1092 / 1023 / 203	1346 / 1272 / 168	1136 / 983 / 160	1343 / 1171 / 127	949 / 931 / 118	948 / 1092 / 92	1033 / 873 / 172	1107 / 1081 / 141	1060 / 989 / 212	1315 / 1241 / 177	1099 / 949 / 167	1312 / 1143 / 134

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				83in x 41.5in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
100	1	936 / 456 / 153	1009 / 613 / 136	933 / 608 / 209	1019 / 811 / 184	976 / 759 / 283	1038 / 931 / 230	850 / 722 / 220	1034 / 891 / 180	968 / 511 / 149	1053 / 684 / 131	969 / 679 / 202	1032 / 871 / 172	999 / 819 / 265	1058 / 988 / 212	884 / 755 / 200	1097 / 948 / 167	969 / 549 / 140	1060 / 728 / 123	1006 / 752 / 196	1039 / 923 / 160	1015 / 871 / 247	1150 / 1079 / 203	970 / 832 / 194	1146 / 993 / 154		
	2	1009 / 613 / 136	1113 / 808 / 118	1019 / 826 / 184	1050 / 997 / 147	1038 / 943 / 230	1203 / 1147 / 186	1034 / 904 / 180	1257 / 1108 / 147	1053 / 684 / 131	1173 / 895 / 114	1032 / 887 / 172	1058 / 1051 / 135	1058 / 1001 / 212	1313 / 1256 / 177	1097 / 962 / 167	1310 / 1158 / 134	1060 / 728 / 123	1181 / 942 / 105	1039 / 939 / 160	1108 / 1143 / 129	1150 / 1093 / 203	1343 / 1287 / 159	1146 / 1008 / 154	1415 / 1252 / 127		
	3	959 / 1002 / 110	999 / 1208 / 88	1053 / 942 / 160	1124 / 1146 / 129	1122 / 1053 / 195	1370 / 1297 / 159	1170 / 1014 / 154	1444 / 1260 / 127	961 / 1060 / 101	1047 / 1318 / 83	1064 / 1000 / 147	1215 / 1255 / 123	1227 / 1156 / 186	1484 / 1407 / 150	1224 / 1064 / 140	1481 / 1295 / 114	954 / 1103 / 92	1045 / 1343 / 75	1115 / 1092 / 141	1242 / 1286 / 111	1328 / 1253 / 177	1587 / 1508 / 142	1325 / 1154 / 134	1585 / 1388 / 107		
Wind Speed [mph]		170								180																	
100	1	1000 / 603 / 136	1101 / 794 / 118	1009 / 797 / 184	1081 / 1003 / 153	1025 / 915 / 230	1183 / 1113 / 186	1017 / 875 / 180	1236 / 1074 / 147	1029 / 656 / 131	1141 / 859 / 114	1043 / 866 / 178	1075 / 1036 / 141	1070 / 987 / 221	1261 / 1189 / 177	1054 / 910 / 167	1321 / 1150 / 140										
	2	1101 / 794 / 118	1233 / 1021 / 101	1038 / 980 / 147	1171 / 1230 / 123	1183 / 1128 / 186	1430 / 1373 / 150	1236 / 1089 / 147	1512 / 1340 / 120	1141 / 859 / 114	1226 / 1046 / 92	1075 / 1054 / 141	1245 / 1311 / 117	1261 / 1205 / 177	1507 / 1450 / 142	1321 / 1167 / 140	1599 / 1420 / 114										
	3	987 / 1187 / 88	1108 / 1428 / 70	1110 / 1127 / 129	1322 / 1372 / 105	1347 / 1274 / 159		1420 / 1239 / 127		1016 / 1265 / 83		1167 / 1204 / 123	1394 / 1449 / 98	1425 / 1350 / 150		1506 / 1316 / 120											
Wind Speed [mph]		190								200																	
100	1	1059 / 708 / 127	1180 / 922 / 110	1038 / 900 / 166	1110 / 1105 / 135	1082 / 1013 / 203	1333 / 1260 / 168	1126 / 974 / 160	1401 / 1221 / 134	1087 / 759 / 123	1215 / 982 / 105	1067 / 961 / 160	1141 / 1170 / 129	1145 / 1075 / 195	1398 / 1323 / 159	1194 / 1035 / 154	1473 / 1286 / 127										
	2	1180 / 922 / 110	1299 / 1111 / 88	1110 / 1125 / 135	1313 / 1385 / 111	1333 / 1277 / 168		1401 / 1239 / 134	1676 / 1489 / 107	1215 / 982 / 105	1365 / 1171 / 83	1141 / 1191 / 129	1372 / 1450 / 105	1398 / 1341 / 159		1473 / 1305 / 127											
	3	1042 / 1336 / 79		1233 / 1276 / 117		1493 / 1417 / 142		1584 / 1386 / 114		1088 / 1400 / 75		1293 / 1340 / 111		1653 / 1571 / 142		1651 / 1446 / 107											

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	425 / 282 / 50	512 / 372 / 43	455 / 384 / 55	537 / 488 / 46	524 / 436 / 55	632 / 552 / 46	526 / 412 / 61	640 / 522 / 51	445 / 302 / 49	535 / 395 / 41	468 / 403 / 53	548 / 505 / 43	547 / 461 / 53	655 / 577 / 44	550 / 435 / 59	665 / 546 / 49	464 / 321 / 47	555 / 416 / 39	487 / 426 / 51	568 / 529 / 41	568 / 484 / 51	693 / 615 / 43	572 / 457 / 57	687 / 567 / 46
	2	512 / 372 / 43	619 / 478 / 36	527 / 488 / 45	628 / 611 / 37	632 / 559 / 46	757 / 692 / 37	640 / 529 / 51	773 / 657 / 42	535 / 395 / 41	643 / 502 / 34	548 / 514 / 43	650 / 637 / 35	655 / 585 / 44	801 / 736 / 36	665 / 554 / 49	796 / 680 / 40	555 / 416 / 39	664 / 523 / 32	568 / 539 / 41	668 / 660 / 33	693 / 623 / 43	818 / 755 / 34	687 / 576 / 46	839 / 719 / 38
	3	506 / 589 / 32	595 / 720 / 26	604 / 570 / 39	704 / 690 / 32	734 / 656 / 41	885 / 811 / 33	728 / 606 / 44	880 / 748 / 36	522 / 614 / 31	627 / 765 / 25	627 / 597 / 38	745 / 734 / 31	757 / 681 / 38	903 / 830 / 31	752 / 629 / 42	929 / 792 / 35	551 / 653 / 30	659 / 808 / 25	646 / 621 / 36	761 / 754 / 29	776 / 702 / 36	947 / 874 / 30	794 / 667 / 41	943 / 806 / 33
5	1	425 / 282 / 50	512 / 372 / 43	455 / 384 / 64	537 / 488 / 53	524 / 436 / 68	632 / 552 / 57	526 / 412 / 70	640 / 522 / 58	445 / 302 / 49	535 / 395 / 41	468 / 403 / 61	548 / 505 / 50	547 / 461 / 66	655 / 577 / 54	550 / 435 / 68	665 / 546 / 56	464 / 321 / 47	555 / 416 / 39	487 / 426 / 59	568 / 529 / 48	568 / 484 / 63	693 / 615 / 53	572 / 457 / 65	687 / 567 / 53
	2	512 / 372 / 43	619 / 478 / 36	527 / 488 / 52	628 / 611 / 43	632 / 559 / 57	757 / 692 / 46	640 / 529 / 58	773 / 657 / 48	535 / 395 / 41	643 / 502 / 34	548 / 514 / 50	650 / 637 / 41	655 / 585 / 54	801 / 736 / 45	665 / 554 / 56	796 / 680 / 45	555 / 416 / 39	664 / 523 / 32	568 / 539 / 48	668 / 660 / 39	693 / 623 / 53	818 / 755 / 42	687 / 576 / 53	839 / 719 / 44
	3	506 / 589 / 32	595 / 720 / 26	604 / 570 / 46	704 / 690 / 36	734 / 656 / 50	885 / 811 / 41	728 / 606 / 50	880 / 748 / 41	522 / 614 / 31	627 / 765 / 25	627 / 597 / 44	745 / 734 / 35	757 / 681 / 47	903 / 830 / 38	752 / 629 / 48	929 / 792 / 40	551 / 653 / 30	659 / 808 / 25	646 / 621 / 42	761 / 754 / 33	776 / 702 / 45	947 / 874 / 37	794 / 667 / 47	943 / 806 / 37
10	1	478 / 278 / 59	525 / 372 / 51	495 / 384 / 83	537 / 488 / 68	524 / 436 / 89	632 / 552 / 74	526 / 412 / 85	640 / 522 / 71	495 / 302 / 58	537 / 395 / 49	497 / 403 / 79	548 / 505 / 64	547 / 461 / 85	655 / 577 / 70	550 / 435 / 82	665 / 546 / 68	504 / 321 / 56	555 / 416 / 47	507 / 426 / 76	568 / 529 / 62	568 / 484 / 82	693 / 615 / 68	572 / 457 / 79	687 / 567 / 65
	2	525 / 372 / 51	619 / 478 / 42	527 / 488 / 67	628 / 611 / 55	632 / 559 / 74	757 / 692 / 60	640 / 529 / 71	773 / 657 / 58	537 / 395 / 49	643 / 502 / 40	548 / 514 / 64	650 / 637 / 52	655 / 585 / 70	801 / 736 / 58	665 / 554 / 68	796 / 680 / 55	555 / 416 / 47	664 / 523 / 39	568 / 539 / 62	668 / 660 / 50	693 / 623 / 68	818 / 755 / 55	687 / 576 / 65	839 / 719 / 53
	3	506 / 589 / 39	595 / 720 / 31	604 / 570 / 59	704 / 690 / 47	734 / 656 / 65	885 / 811 / 53	728 / 606 / 61	880 / 748 / 50	522 / 614 / 37	627 / 765 / 30	627 / 597 / 56	745 / 734 / 46	757 / 681 / 62	903 / 830 / 50	752 / 629 / 58	929 / 792 / 49	551 / 653 / 36	659 / 808 / 29	646 / 621 / 54	761 / 754 / 43	776 / 702 / 58	947 / 874 / 48	794 / 667 / 57	943 / 806 / 45
0	1	482 / 340 / 46	575 / 435 / 38	506 / 449 / 49	586 / 551 / 39	587 / 505 / 49	712 / 635 / 41	593 / 477 / 54	706 / 586 / 44	498 / 357 / 44	592 / 453 / 36	523 / 470 / 47	616 / 584 / 39	618 / 536 / 48	747 / 670 / 39	612 / 496 / 52	742 / 619 / 43	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 39	896 / 834 / 32	742 / 628 / 43	892 / 770 / 35
	2	575 / 435 / 38	699 / 555 / 32	586 / 561 / 39	703 / 699 / 32	712 / 644 / 41	858 / 795 / 33	706 / 595 / 44	881 / 758 / 37	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 39	896 / 834 / 32	742 / 628 / 43	892 / 770 / 35	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 39	896 / 834 / 32	742 / 628 / 43	892 / 770 / 35
	3	563 / 673 / 29	667 / 822 / 23	663 / 642 / 34	797 / 794 / 28	815 / 741 / 35	989 / 916 / 29	810 / 683 / 38	985 / 844 / 31	590 / 710 / 28	694 / 860 / 22	696 / 677 / 33	832 / 832 / 27	853 / 778 / 34	1028 / 955 / 28	848 / 718 / 37	1024 / 880 / 30	590 / 710 / 28	694 / 860 / 22	696 / 677 / 33	832 / 832 / 27	853 / 778 / 34	1028 / 955 / 28	848 / 718 / 37	1024 / 880 / 30
5	1	482 / 340 / 46	575 / 435 / 38	506 / 449 / 57	586 / 551 / 46	587 / 505 / 61	712 / 635 / 50	593 / 477 / 62	706 / 586 / 50	498 / 357 / 44	592 / 453 / 36	523 / 470 / 55	616 / 584 / 45	618 / 536 / 59	747 / 670 / 49	612 / 496 / 60	742 / 619 / 49	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 49	896 / 834 / 40	742 / 628 / 49	892 / 770 / 40
	2	575 / 435 / 38	699 / 555 / 32	586 / 561 / 46	703 / 699 / 38	712 / 644 / 50	858 / 795 / 41	706 / 595 / 46	881 / 758 / 43	592 / 453 / 36	715 / 573 / 30	602 / 581 / 44	715 / 715 / 35	747 / 679 / 49	896 / 834 / 40	742 / 628 / 49	892 / 770 / 40	592 / 453 / 36	715 / 573 / 30	602 / 581 / 44	715 / 715 / 35	747 / 679 / 49	896 / 834 / 40	742 / 628 / 49	892 / 770 / 40
	3	563 / 673 / 29	667 / 822 / 23	663 / 642 / 40	797 / 794 / 32	815 / 741 / 44	989 / 916 / 36	810 / 683 / 44	985 / 844 / 36	590 / 710 / 28	694 / 860 / 22	696 / 677 / 39	832 / 832 / 31	853 / 778 / 42	1028 / 955 / 34	848 / 718 / 43	1024 / 880 / 35	590 / 710 / 28	694 / 860 / 22	696 / 677 / 39	832 / 832 / 31	853 / 778 / 42	1028 / 955 / 34	848 / 718 / 43	1024 / 880 / 35
10	1	512 / 340 / 54	575 / 435 / 45	516 / 449 / 74	586 / 551 / 59	587 / 505 / 79	712 / 635 / 65	593 / 477 / 76	706 / 586 / 61	520 / 357 / 52	592 / 453 / 43	524 / 470 / 71	616 / 584 / 58	618 / 536 / 77	747 / 670 / 63	612 / 496 / 73	742 / 619 / 60	592 / 453 / 43	715 / 573 / 36	602 / 581 / 46	715 / 715 / 46	747 / 679 / 63	896 / 834 / 51	742 / 628 / 60	892 / 770 / 49
	2	575 / 435 / 45	699 / 555 / 38	586 / 561 / 59	703 / 699 / 48	712 / 644 / 65	858 / 795 / 53	706 / 595 / 61	881 / 758 / 52	592 / 453 / 43	715 / 573 / 36	602 / 581 / 56	715 / 715 / 46	747 / 679 / 63	896 / 834 / 51	742 / 628 / 60	892 / 770 / 49	592 / 453 / 43	715 / 573 / 36	602 / 581 / 56	715 / 715 / 46	747 / 679 / 63	896 / 834 / 51	742 / 628 / 60	892 / 770 / 49
	3	563 / 673 / 34	667 / 822 / 27	663 / 642 / 51	797 / 794 / 42	815 / 741 / 57	989 / 916 / 46	810 / 683 / 53	985 / 844 / 44	590 / 710 / 33	694 / 860 / 26	696 / 677 / 50	832 / 832 / 40	853 / 778 / 55	1028 / 955 / 45	848 / 718 / 52	1024 / 880 / 42	590 / 710 / 33	694 / 860 / 26	696 / 677 / 50	832 / 832 / 40	853 / 778 / 55	1028 / 955 / 45	848 / 718 / 52	1024 / 880 / 42
0	1	514 / 374 / 43	621 / 480 / 36	539 / 490 / 46	631 / 603 / 37	634 / 554 / 46	760 / 685 / 37	628 / 512 / 50	776 / 650 / 42	498 / 357 / 44	592 / 453 / 36	523 / 470 / 47	616 / 584 / 39	618 / 536 / 48	747 / 670 / 39	612 / 496 / 52	742 / 619 / 43	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 39	896 / 834 / 32	742 / 628 / 43	892 / 770 / 35
	2	621 / 480 / 36	748 / 603 / 29	631 / 614 / 37	746 / 750 / 30	760 / 694 / 37	900 / 840 / 30	776 / 660 / 42	928 / 803 / 34	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 39	896 / 834 / 32	742 / 628 / 43	892 / 770 / 35	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 39	896 / 834 / 32	742 / 628 / 43	892 / 770 / 35
	3	597 / 723 / 26	720 / 895 / 22	707 / 692 / 32	835 / 839 / 25	860 / 788 / 32	1065 / 991 / 27	884 / 751 / 36	1061 / 913 / 29	590 / 710 / 28	694 / 860 / 22	696 / 677 / 33	832 / 832 / 27	853 / 778 / 34	1028 / 955 / 28	848 / 718 / 37	1024 / 880 / 30	590 / 710 / 28	694 / 860 / 22	696 / 677 / 33	832 / 832 / 27	853 / 778 / 34	1028 / 955 / 28	848 / 718 / 37	1024 / 880 / 30
5	1	514 / 374 / 43	621 / 480 / 36	539 / 490 / 53	631 / 603 / 43	634 / 554 / 57	760 / 685 / 46	628 / 512 / 57	776 / 650 / 48	498 / 357 / 44	592 / 453 / 36	523 / 470 / 55	616 / 584 / 45	618 / 536 / 59	747 / 670 / 49	612 / 496 / 60	742 / 619 / 49	592 / 453 / 36	715 / 573 / 30	602 / 581 / 38	715 / 715 / 31	747 / 679 / 49	896 / 834 / 40	742 / 628 / 49	892 / 770 / 40
	2	621 / 480 / 36	748 / 603 / 29	631 / 614 / 43	746 / 750 / 34	760 / 694 / 46	900 / 840 / 37	776 / 660 / 48	928 / 803 / 39	592 / 453 / 36	715 / 573 / 30	602 / 581 / 44	715 / 715 / 35	747 / 679 / 49	896 / 834 / 40	742 / 628 / 49	892 / 770 / 40	592 / 453 / 36	715 / 573 / 30	602 / 581 / 44	715 / 715 / 35	747 / 679 / 49	896 / 834 / 40	742 / 628 / 49	892 / 770 / 40
	3	597 / 723 / 26	720 / 895 / 22	707 / 692 / 36	835 / 839 / 29	860 / 788 / 40	1065 / 991 / 33	884 / 751 / 41	1061 / 913 / 33	590 / 710 / 28	694 / 860 / 22	696 / 677 / 39	832 / 832 / 31	853 / 778 / 42	1028 / 955 / 34	848 / 718 / 43	1024 / 880 / 35	590 / 710 / 28	694 / 860 / 22	696 / 677 / 39	832 / 832 / 31	853 / 778 / 42	1028 / 955 / 34	848 / 718 / 43	1024 / 880 / 35
10	1	527 / 374 / 51	621 / 480 / 42	539 / 490 / 68	631 / 603 / 55	634 / 554 / 74	760 / 685 / 60	628 / 512 / 69	776 / 650 / 58	520 / 357 / 52	592 / 453 / 43	524 / 470 / 71	616 / 584 / 58	618 / 536 / 77	747 / 670 / 63	612 / 496 / 73	742 / 619 / 60	592 / 453 / 43	715 / 573 / 36	602 / 581 / 46	715 / 715 / 46	747 / 679 / 63	896 / 834 / 51	742 / 628 / 60	892 / 770 / 49
	2	621 / 480 / 42	748 / 603 / 35	631 / 614 / 55	746 / 750 / 44	760 / 694 / 60	900 / 840 / 48	776 / 660 / 58	928 / 803 / 47	592 / 453 / 43	715 / 573 / 36	602 / 581 / 56	715 / 715 / 46	747 / 679 / 63	896 / 834 / 51	742 / 628 / 60	892 / 770 / 49	592 / 453 / 43	715 / 573 / 36	602 / 581 / 56	715 / 715 / 46	747 / 679 / 63	896 / 834 / 51	742 / 628 / 60	892 / 770 / 49</

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																																																																																																																																																																																																																																																																																													
Wind Speed [mph]		140																150																160																																																																																																																																																																																																																																																																													
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																																																																																																																																																																																																																																																																	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																																																																																																																																																																																																																																																															
		0	1	529 / 390 / 41	635 / 495 / 34	554 / 509 / 44	643 / 618 / 35	664 / 584 / 45	792 / 717 / 36	657 / 539 / 49	787 / 661 / 40	565 / 425 / 39	673 / 532 / 32	577 / 540 / 40	695 / 676 / 33	703 / 625 / 42	851 / 777 / 34	697 / 577 / 45	847 / 717 / 37	598 / 458 / 36	722 / 578 / 30	608 / 577 / 38	722 / 710 / 31	754 / 677 / 39	905 / 831 / 32	749 / 625 / 43	900 / 766 / 35	5	1	529 / 390 / 41	635 / 495 / 34	554 / 509 / 51	643 / 618 / 41	664 / 584 / 55	792 / 717 / 45	657 / 539 / 56	787 / 661 / 45	565 / 425 / 39	673 / 532 / 32	577 / 540 / 47	695 / 676 / 39	703 / 625 / 51	851 / 777 / 42	697 / 577 / 52	847 / 717 / 43	598 / 458 / 36	722 / 578 / 30	608 / 577 / 44	722 / 710 / 35	754 / 677 / 49	905 / 831 / 40	749 / 625 / 49	900 / 766 / 40	10	1	532 / 390 / 49	635 / 495 / 40	554 / 509 / 66	643 / 618 / 52	664 / 584 / 72	792 / 717 / 58	657 / 539 / 68	787 / 661 / 55	565 / 425 / 46	673 / 532 / 38	577 / 540 / 60	695 / 676 / 50	703 / 625 / 67	851 / 777 / 55	697 / 577 / 63	847 / 717 / 52	598 / 458 / 43	722 / 578 / 36	608 / 577 / 56	722 / 710 / 46	754 / 677 / 63	905 / 831 / 51	749 / 625 / 60	900 / 766 / 49	2	635 / 495 / 34	781 / 632 / 29	643 / 629 / 41	776 / 783 / 33	792 / 727 / 45	932 / 872 / 36	787 / 671 / 45	962 / 835 / 37	673 / 532 / 32	817 / 668 / 26	676 / 670 / 38	803 / 817 / 30	825 / 763 / 41	1027 / 966 / 34	847 / 727 / 43	1023 / 891 / 35	722 / 578 / 30	869 / 717 / 25	722 / 722 / 35	847 / 868 / 28	875 / 814 / 38	1076 / 1016 / 32	900 / 777 / 40	1117 / 977 / 33	3	620 / 755 / 25	743 / 928 / 21	736 / 725 / 31	864 / 871 / 24	892 / 820 / 31	1098 / 1024 / 26	918 / 782 / 35	1094 / 943 / 28	663 / 815 / 24	784 / 985 / 19	791 / 786 / 29	952 / 965 / 24	950 / 879 / 29	1152 / 1079 / 24	981 / 840 / 33	1201 / 1039 / 27	701 / 868 / 22	852 / 1076 / 18	812 / 812 / 30	997 / 1015 / 25	1038 / 964 / 34	1249 / 1174 / 28	1034 / 889 / 35	1246 / 1081 / 28	0	1	640 / 498 / 35	768 / 621 / 29	649 / 623 / 36	763 / 756 / 29	779 / 705 / 36	950 / 877 / 30	796 / 669 / 41	946 / 809 / 33	664 / 523 / 32	809 / 660 / 27	668 / 648 / 33	799 / 797 / 27	818 / 745 / 34	987 / 915 / 28	839 / 709 / 38	1020 / 875 / 31	5	1	640 / 498 / 35	768 / 621 / 42	649 / 623 / 33	763 / 756 / 33	779 / 705 / 45	950 / 877 / 37	796 / 669 / 47	946 / 809 / 37	664 / 523 / 32	809 / 660 / 27	668 / 648 / 39	799 / 797 / 31	818 / 745 / 42	987 / 915 / 34	839 / 709 / 44	1020 / 875 / 36	10	1	640 / 498 / 41	768 / 621 / 34	649 / 623 / 54	763 / 756 / 43	779 / 705 / 58	950 / 877 / 48	796 / 669 / 57	946 / 809 / 45	664 / 523 / 39	809 / 660 / 32	668 / 648 / 50	799 / 797 / 40	818 / 745 / 55	987 / 915 / 45	839 / 709 / 53	1020 / 875 / 44	2	768 / 621 / 29	914 / 759 / 23	763 / 770 / 29	918 / 945 / 24	950 / 889 / 30	1111 / 1053 / 24	946 / 820 / 33	1158 / 1015 / 27	809 / 660 / 27	986 / 823 / 22	799 / 811 / 27	947 / 980 / 22	987 / 927 / 28	1186 / 1128 / 23	1020 / 888 / 31	1239 / 1090 / 26	3	731 / 912 / 21	876 / 1111 / 17	882 / 887 / 25	1029 / 1052 / 20	1079 / 1006 / 26	1274 / 1200 / 21	1120 / 966 / 29	1337 / 1163 / 23	785 / 985 / 20	933 / 1187 / 16	915 / 926 / 24	1099 / 1127 / 19	1157 / 1083 / 25	1351 / 1275 / 19	1154 / 997 / 27	1423 / 1240 / 22	0	1	699 / 557 / 31	845 / 694 / 25	701 / 686 / 32	857 / 860 / 26	880 / 806 / 33	1055 / 981 / 27	876 / 743 / 36	1051 / 904 / 29	731 / 587 / 29	904 / 747 / 25	729 / 718 / 30	882 / 889 / 24	910 / 837 / 31	1120 / 1045 / 26	937 / 798 / 35	1116 / 963 / 28	5	1	699 / 557 / 31	845 / 694 / 25	701 / 686 / 36	857 / 860 / 30	880 / 806 / 41	1055 / 981 / 33	876 / 743 / 41	1051 / 904 / 33	731 / 587 / 29	904 / 747 / 25	729 / 718 / 34	882 / 889 / 28	910 / 837 / 38	1120 / 1045 / 32	937 / 798 / 40	1116 / 963 / 32	10	1	699 / 557 / 37	845 / 694 / 30	701 / 686 / 47	857 / 860 / 39	880 / 806 / 53	1055 / 981 / 43	876 / 743 / 50	1051 / 904 / 41	731 / 587 / 35	904 / 747 / 29	729 / 718 / 44	882 / 889 / 36	910 / 837 / 50	1120 / 1045 / 41	937 / 798 / 49	1116 / 963 / 39	2	845 / 694 / 25	1017 / 853 / 21	828 / 845 / 29	1009 / 1048 / 24	1055 / 995 / 33	1257 / 1198 / 27	1051 / 917 / 33	1317 / 1160 / 28	904 / 747 / 25	1081 / 911 / 20	882 / 905 / 28	1067 / 1112 / 23	1073 / 1015 / 31	1321 / 1263 / 25	1116 / 977 / 32	1388 / 1225 / 27	3	802 / 1011 / 18	985 / 1258 / 15	977 / 993 / 23	1164 / 1197 / 18	1175 / 1103 / 23	1420 / 1343 / 18	1228 / 1064 / 26	1501 / 1309 / 21	848 / 1073 / 18	1032 / 1322 / 15	994 / 1014 / 21	1223 / 1261 / 17	1238 / 1165 / 22	1479 / 1401 / 17
0	1		640 / 498 / 35	768 / 621 / 29	649 / 623 / 36	763 / 756 / 29	779 / 705 / 36	950 / 877 / 30	796 / 669 / 41	946 / 809 / 33	664 / 523 / 32	809 / 660 / 27	668 / 648 / 33	799 / 797 / 27	818 / 745 / 34	987 / 915 / 28	839 / 709 / 38	1020 / 875 / 31	5	1	640 / 498 / 35	768 / 621 / 42	649 / 623 / 33	763 / 756 / 33	779 / 705 / 45	950 / 877 / 37	796 / 669 / 47		946 / 809 / 37	664 / 523 / 32	809 / 660 / 27	668 / 648 / 39	799 / 797 / 31	818 / 745 / 42	987 / 915 / 34	839 / 709 / 44	1020 / 875 / 36	10	1	640 / 498 / 41	768 / 621 / 34	649 / 623 / 54	763 / 756 / 43	779 / 705 / 58	950 / 877 / 48	796 / 669 / 57	946 / 809 / 45	664 / 523 / 39	809 / 660 / 32	668 / 648 / 50	799 / 797 / 40	818 / 745 / 55	987 / 915 / 45		839 / 709 / 53	1020 / 875 / 44	2	768 / 621 / 29	914 / 759 / 23	763 / 770 / 29	918 / 945 / 24	950 / 889 / 30	1111 / 1053 / 24	946 / 820 / 33	1158 / 1015 / 27	809 / 660 / 27	986 / 823 / 22	799 / 811 / 27	947 / 980 / 22	987 / 927 / 28	1186 / 1128 / 23	1020 / 888 / 31	1239 / 1090 / 26	3	731 / 912 / 21	876 / 1111 / 17	882 / 887 / 25	1029 / 1052 / 20	1079 / 1006 / 26	1274 / 1200 / 21	1120 / 966 / 29	1337 / 1163 / 23	785 / 985 / 20	933 / 1187 / 16	915 / 926 / 24	1099 / 1127 / 19	1157 / 1083 / 25	1351 / 1275 / 19	1154 / 997 / 27	1423 / 1240 / 22	0	1	699 / 557 / 31	845 / 694 / 25	701 / 686 / 32	857 / 860 / 26	880 / 806 / 33	1055 / 981 / 27	876 / 743 / 36	1051 / 904 / 29	731 / 587 / 29	904 / 747 / 25	729 / 718 / 30	882 / 889 / 24	910 / 837 / 31	1120 / 1045 / 26	937 / 798 / 35	1116 / 963 / 28	5	1	699 / 557 / 31	845 / 694 / 25	701 / 686 / 36	857 / 860 / 30	880 / 806 / 41	1055 / 981 / 33	876 / 743 / 41	1051 / 904 / 33	731 / 587 / 29	904 / 747 / 25	729 / 718 / 34	882 / 889 / 28	910 / 837 / 38	1120 / 1045 / 32	937 / 798 / 40	1116 / 963 / 32	10	1	699 / 557 / 37		845 / 694 / 30	701 / 686 / 47	857 / 860 / 39	880 / 806 / 53	1055 / 981 / 43	876 / 743 / 50	1051 / 904 / 41	731 / 587 / 35	904 / 747 / 29	729 / 718 / 44	882 / 889 / 36	910 / 837 / 50	1120 / 1045 / 41	937 / 798 / 49	1116 / 963 / 39	2	845 / 694 / 25		1017 / 853 / 21	828 / 845 / 29	1009 / 1048 / 24	1055 / 995 / 33	1257 / 1198 / 27	1051 / 917 / 33	1317 / 1160 / 28	904 / 747 / 25	1081 / 911 / 20	882 / 905 / 28	1067 / 1112 / 23	1073 / 1015 / 31	1321 / 1263 / 25	1116 / 977 / 32	1388 / 1225 / 27	3	802 / 1011 / 18		985 / 1258 / 15	977 / 993 / 23	1164 / 1197 / 18	1175 / 1103 / 23	1420 / 1343 / 18	1228 / 1064 / 26	1501 / 1309 / 21	848 / 1073 / 18	1032 / 1322 / 15	994 / 1014 / 21	1223 / 1261 / 17	1238 / 1165 / 22	1479 / 1401 / 17	1297 / 1126 / 25	1569 / 1371 / 20																																																																																																																										
	0		1	699 / 557 / 31	845 / 694 / 25	701 / 686 / 32	857 / 860 / 26	880 / 806 / 33	1055 / 981 / 27	876 / 743 / 36	1051 / 904 / 29	731 / 587 / 29	904 / 747 / 25	729 / 718 / 30	882 / 889 / 24	910 / 837 / 31	1120 / 1045 / 26	937 / 798 / 35		1116 / 963 / 28	5	1	699 / 557 / 31	845 / 694 / 25	701 / 686 / 36	857 / 860 / 30	880 / 806 / 41		1055 / 981 / 33	876 / 743 / 41	1051 / 904 / 33	731 / 587 / 29	904 / 747 / 25	729 / 718 / 34	882 / 889 / 28	910 / 837 / 38	1120 / 1045 / 32		937 / 798 / 40	1116 / 963 / 32	10	1	699 / 557 / 37	845 / 694 / 30	701 / 686 / 47	857 / 860 / 39	880 / 806 / 53	1055 / 981 / 43	876 / 743 / 50	1051 / 904 / 41	731 / 587 / 35	904 / 747 / 29	729 / 718 / 44		882 / 889 / 36	910 / 837 / 50	1120 / 1045 / 41	937 / 798 / 49	1116 / 963 / 39	2	845 / 694 / 25	1017 / 853 / 21	828 / 845 / 29	1009 / 1048 / 24	1055 / 995 / 33	1257 / 1198 / 27	1051 / 917 / 33	1317 / 1160 / 28	904 / 747 / 25	1081 / 911 / 20	882 / 905 / 28	1067 / 1112 / 23	1073 / 1015 / 31	1321 / 1263 / 25	1116 / 977 / 32	1388 / 1225 / 27	3	802 / 1011 / 18	985 / 1258 / 15	977 / 993 / 23	1164 / 1197 / 18	1175 / 1103 / 23	1420 / 1343 / 18	1228 / 1064 / 26	1501 / 1309 / 21	848 / 1073 / 18	1032 / 1322 / 15	994 / 1014 / 21	1223 / 1261 / 17	1238 / 1165 / 22		1479 / 1401 / 17	1297 / 1126 / 25	1569 / 1371 / 20																																																																																																																																																																																																																	

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	527 / 264 / 66	578 / 365 / 58	537 / 366 / 97	587 / 488 / 84	524 / 436 / 109	632 / 552 / 90	526 / 412 / 100	640 / 522 / 83	532 / 282 / 63	587 / 387 / 56	544 / 389 / 93	584 / 505 / 79	547 / 461 / 105	655 / 577 / 86	550 / 435 / 97	665 / 546 / 80	547 / 305 / 62	606 / 416 / 55	551 / 411 / 90	592 / 529 / 75	568 / 484 / 101	693 / 615 / 84	572 / 457 / 93	687 / 567 / 76
	2	578 / 365 / 58	635 / 478 / 49	575 / 488 / 82	628 / 611 / 67	632 / 559 / 90	757 / 692 / 74	640 / 529 / 83	773 / 657 / 68	587 / 387 / 56	645 / 502 / 47	584 / 514 / 79	650 / 637 / 64	655 / 585 / 86	801 / 736 / 72	665 / 554 / 80	796 / 680 / 65	606 / 416 / 55	664 / 523 / 45	592 / 539 / 75	668 / 660 / 61	693 / 623 / 84	818 / 755 / 67	687 / 576 / 76	839 / 719 / 63
	3	535 / 589 / 45	595 / 720 / 36	612 / 570 / 72	704 / 690 / 58	734 / 656 / 80	885 / 811 / 65	728 / 606 / 72	880 / 748 / 59	540 / 614 / 43	627 / 765 / 35	627 / 597 / 69	745 / 734 / 56	757 / 681 / 76	903 / 830 / 61	752 / 629 / 68	929 / 792 / 57	557 / 653 / 42	659 / 808 / 34	646 / 621 / 66	761 / 754 / 53	776 / 702 / 72	947 / 874 / 59	794 / 667 / 66	943 / 806 / 53
	1	568 / 251 / 71	617 / 352 / 64	573 / 347 / 109	631 / 479 / 97	546 / 436 / 135	632 / 552 / 112	526 / 412 / 117	640 / 522 / 97	580 / 273 / 70	634 / 379 / 62	576 / 369 / 105	638 / 505 / 93	557 / 461 / 130	655 / 577 / 106	550 / 435 / 113	665 / 546 / 93	582 / 289 / 67	639 / 399 / 60	590 / 397 / 103	644 / 529 / 89	568 / 484 / 125	693 / 615 / 104	572 / 457 / 108	687 / 567 / 88
	2	617 / 352 / 64	688 / 478 / 56	631 / 488 / 97	665 / 611 / 80	632 / 559 / 112	757 / 692 / 91	640 / 529 / 97	773 / 657 / 80	634 / 379 / 62	696 / 502 / 54	638 / 514 / 93	672 / 637 / 76	655 / 585 / 106	801 / 736 / 88	665 / 554 / 93	796 / 680 / 75	639 / 399 / 60	702 / 523 / 51	644 / 539 / 89	676 / 660 / 72	693 / 623 / 104	818 / 755 / 83	687 / 576 / 88	839 / 719 / 73
	3	583 / 589 / 51	610 / 720 / 41	661 / 570 / 85	704 / 690 / 68	734 / 656 / 99	885 / 811 / 81	728 / 606 / 84	880 / 748 / 69	586 / 614 / 49	630 / 765 / 40	669 / 597 / 82	745 / 734 / 66	757 / 681 / 94	903 / 830 / 75	752 / 629 / 80	929 / 792 / 66	602 / 653 / 48	659 / 808 / 39	674 / 621 / 78	761 / 754 / 62	776 / 702 / 88	947 / 874 / 73	794 / 667 / 77	943 / 806 / 62
	1	568 / 251 / 71	617 / 352 / 64	573 / 347 / 109	631 / 479 / 97	582 / 436 / 162	632 / 552 / 134	526 / 412 / 137	640 / 522 / 114	580 / 273 / 70	634 / 379 / 62	576 / 369 / 105	638 / 505 / 93	591 / 461 / 156	655 / 577 / 128	550 / 435 / 132	665 / 546 / 109	582 / 289 / 67	639 / 399 / 60	590 / 397 / 103	644 / 529 / 89	600 / 484 / 150	693 / 615 / 125	572 / 457 / 127	687 / 567 / 104
	2	617 / 352 / 64	688 / 478 / 56	631 / 488 / 97	665 / 611 / 80	632 / 559 / 134	757 / 692 / 109	640 / 529 / 114	773 / 657 / 93	634 / 379 / 62	696 / 502 / 54	638 / 514 / 93	672 / 637 / 76	655 / 585 / 106	801 / 736 / 88	665 / 554 / 93	796 / 680 / 75	639 / 399 / 60	702 / 523 / 51	644 / 539 / 89	676 / 660 / 72	693 / 623 / 104	818 / 755 / 100	687 / 576 / 104	839 / 719 / 86
	3	583 / 589 / 51	610 / 720 / 41	661 / 570 / 85	704 / 690 / 68	734 / 656 / 119	885 / 811 / 97	728 / 606 / 98	880 / 748 / 80	586 / 614 / 49	630 / 765 / 40	669 / 597 / 82	745 / 734 / 66	757 / 681 / 112	903 / 830 / 91	752 / 629 / 93	929 / 792 / 78	602 / 653 / 48	659 / 808 / 39	674 / 621 / 78	761 / 754 / 62	776 / 702 / 106	947 / 874 / 88	794 / 667 / 91	943 / 806 / 73
15	1	561 / 328 / 61	613 / 435 / 53	567 / 441 / 89	598 / 551 / 72	587 / 505 / 97	712 / 635 / 80	593 / 477 / 89	706 / 586 / 72	565 / 345 / 59	619 / 453 / 50	583 / 470 / 87	617 / 584 / 71	618 / 536 / 95	747 / 670 / 78	612 / 496 / 85	742 / 619 / 70	ASCE Group Zone							
	2	613 / 435 / 53	699 / 555 / 44	598 / 561 / 72	703 / 699 / 59	712 / 644 / 80	858 / 795 / 65	706 / 595 / 72	881 / 758 / 61	619 / 453 / 50	715 / 573 / 42	603 / 581 / 69	715 / 715 / 56	747 / 679 / 78	896 / 834 / 63	742 / 628 / 70	892 / 770 / 57	Panal Angle							
	3	563 / 673 / 40	667 / 822 / 32	663 / 642 / 62	797 / 794 / 51	815 / 741 / 70	989 / 916 / 57	810 / 683 / 63	985 / 844 / 51	590 / 710 / 38	694 / 860 / 31	696 / 677 / 61	832 / 832 / 49	853 / 778 / 67	1028 / 955 / 55	848 / 718 / 61	1024 / 880 / 50	Mono Slope							
	1	594 / 310 / 66	656 / 426 / 59	605 / 425 / 101	648 / 551 / 85	587 / 505 / 119	712 / 635 / 99	593 / 477 / 104	706 / 586 / 84	606 / 332 / 65	673 / 453 / 58	619 / 453 / 99	666 / 584 / 84	618 / 536 / 117	747 / 670 / 96	612 / 496 / 99	742 / 619 / 82	0 - 7.5							
	2	656 / 426 / 59	723 / 555 / 50	648 / 561 / 85	703 / 699 / 70	712 / 644 / 81	858 / 795 / 81	706 / 595 / 84	881 / 758 / 71	673 / 453 / 58	726 / 573 / 48	650 / 581 / 82	715 / 715 / 66	747 / 679 / 96	896 / 834 / 78	742 / 628 / 82	892 / 770 / 66	7.5 - 15							
	3	602 / 673 / 45	667 / 822 / 36	677 / 642 / 74	797 / 794 / 60	815 / 741 / 86	989 / 916 / 70	810 / 683 / 73	985 / 844 / 60	616 / 710 / 44	694 / 860 / 35	697 / 677 / 72	832 / 832 / 58	853 / 778 / 83	1028 / 955 / 68	848 / 718 / 71	1024 / 880 / 58	15 - 30							
	1	594 / 310 / 66	656 / 426 / 59	605 / 425 / 101	648 / 551 / 85	607 / 505 / 144	712 / 635 / 119	593 / 477 / 122	706 / 586 / 98	606 / 332 / 65	673 / 453 / 58	619 / 453 / 99	666 / 584 / 84	627 / 536 / 140	747 / 670 / 116	612 / 496 / 117	742 / 619 / 96	30 - 45							
	2	656 / 426 / 59	723 / 555 / 50	648 / 561 / 85	703 / 699 / 70	712 / 644 / 119	858 / 795 / 97	706 / 595 / 98	881 / 758 / 83	673 / 453 / 58	726 / 573 / 48	650 / 581 / 82	715 / 715 / 66	747 / 679 / 116	896 / 834 / 94	742 / 628 / 96	892 / 770 / 78	ASCE Group Zone							
	3	602 / 673 / 45	667 / 822 / 36	677 / 642 / 74	797 / 794 / 60	815 / 741 / 103	989 / 916 / 84	810 / 683 / 86	985 / 844 / 70	616 / 710 / 44	694 / 860 / 35	697 / 677 / 72	832 / 832 / 58	853 / 778 / 100	1028 / 955 / 81	848 / 718 / 83	1024 / 880 / 68	Panal Angle							
15	1	580 / 367 / 58	637 / 480 / 49	588 / 490 / 84	631 / 603 / 67	634 / 554 / 90	760 / 685 / 74	628 / 512 / 82	776 / 650 / 68	565 / 345 / 59	619 / 453 / 50	583 / 470 / 87	617 / 584 / 71	618 / 536 / 95	747 / 670 / 78	612 / 496 / 85	742 / 619 / 70	ASCE Group Zone							
	2	637 / 480 / 49	748 / 603 / 41	631 / 614 / 67	746 / 750 / 54	760 / 694 / 74	900 / 840 / 59	776 / 660 / 68	928 / 803 / 55	619 / 453 / 50	715 / 573 / 42	603 / 581 / 69	715 / 715 / 56	747 / 679 / 78	896 / 834 / 63	742 / 628 / 70	892 / 770 / 57	Panal Angle							
	3	597 / 723 / 36	720 / 895 / 30	707 / 692 / 58	835 / 839 / 46	860 / 788 / 63	1065 / 991 / 53	884 / 751 / 59	1061 / 913 / 48	590 / 710 / 38	694 / 860 / 31	696 / 677 / 61	832 / 832 / 49	853 / 778 / 67	1028 / 955 / 55	848 / 718 / 61	1024 / 880 / 50	Mono Slope							
	1	618 / 353 / 64	690 / 480 / 56	620 / 471 / 95	667 / 603 / 80	634 / 554 / 112	760 / 685 / 91	628 / 512 / 95	776 / 650 / 80	606 / 332 / 65	673 / 453 / 58	619 / 453 / 99	666 / 584 / 84	618 / 536 / 117	747 / 670 / 96	612 / 496 / 99	742 / 619 / 82	0 - 7.5							
	2	690 / 480 / 56	748 / 603 / 46	667 / 614 / 80	746 / 750 / 64	760 / 694 / 91	900 / 840 / 73	776 / 660 / 80	928 / 803 / 64	673 / 453 / 58	726 / 573 / 48	650 / 581 / 82	715 / 715 / 66	747 / 679 / 96	896 / 834 / 78	742 / 628 / 82	892 / 770 / 66	7.5 - 15							
	3	612 / 723 / 41	720 / 895 / 34	707 / 692 / 68	835 / 839 / 55	860 / 788 / 78	1065 / 991 / 65	884 / 751 / 69	1061 / 913 / 55	616 / 710 / 44	694 / 860 / 35	697 / 677 / 72	832 / 832 / 58	853 / 778 / 83	1028 / 955 / 68	848 / 718 / 71	1024 / 880 / 58	15 - 30							
	1	618 / 353 / 64	690 / 480 / 56	620 / 471 / 95	667 / 603 / 80	634 / 554 / 134	760 / 685 / 109	628 / 512 / 111	776 / 650 / 93	606 / 332 / 65	673 / 453 / 58	619 / 453 / 99	666 / 584 / 84	627 / 536 / 140	747 / 670 / 116	612 / 496 / 117	742 / 619 / 96	30 - 45							
	2	690 / 480 / 56	748 / 603 / 46	667 / 614 / 80	746 / 750 / 64	760 / 694 / 109	900 / 840 / 88	776 / 660 / 93	928 / 803 / 75	673 / 453 / 58	726 / 573 / 48	650 / 581 / 82	715 / 715 / 66	747 / 679 / 116	896 / 834 / 94	742 / 628 / 96	892 / 770 / 78	ASCE Group Zone							
	3	612 / 723 / 41	720 / 895 / 34	707 / 692 / 68	835 / 839 / 55	860 / 788 / 94	1065 / 991 / 78	884 / 751 / 80	1061 / 913 / 65	616 / 710 / 44	694 / 860 / 35	697 / 677 / 72	832 / 832 / 58	853 / 778 / 100	1028 / 955 / 81	848 / 718 / 83	1024 / 880 / 68	Panal Angle							
15	1	580 / 367 / 58	637 / 480 / 49	588 / 490 / 84	631 / 603 / 67	634 / 554 / 90	760 / 685 / 74	628 / 512 / 82	776 / 650 / 68	565 / 345 / 59	619 / 453 / 50	583 / 470 / 87	617 / 584 / 71	618 / 536 / 95	747 / 670 / 78	612 / 496 / 85	742 / 619 / 70	ASCE Group Zone							
	2	637 / 480 / 49	748 / 603 / 41	631 / 614 / 67	746 / 750 / 54	760 / 694 / 74	900 / 840 / 59	776 / 660 / 68	928 / 803 / 55	619 / 453 / 50	715 / 573 / 42	603 / 581 / 69	715 / 715 / 56	747 / 679 / 78	896 / 834 / 63	742 / 628 / 70	892 / 770 / 57	Panal Angle							
	3	597 / 723 / 36	720 / 895 / 30	707 / 692 / 58	835 / 839 / 46	860 / 788 / 63	1065 / 991 / 53	884 / 751 / 59	1061 / 913 / 48	590 / 710 / 38	694 / 860 / 31	696 / 677 / 61	832 / 832 / 49	853 / 778 / 67	1028 / 955 / 55	848 / 718 / 61	1024 / 880 / 50	Mono Slope							
	1	618 / 353 / 64	690 / 480 / 56	620 / 471 / 95	667 / 603 / 80	634 / 554 / 112	760 / 685 / 91	628 / 512 / 95	776 / 650 / 80	606 / 332 / 65	673 / 453 / 58	619 / 453 / 99	666 / 584 / 84	618 / 536 / 117	747 / 670 / 96	612 / 496 / 99	742 / 619 / 82	0 - 7.5							
	2	690 / 480 / 56	748 / 603 / 46	667 / 614 / 80	746 / 750 / 64	760 / 694 / 91	900 / 840 / 73	776 / 660 / 80	928 / 803 / 64	673 / 453 / 58	726 / 573 / 48	650 / 581 / 82	715 / 715 / 66	747 / 679 / 96	896 / 834 / 78	742 / 628 / 82	892 / 770 / 66	7.5 - 15							
	3	612 / 723 / 41	720 / 895 / 34	707 / 692 / 68	835 / 839 / 55	860 / 788 / 78	1065 / 991 / 65	884 / 751 / 69	1061 / 913 / 55	616 / 710 / 44	694 / 860 / 35	697 / 677 / 72	832 / 832 / 58	853 / 778 / 83	1028 / 955 / 68	848 / 718 / 71									

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		15	1	594 / 390 / 57	640 / 495 / 47	592 / 509 / 80	643 / 618 / 64	664 / 584 / 88	792 / 717 / 72	657 / 539 / 80	787 / 661 / 65	610 / 425 / 54	673 / 532 / 44	595 / 540 / 74	695 / 676 / 61	703 / 625 / 82	851 / 777 / 67	697 / 577 / 74	847 / 717 / 61	623 / 458 / 50	722 / 578 / 42	608 / 577 / 69	722 / 710 / 56	754 / 677 / 78	905 / 831 / 63	749 / 625 / 70	900 / 766 / 57	640 / 495 / 47	781 / 632 / 40	643 / 629 / 64	776 / 783 / 53	792 / 727 / 72	932 / 872 / 57	787 / 671 / 65	962 / 835 / 53	673 / 532 / 44	817 / 668 / 36	676 / 670 / 59	803 / 817 / 48	825 / 763 / 65	1027 / 966 / 55	847 / 727 / 61	1023 / 891 / 50	722 / 578 / 42	869 / 717 / 34	722 / 722 / 56	847 / 868 / 45	875 / 814 / 61	1076 / 1016 / 51
15	2	620 / 755 / 35	743 / 928 / 29	736 / 725 / 56	864 / 871 / 45	892 / 820 / 61	1098 / 1024 / 51	918 / 782 / 57	1094 / 943 / 46	663 / 815 / 33	784 / 985 / 27	791 / 786 / 53	952 / 965 / 43	950 / 879 / 57	1152 / 1079 / 47	981 / 840 / 53	1201 / 1039 / 44	701 / 868 / 31	852 / 1076 / 25	812 / 812 / 48	997 / 1015 / 40	1038 / 964 / 55	1249 / 1174 / 44	1034 / 889 / 50	1246 / 1081 / 40	620 / 755 / 35	743 / 928 / 29	736 / 725 / 56	864 / 871 / 45	892 / 820 / 61	1098 / 1024 / 51	918 / 782 / 57	1094 / 943 / 46	663 / 815 / 33	784 / 985 / 27	791 / 786 / 53	952 / 965 / 43	950 / 879 / 57	1152 / 1079 / 47	981 / 840 / 53	1201 / 1039 / 44	701 / 868 / 31	852 / 1076 / 25	812 / 812 / 48	997 / 1015 / 40	1038 / 964 / 55	1249 / 1174 / 44	1034 / 889 / 50	1246 / 1081 / 40
15	3	630 / 375 / 62	691 / 495 / 54	634 / 498 / 93	666 / 618 / 76	664 / 584 / 109	792 / 717 / 88	657 / 539 / 93	787 / 661 / 75	654 / 417 / 60	704 / 532 / 50	646 / 540 / 87	696 / 676 / 72	703 / 625 / 101	851 / 777 / 83	697 / 577 / 86	847 / 717 / 71	677 / 458 / 58	731 / 578 / 48	654 / 577 / 82	722 / 710 / 66	754 / 677 / 96	905 / 831 / 78	749 / 625 / 82	900 / 766 / 66	630 / 375 / 62	691 / 495 / 54	634 / 498 / 93	666 / 618 / 76	664 / 584 / 109	792 / 717 / 88	657 / 539 / 93	787 / 661 / 75	654 / 417 / 60	704 / 532 / 50	646 / 540 / 87	696 / 676 / 72	703 / 625 / 101	851 / 777 / 83	697 / 577 / 86	847 / 717 / 71	677 / 458 / 58	731 / 578 / 48	654 / 577 / 82	722 / 710 / 66	754 / 677 / 96	905 / 831 / 78	749 / 625 / 82	900 / 766 / 66
20	1	691 / 495 / 54	781 / 632 / 45	666 / 629 / 76	776 / 783 / 62	792 / 727 / 88	932 / 872 / 70	787 / 671 / 75	962 / 835 / 62	704 / 532 / 50	817 / 668 / 41	677 / 670 / 70	803 / 817 / 57	825 / 763 / 81	1027 / 966 / 68	847 / 727 / 71	1023 / 891 / 58	731 / 578 / 48	869 / 717 / 39	722 / 722 / 66	847 / 868 / 53	875 / 814 / 75	1076 / 1016 / 63	900 / 777 / 66	1117 / 977 / 55	691 / 495 / 54	781 / 632 / 45	666 / 629 / 76	776 / 783 / 62	792 / 727 / 88	932 / 872 / 70	787 / 671 / 75	962 / 835 / 62	704 / 532 / 50	817 / 668 / 41	677 / 670 / 70	803 / 817 / 57	825 / 763 / 81	1027 / 966 / 68	847 / 727 / 71	1023 / 891 / 58	731 / 578 / 48	869 / 717 / 39	722 / 722 / 66	847 / 868 / 53	875 / 814 / 75	1076 / 1016 / 63	900 / 777 / 66	1117 / 977 / 55
20	2	624 / 755 / 40	743 / 928 / 33	736 / 725 / 66	864 / 871 / 53	892 / 820 / 75	1098 / 1024 / 63	918 / 782 / 66	1094 / 943 / 53	663 / 815 / 38	784 / 985 / 30	791 / 786 / 62	952 / 965 / 51	950 / 879 / 70	1152 / 1079 / 57	981 / 840 / 62	1201 / 1039 / 51	701 / 868 / 35	852 / 1076 / 29	812 / 812 / 57	997 / 1015 / 47	1038 / 964 / 68	1249 / 1174 / 55	1034 / 889 / 58	1246 / 1081 / 47	624 / 755 / 40	743 / 928 / 33	736 / 725 / 66	864 / 871 / 53	892 / 820 / 75	1098 / 1024 / 63	918 / 782 / 66	1094 / 943 / 53	663 / 815 / 38	784 / 985 / 30	791 / 786 / 62	952 / 965 / 51	950 / 879 / 70	1152 / 1079 / 57	981 / 840 / 62	1201 / 1039 / 51	701 / 868 / 35	852 / 1076 / 29	812 / 812 / 57	997 / 1015 / 47	1038 / 964 / 68	1249 / 1174 / 55	1034 / 889 / 58	1246 / 1081 / 47
20	3	630 / 375 / 62	691 / 495 / 54	634 / 498 / 93	666 / 618 / 76	664 / 584 / 109	792 / 717 / 88	657 / 539 / 93	787 / 661 / 75	654 / 417 / 60	704 / 532 / 50	646 / 540 / 87	696 / 676 / 72	703 / 625 / 101	851 / 777 / 83	697 / 577 / 86	847 / 717 / 71	677 / 458 / 58	731 / 578 / 48	654 / 577 / 82	722 / 710 / 66	754 / 677 / 96	905 / 831 / 78	749 / 625 / 82	900 / 766 / 66	630 / 375 / 62	691 / 495 / 54	634 / 498 / 93	666 / 618 / 76	664 / 584 / 109	792 / 717 / 88	657 / 539 / 93	787 / 661 / 75	654 / 417 / 60	704 / 532 / 50	646 / 540 / 87	696 / 676 / 72	703 / 625 / 101	851 / 777 / 83	697 / 577 / 86	847 / 717 / 71	677 / 458 / 58	731 / 578 / 48	654 / 577 / 82	722 / 710 / 66	754 / 677 / 96	905 / 831 / 78	749 / 625 / 82	900 / 766 / 66
25	1	691 / 495 / 54	781 / 632 / 45	666 / 629 / 76	776 / 783 / 62	792 / 727 / 88	932 / 872 / 70	787 / 671 / 75	962 / 835 / 62	704 / 532 / 50	817 / 668 / 41	677 / 670 / 70	803 / 817 / 57	825 / 763 / 81	1027 / 966 / 68	847 / 727 / 71	1023 / 891 / 58	731 / 578 / 48	869 / 717 / 39	722 / 722 / 66	847 / 868 / 53	875 / 814 / 75	1076 / 1016 / 63	900 / 777 / 66	1117 / 977 / 55	691 / 495 / 54	781 / 632 / 45	666 / 629 / 76	776 / 783 / 62	792 / 727 / 88	932 / 872 / 70	787 / 671 / 75	962 / 835 / 62	704 / 532 / 50	817 / 668 / 41	677 / 670 / 70	803 / 817 / 57	825 / 763 / 81	1027 / 966 / 68	847 / 727 / 71	1023 / 891 / 58	731 / 578 / 48	869 / 717 / 39	722 / 722 / 66	847 / 868 / 53	875 / 814 / 75	1076 / 1016 / 63	900 / 777 / 66	1117 / 977 / 55
25	2	624 / 755 / 40	743 / 928 / 33	736 / 725 / 66	864 / 871 / 53	892 / 820 / 75	1098 / 1024 / 63	918 / 782 / 66	1094 / 943 / 53	663 / 815 / 38	784 / 985 / 30	791 / 786 / 62	952 / 965 / 51	950 / 879 / 70	1152 / 1079 / 57	981 / 840 / 62	1201 / 1039 / 51	701 / 868 / 35	852 / 1076 / 29	812 / 812 / 57	997 / 1015 / 47	1038 / 964 / 68	1249 / 1174 / 55	1034 / 889 / 58	1246 / 1081 / 47	624 / 755 / 40	743 / 928 / 33	736 / 725 / 66	864 / 871 / 53	892 / 820 / 75	1098 / 1024 / 63	918 / 782 / 66	1094 / 943 / 53	663 / 815 / 38	784 / 985 / 30	791 / 786 / 62	952 / 965 / 51	950 / 879 / 70	1152 / 1079 / 57	981 / 840 / 62	1201 / 1039 / 51	701 / 868 / 35	852 / 1076 / 29	812 / 812 / 57	997 / 1015 / 47	1038 / 964 / 68	1249 / 1174 / 55	1034 / 889 / 58	1246 / 1081 / 47
25	3	630 / 375 / 62	691 / 495 / 54	634 / 498 / 93	666 / 618 / 76	664 / 584 / 109	792 / 717 / 88	657 / 539 / 93	787 / 661 / 75	654 / 417 / 60	704 / 532 / 50	646 / 540 / 87	696 / 676 / 72	703 / 625 / 101	851 / 777 / 83	697 / 577 / 86	847 / 717 / 71	677 / 458 / 58	731 / 578 / 48	654 / 577 / 82	722 / 710 / 66	754 / 677 / 96	905 / 831 / 78	749 / 625 / 82	900 / 766 / 66	630 / 375 / 62	691 / 495 / 54	634 / 498 / 93	666 / 618 / 76	664 / 584 / 109	792 / 717 / 88	657 / 539 / 93	787 / 661 / 75	654 / 417 / 60	704 / 532 / 50	646 / 540 / 87	696 / 676 / 72	703 / 625 / 101	851 / 777 / 83	697 / 577 / 86	847 / 717 / 71	677 / 458 / 58	731 / 578 / 48	654 / 577 / 82	722 / 710 / 66	754 / 677 / 96	905 / 831 / 78	749 / 625 / 82	900 / 766 / 66
170	1	647 / 498 / 48	768 / 621 / 40	649 / 623 / 66	763 / 756 / 53	779 / 705 / 72	950 / 877 / 59	796 / 669 / 66	946 / 809 / 53	664 / 523 / 45	809 / 660 / 37	668 / 648 / 61	799 / 797 / 49	818 / 745 / 67	987 / 915 / 55	839 / 709 / 63	1020 / 875 / 51	647 / 498 / 48	768 / 621 / 40	649 / 623 / 66	763 / 756 / 53	779 / 705 / 72	950 / 877 / 59	796 / 669 / 66	946 / 809 / 53	664 / 523 / 45	809 / 660 / 37	668 / 648 / 61	799 / 797 / 49	818 / 745 / 67	987 / 915 / 55	839 / 709 / 63	1020 / 875 / 51	647 / 498 / 48	768 / 621 / 40	649 / 623 / 66	763 / 756 / 53	779 / 705 / 72	950 / 877 / 59	796 / 669 / 66	946 / 809 / 53	664 / 523 / 45	809 / 660 / 37	668 / 648 / 61	799 / 797 / 49	818 / 745 / 67	987 / 915 / 55	839 / 709 / 63	1020 / 875 / 51
170	2	768 / 621 / 40	914 / 759 / 32	763 / 770 / 53	918 / 945 / 43	950 / 889 / 59	1111 / 1053 / 47	946 / 820 / 53	1158 / 1015 / 44	809 / 660 / 37	986 / 823 / 31	799 / 811 / 49	947 / 980 / 40	987 / 927 / 55	1186 / 1128 / 44	1020 / 888 / 51	1239 / 1090 / 42	768 / 621 / 40	914 / 759 / 32	763 / 770 / 53	918 / 945 / 43	950 / 889 / 59	1111 / 1053 / 47	946 / 820 / 53	1158 / 1015 / 44	809 / 660 / 37	986 / 823 / 31	799 / 811 / 49	947 / 980 / 40	987 / 927 / 55	1186 / 1128 / 44	1020 / 888 / 51	1239 / 1090 / 42	768 / 621 / 40	914 / 759 / 32	763 / 770 / 53	918 / 945 / 43	950 / 889 / 59	1111 / 1053 / 47	946 / 820 / 53	1158 / 1015 / 44	809 / 660 / 37	986 / 823 / 31	799 / 811 / 49	947 / 980 / 40	987 / 927 / 55	1186 / 1128 / 44	1020 / 888 / 51	1239 / 1090 / 42
170	3	731 / 912 / 29	876 / 1111 / 23	882 / 887 / 46	1029 / 1052 / 36	1079 / 1006 / 51	1274 / 1200 / 40	1120 / 966 / 48	1337 / 1163 / 38	785 / 985 / 28	933 / 1187 / 22	915 / 926 / 43	1099 / 1127 / 35	1157 / 1083 / 49	1351 / 1275 / 38	1154 / 997 / 44	1423 / 1240 / 36	731 / 912 / 29	876 / 1111 / 23	882 / 887 / 46	1029 / 1052 / 36	1079 / 1006 / 51	1274 / 1200 / 40	1120 / 966 / 48	1337 / 1163 / 38	785 / 985 / 28	933 / 1187 / 22	915 / 926 / 43	1099 / 1127 / 35	1157 / 1083 / 49	1351 / 1275 / 38	1154 / 997 / 44	1423 / 1240 / 36	731 / 912 / 29	876 / 1111 / 23	882 / 887 / 46	1029 / 1052 / 36	1079 / 1006 / 51	1274 / 1200 / 40	1120 / 966 / 48	1337 / 1163 / 38	785 / 985 / 28	933 / 1187 / 22	915 / 926 / 43	1099 / 1127 / 35	1157 / 1083 / 49	1351 / 1275 / 38	1154 / 997 / 44	1423 / 1240 / 36
180	1	699 / 498 / 55	768 / 621 / 45	676 / 623 / 78	763 / 756 / 62	779 / 705 / 88	950 / 877 / 73	796 / 669 / 77	946 / 809 / 62	702 / 523 / 51	809 / 660 / 43	676 / 648 / 72	799 / 797 / 58	818 / 745 / 83	987 / 915 / 68	839 / 709 / 73	1020 / 875 / 60	699 / 498 / 55	768 / 621 / 45	676 / 623 / 78	763 / 756 / 62	779 / 705 / 88	950 / 877 / 73	796 / 669 / 77	946 / 809 / 62	702 / 523 / 51	809 / 660 / 43	676 / 648 / 72	799 / 797 / 58	818 / 745 / 83	987 / 915 / 68	839 / 709 / 73	1020 / 875 / 60	699 / 498 / 55	768 / 621 / 45	676 / 623 / 78	763 / 756 / 62	779 / 705 / 88	950 / 877 / 73	796 / 669 / 77	946 / 809 / 62	702 / 523 / 51	809 / 660 / 43	676 / 648 / 72	799 / 797 /				

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95										100										105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge							
		30	1	593 / 247 / 75	636 / 345 / 67	596 / 341 / 116	648 / 469 / 103	605 / 428 / 186	659 / 552 / 157	526 / 412 / 157	640 / 522 / 131	594 / 263 / 72	653 / 372 / 65	598 / 362 / 111	653 / 494 / 99	613 / 452 / 179	668 / 577 / 150	550 / 435 / 151	665 / 546 / 125	605 / 284 / 71	655 / 391 / 63	611 / 389 / 109	672 / 529 / 97	633 / 484 / 175	693 / 615 / 146	572 / 457 / 145	687 / 567 / 119				
Wind Speed [mph]		110										115																			
30	1	616 / 305 / 69	671 / 417 / 61	624 / 416 / 107	674 / 551 / 93	639 / 505 / 168	712 / 635 / 139	593 / 477 / 140	706 / 586 / 113	627 / 325 / 68	687 / 443 / 60	637 / 444 / 105	692 / 584 / 90	658 / 536 / 164	747 / 670 / 135	612 / 496 / 134	742 / 619 / 110	ASCE Group Zone													
Exposure Category : B	Panal Angle	0 - 7.5		7.5 - 15		15 - 30		30 - 45		Mono Slope																					
30	2	671 / 417 / 61	749 / 555 / 53	674 / 561 / 93	719 / 699 / 76	712 / 644 / 139	858 / 795 / 113	706 / 595 / 113	881 / 758 / 95	687 / 443 / 60	750 / 573 / 51	676 / 581 / 88	718 / 715 / 72	747 / 679 / 135	896 / 834 / 110	742 / 628 / 110	892 / 770 / 89														
30	3	624 / 673 / 48	667 / 822 / 39	700 / 642 / 80	797 / 794 / 65	815 / 741 / 120	989 / 916 / 99	810 / 683 / 98	985 / 844 / 80	639 / 710 / 47	694 / 860 / 38	719 / 677 / 78	832 / 832 / 63	853 / 778 / 117	1028 / 955 / 95	848 / 718 / 95	1024 / 880 / 77														
35	1	637 / 293 / 73	697 / 408 / 65	641 / 400 / 117	712 / 551 / 105	670 / 505 / 192	724 / 635 / 159	593 / 477 / 157	706 / 586 / 127	646 / 313 / 71	711 / 434 / 64	652 / 426 / 114	728 / 584 / 103	688 / 536 / 188	747 / 670 / 154	612 / 496 / 151	742 / 619 / 124														
35	2	697 / 408 / 65	765 / 542 / 57	712 / 561 / 105	750 / 699 / 86	724 / 644 / 159	858 / 795 / 130	706 / 595 / 127	881 / 758 / 107	711 / 434 / 64	784 / 573 / 55	711 / 581 / 100	747 / 715 / 81	747 / 679 / 154	896 / 834 / 125	742 / 628 / 124	892 / 770 / 101														
35	3	657 / 673 / 52	689 / 822 / 42	732 / 642 / 91	797 / 794 / 74	815 / 741 / 138	989 / 916 / 113	810 / 683 / 111	985 / 844 / 91	670 / 710 / 51	703 / 860 / 41	751 / 677 / 88	832 / 832 / 72	853 / 778 / 134	1028 / 955 / 109	848 / 718 / 107	1024 / 880 / 87														
40	1	668 / 287 / 125	721 / 399 / 112	669 / 392 / 167	732 / 539 / 150	686 / 494 / 217	750 / 635 / 183	593 / 477 / 175	706 / 586 / 142	676 / 306 / 122	733 / 424 / 110	678 / 417 / 164	747 / 571 / 147	703 / 524 / 212	770 / 670 / 179	612 / 496 / 168	742 / 619 / 138														
40	2	721 / 399 / 112	800 / 542 / 100	732 / 548 / 150	780 / 699 / 126	750 / 644 / 183	858 / 795 / 150	706 / 595 / 142	881 / 758 / 119	733 / 424 / 110	818 / 573 / 97	747 / 581 / 147	776 / 715 / 119	770 / 679 / 145	896 / 834 / 138	742 / 628 / 138	892 / 770 / 112														
40	3	689 / 673 / 92	715 / 822 / 74	765 / 642 / 133	816 / 794 / 108	815 / 741 / 159	989 / 916 / 130	810 / 683 / 123	985 / 844 / 101	701 / 710 / 89	728 / 860 / 72	782 / 677 / 129	835 / 832 / 105	853 / 778 / 154	1028 / 955 / 126	848 / 718 / 119	1024 / 880 / 97														
Wind Speed [mph]		120										130																			
30	1	638 / 346 / 67	703 / 470 / 59	650 / 471 / 103	692 / 603 / 86	661 / 554 / 157	760 / 685 / 128	628 / 512 / 128	776 / 650 / 107	627 / 325 / 68	687 / 443 / 60	637 / 444 / 105	692 / 584 / 90	658 / 536 / 164	747 / 670 / 135	612 / 496 / 134	742 / 619 / 110														
30	2	703 / 470 / 59	769 / 603 / 49	692 / 614 / 86	746 / 750 / 70	760 / 694 / 128	900 / 840 / 102	776 / 660 / 107	928 / 803 / 86	687 / 443 / 60	750 / 573 / 51	676 / 581 / 88	718 / 715 / 72	747 / 679 / 135	896 / 834 / 110	742 / 628 / 110	892 / 770 / 89														
30	3	633 / 723 / 44	720 / 895 / 36	717 / 692 / 74	835 / 839 / 59	860 / 788 / 110	1065 / 991 / 91	884 / 751 / 92	1061 / 913 / 74	639 / 710 / 47	694 / 860 / 38	719 / 677 / 78	832 / 832 / 63	853 / 778 / 117	1028 / 955 / 95	848 / 718 / 95	1024 / 880 / 77														
35	1	655 / 332 / 70	725 / 459 / 62	663 / 452 / 112	727 / 603 / 98	691 / 554 / 179	760 / 685 / 146	628 / 512 / 144	776 / 650 / 121	646 / 313 / 71	711 / 434 / 64	652 / 426 / 114	728 / 584 / 103	688 / 536 / 188	747 / 670 / 154	612 / 496 / 151	742 / 619 / 124														
35	2	725 / 459 / 62	802 / 603 / 54	727 / 614 / 98	764 / 750 / 79	760 / 694 / 146	900 / 840 / 117	776 / 660 / 121	928 / 803 / 97	711 / 434 / 64	784 / 573 / 55	711 / 581 / 100	747 / 715 / 81	747 / 679 / 154	896 / 834 / 125	742 / 628 / 124	892 / 770 / 101														
35	3	662 / 723 / 48	720 / 895 / 39	747 / 692 / 84	835 / 839 / 67	860 / 788 / 125	1065 / 991 / 105	884 / 751 / 104	1061 / 913 / 84	670 / 710 / 51	703 / 860 / 41	751 / 677 / 88	832 / 832 / 72	853 / 778 / 134	1028 / 955 / 109	848 / 718 / 107	1024 / 880 / 87														
40	1	684 / 326 / 120	746 / 448 / 107	688 / 442 / 161	761 / 603 / 143	720 / 554 / 207	769 / 685 / 169	628 / 512 / 160	776 / 650 / 134	676 / 306 / 122	733 / 424 / 110	678 / 417 / 164	747 / 571 / 147	703 / 524 / 212	770 / 670 / 179	612 / 496 / 168	742 / 619 / 138														
40	2	746 / 448 / 107	835 / 603 / 94	761 / 614 / 143	792 / 750 / 115	769 / 694 / 169	900 / 840 / 135	776 / 660 / 134	928 / 803 / 108	733 / 424 / 110	818 / 573 / 97	747 / 581 / 147	776 / 715 / 119	770 / 679 / 145	896 / 834 / 138	742 / 628 / 138	892 / 770 / 112														
40	3	692 / 723 / 84	740 / 895 / 69	776 / 692 / 122	835 / 839 / 98	860 / 788 / 145	1065 / 991 / 121	884 / 751 / 116	1061 / 913 / 93	701 / 710 / 89	728 / 860 / 72	782 / 677 / 129	835 / 832 / 105	853 / 778 / 154	1028 / 955 / 126	848 / 718 / 119	1024 / 880 / 97														

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	649 / 367 / 65	718 / 495 / 57	649 / 488 / 99	690 / 618 / 82	679 / 584 / 153	792 / 717 / 124	657 / 539 / 125	787 / 661 / 101	670 / 408 / 63	729 / 532 / 53	673 / 540 / 95	718 / 676 / 78	703 / 625 / 142	851 / 777 / 117	697 / 577 / 116	847 / 717 / 95	691 / 448 / 60	755 / 578 / 51	680 / 577 / 88	723 / 710 / 72	754 / 677 / 135	905 / 831 / 110	749 / 625 / 110	900 / 766 / 89
	2	718 / 495 / 57	787 / 632 / 48	690 / 629 / 82	776 / 783 / 67	792 / 727 / 124	932 / 872 / 99	787 / 671 / 101	962 / 835 / 83	729 / 532 / 53	817 / 668 / 44	699 / 670 / 76	803 / 817 / 61	825 / 763 / 113	1027 / 966 / 95	847 / 727 / 95	1023 / 891 / 77	755 / 578 / 51	869 / 717 / 42	723 / 722 / 72	847 / 868 / 57	875 / 814 / 106	1076 / 1016 / 88	900 / 777 / 89	1117 / 977 / 74
	3	645 / 755 / 43	743 / 928 / 35	736 / 725 / 72	864 / 871 / 57	892 / 820 / 106	1098 / 1024 / 88	918 / 782 / 89	1094 / 943 / 71	666 / 815 / 40	784 / 985 / 32	791 / 786 / 67	952 / 965 / 55	950 / 879 / 99	1152 / 1079 / 80	981 / 840 / 83	1201 / 1039 / 69	701 / 868 / 38	852 / 1076 / 31	812 / 812 / 61	997 / 1015 / 51	1038 / 964 / 95	1249 / 1174 / 77	1034 / 889 / 77	1246 / 1081 / 63
	1	664 / 352 / 68	739 / 484 / 61	674 / 478 / 110	723 / 618 / 93	708 / 584 / 175	792 / 717 / 142	657 / 539 / 141	787 / 661 / 114	697 / 399 / 67	765 / 532 / 58	695 / 528 / 105	750 / 676 / 88	722 / 625 / 163	851 / 777 / 134	697 / 577 / 131	847 / 717 / 107	715 / 438 / 64	789 / 578 / 55	715 / 577 / 100	752 / 710 / 81	754 / 677 / 154	905 / 831 / 125	749 / 625 / 124	900 / 766 / 101
	2	739 / 484 / 61	820 / 632 / 52	723 / 629 / 93	780 / 783 / 76	792 / 727 / 142	932 / 872 / 113	787 / 671 / 114	962 / 835 / 94	765 / 532 / 58	827 / 668 / 48	730 / 670 / 86	803 / 817 / 69	825 / 763 / 130	1027 / 966 / 109	847 / 727 / 107	1023 / 891 / 87	789 / 578 / 55	869 / 717 / 45	752 / 722 / 81	847 / 868 / 65	875 / 814 / 121	1076 / 1016 / 100	900 / 777 / 101	1117 / 977 / 84
	3	673 / 755 / 47	743 / 928 / 38	762 / 725 / 81	864 / 871 / 65	892 / 820 / 121	1098 / 1024 / 100	918 / 782 / 101	1094 / 943 / 81	693 / 815 / 44	784 / 985 / 35	791 / 786 / 76	952 / 965 / 62	950 / 879 / 113	1152 / 1079 / 92	981 / 840 / 94	1201 / 1039 / 77	708 / 868 / 41	852 / 1076 / 34	812 / 812 / 69	997 / 1015 / 57	1038 / 964 / 109	1249 / 1174 / 88	1034 / 889 / 87	1246 / 1081 / 71
	1	691 / 345 / 117	758 / 472 / 105	698 / 467 / 157	756 / 618 / 136	736 / 584 / 203	792 / 717 / 164	657 / 539 / 157	787 / 661 / 127	722 / 391 / 115	781 / 519 / 100	716 / 516 / 150	781 / 676 / 129	748 / 625 / 188	851 / 777 / 154	697 / 577 / 145	847 / 717 / 119	737 / 428 / 110	823 / 578 / 97	751 / 577 / 147	781 / 710 / 119	776 / 677 / 179	905 / 831 / 145	749 / 625 / 138	900 / 766 / 112
	2	758 / 472 / 105	852 / 632 / 92	756 / 629 / 136	807 / 783 / 112	792 / 727 / 164	932 / 872 / 130	787 / 671 / 127	962 / 835 / 105	781 / 519 / 100	857 / 668 / 84	760 / 670 / 126	806 / 817 / 101	825 / 763 / 150	1027 / 966 / 126	847 / 727 / 119	1023 / 891 / 97	823 / 578 / 97	881 / 717 / 79	781 / 722 / 119	847 / 868 / 94	875 / 814 / 140	1076 / 1016 / 116	900 / 777 / 112	1117 / 977 / 93
	3	702 / 755 / 82	750 / 928 / 67	791 / 725 / 119	864 / 871 / 94	892 / 820 / 140	1098 / 1024 / 116	918 / 782 / 112	1094 / 943 / 90	719 / 815 / 77	784 / 985 / 61	818 / 786 / 112	952 / 965 / 91	950 / 879 / 130	1152 / 1079 / 106	981 / 840 / 105	1201 / 1039 / 86	733 / 868 / 72	852 / 1076 / 59	813 / 812 / 101	997 / 1015 / 84	1038 / 964 / 126	1249 / 1174 / 102	1034 / 889 / 97	1246 / 1081 / 79
Wind Speed [mph]		170								180															
30	1	710 / 487 / 57	778 / 621 / 48	700 / 623 / 84	763 / 756 / 67	779 / 705 / 124	950 / 877 / 102	796 / 669 / 104	946 / 809 / 83	728 / 523 / 55	809 / 660 / 45	699 / 648 / 78	799 / 797 / 63	818 / 745 / 117	987 / 915 / 95	839 / 709 / 98	1020 / 875 / 80	ASCE Group Zone							
	2	778 / 621 / 48	914 / 759 / 39	763 / 770 / 67	918 / 945 / 55	950 / 889 / 102	1111 / 1053 / 80	946 / 820 / 83	1158 / 1015 / 69	809 / 660 / 45	986 / 823 / 38	799 / 811 / 63	947 / 980 / 51	987 / 927 / 95	1186 / 1128 / 77	1020 / 888 / 80	1239 / 1090 / 66	Panal Angle							
	3	731 / 912 / 35	876 / 1111 / 28	882 / 887 / 59	1029 / 1052 / 47	1079 / 1006 / 88	1274 / 1200 / 70	1120 / 966 / 74	1337 / 1163 / 60	785 / 985 / 34	933 / 1187 / 27	915 / 926 / 55	1099 / 1127 / 44	1157 / 1083 / 84	1351 / 1275 / 66	1154 / 997 / 69	1423 / 1240 / 57	Mono Slope							
	1	731 / 475 / 61	810 / 621 / 52	734 / 623 / 95	770 / 756 / 76	779 / 705 / 142	950 / 877 / 117	796 / 669 / 117	946 / 809 / 94	764 / 523 / 60	828 / 660 / 49	730 / 648 / 88	799 / 797 / 72	818 / 745 / 134	987 / 915 / 109	839 / 709 / 111	1020 / 875 / 91	0 - 7.5							
	2	810 / 621 / 52	914 / 759 / 42	770 / 770 / 76	918 / 945 / 62	950 / 889 / 117	1111 / 1053 / 92	946 / 820 / 94	1158 / 1015 / 77	828 / 660 / 49	986 / 823 / 41	799 / 811 / 72	947 / 980 / 57	987 / 927 / 109	1186 / 1128 / 88	1020 / 888 / 91	1239 / 1090 / 74	7.5 - 15							
	3	731 / 912 / 38	876 / 1111 / 31	882 / 887 / 67	1029 / 1052 / 53	1079 / 1006 / 100	1274 / 1200 / 80	1120 / 966 / 84	1337 / 1163 / 67	785 / 985 / 37	933 / 1187 / 29	915 / 926 / 62	1099 / 1127 / 50	1157 / 1083 / 96	1351 / 1275 / 75	1154 / 997 / 77	1423 / 1240 / 64	15 - 30							
	1	751 / 464 / 105	842 / 621 / 92	768 / 623 / 140	797 / 756 / 112	779 / 705 / 164	950 / 877 / 135	796 / 669 / 131	946 / 809 / 105	782 / 510 / 102	858 / 660 / 87	761 / 648 / 129	810 / 797 / 105	818 / 745 / 154	987 / 915 / 126	839 / 709 / 123	1020 / 875 / 101	30 - 45							
	2	842 / 621 / 92	914 / 759 / 74	797 / 770 / 112	918 / 945 / 91	950 / 889 / 135	1111 / 1053 / 106	946 / 820 / 105	1158 / 1015 / 86	858 / 660 / 87	986 / 823 / 72	810 / 811 / 105	947 / 980 / 84	987 / 927 / 126	1186 / 1128 / 102	1020 / 888 / 101	1239 / 1090 / 82	1 = 1							
	3	741 / 912 / 67	876 / 1111 / 54	882 / 887 / 98	1029 / 1052 / 77	1079 / 1006 / 116	1274 / 1200 / 92	1120 / 966 / 93	1337 / 1163 / 75	785 / 985 / 64	933 / 1187 / 51	915 / 926 / 91	1099 / 1127 / 74	1157 / 1083 / 111	1351 / 1275 / 87	1154 / 997 / 86	1423 / 1240 / 71	2 = 2							
Wind Speed [mph]		190								200															
30	1	743 / 557 / 52	845 / 694 / 43	712 / 686 / 74	857 / 860 / 61	880 / 806 / 113	1055 / 981 / 91	876 / 743 / 92	1051 / 904 / 74	756 / 587 / 49	904 / 747 / 42	729 / 718 / 70	882 / 889 / 57	910 / 837 / 106	1120 / 1045 / 88	937 / 798 / 89	1116 / 963 / 71	ASCE Group Zone							
	2	845 / 694 / 43	1017 / 853 / 35	828 / 845 / 59	1009 / 1048 / 49	1055 / 995 / 91	1257 / 1198 / 73	1051 / 917 / 74	1317 / 1160 / 63	904 / 747 / 42	1081 / 911 / 34	882 / 905 / 57	1067 / 1112 / 47	1073 / 1015 / 84	1321 / 1263 / 70	1116 / 977 / 71	1388 / 1225 / 60	Panal Angle							
	3	802 / 1011 / 31	985 / 1258 / 26	977 / 993 / 53	1164 / 1197 / 42	1175 / 1103 / 77	1420 / 1343 / 62	1228 / 1064 / 66	1501 / 1309 / 54	848 / 1073 / 30	1032 / 1322 / 24	994 / 1014 / 49	1223 / 1261 / 40	1238 / 1165 / 73	1479 / 1401 / 59	1297 / 1126 / 63	1569 / 1371 / 51	Mono Slope							
	1	778 / 557 / 57	845 / 694 / 47	742 / 686 / 84	857 / 860 / 69	880 / 806 / 130	1055 / 981 / 105	876 / 743 / 104	1051 / 904 / 84	789 / 587 / 54	904 / 747 / 45	751 / 718 / 79	882 / 889 / 65	910 / 837 / 121	1120 / 1045 / 100	937 / 798 / 101	1116 / 963 / 81	0 - 7.5							
	2	845 / 694 / 47	1017 / 853 / 38	828 / 845 / 67	1009 / 1048 / 55	1055 / 995 / 105	1257 / 1198 / 84	1051 / 917 / 84	1317 / 1160 / 71	904 / 747 / 45	1081 / 911 / 37	882 / 905 / 65	1067 / 1112 / 53	1073 / 1015 / 96	1321 / 1263 / 80	1116 / 977 / 81	1388 / 1225 / 67	7.5 - 15							
	3	802 / 1011 / 34	985 / 1258 / 28	977 / 993 / 60	1164 / 1197 / 48	1175 / 1103 / 88	1420 / 1343 / 71	1228 / 1064 / 74	1501 / 1309 / 61	848 / 1073 / 32	1032 / 1322 / 26	994 / 1014 / 55	1223 / 1261 / 46	1238 / 1165 / 84	1479 / 1401 / 67	1297 / 1126 / 71	1569 / 1371 / 57	15 - 30							
	1	792 / 542 / 97	871 / 694 / 82	772 / 686 / 122	857 / 860 / 101	880 / 806 / 150	1055 / 981 / 121	876 / 743 / 116	1051 / 904 / 93	822 / 587 / 94	907 / 747 / 79	779 / 718 / 115	882 / 889 / 94	910 / 837 / 140	1120 / 1045 / 116	937 / 798 / 112	1116 / 963 / 90	30 - 45							
	2	871 / 694 / 82	1017 / 853 / 67	828 / 845 / 98	1009 / 1048 / 81	1055 / 995 / 121	1257 / 1198 / 97	1051 / 917 / 93	1317 / 1160 / 79	907 / 747 / 79	1081 / 911 / 64	882 / 905 / 94	1067 / 1112 / 77	1073 / 1015 / 111	1321 / 1263 / 92	1116 / 977 / 90	1388 / 1225 / 75	1 = 1							
	3	802 / 1011 / 59	985 / 1258 / 49	977 / 993 / 87	1164 / 1197 / 70	1175 / 1103 / 102	1420 / 1343 / 82	1228 / 1064 / 82	1501 / 1309 / 67	848 / 1073 / 56	1032 / 1322 / 46	994 / 1014 / 81	1223 / 1261 / 67	1238 / 1165 / 97	1479 / 1401 / 77	1297 / 1126 / 79	1569 / 1371 / 64	2 = 2							

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
45	1	664 / 220 / 139	709 / 317 / 128	669 / 310 / 192	710 / 431 / 173	668 / 403 / 255	730 / 539 / 223	539 / 412 / 218	640 / 522 / 181	684 / 244 / 139	720 / 342 / 126	678 / 335 / 188	724 / 463 / 169	684 / 433 / 250	752 / 577 / 218	552 / 435 / 209	665 / 546 / 173	691 / 262 / 137	732 / 366 / 123	686 / 359 / 184	737 / 494 / 165	686 / 453 / 239	774 / 615 / 212	572 / 457 / 201	687 / 567 / 164
	2	709 / 317 / 128	763 / 436 / 114	710 / 439 / 173	775 / 596 / 153	730 / 546 / 223	790 / 692 / 186	640 / 529 / 181	773 / 657 / 148	720 / 342 / 126	780 / 467 / 112	724 / 471 / 169	795 / 637 / 150	752 / 585 / 218	817 / 736 / 181	665 / 554 / 173	796 / 680 / 140	732 / 366 / 123	797 / 497 / 109	737 / 504 / 165	793 / 660 / 142	774 / 623 / 212	818 / 755 / 170	687 / 576 / 164	839 / 719 / 136
	3	719 / 589 / 114	720 / 720 / 92	763 / 544 / 161	804 / 690 / 134	792 / 656 / 202	885 / 811 / 165	728 / 606 / 156	880 / 748 / 127	715 / 614 / 109	736 / 765 / 89	763 / 568 / 153	827 / 734 / 130	797 / 681 / 191	903 / 830 / 154	752 / 629 / 148	929 / 792 / 123	728 / 653 / 106	752 / 808 / 87	780 / 605 / 150	823 / 754 / 123	798 / 702 / 181	947 / 874 / 149	794 / 667 / 144	943 / 806 / 115
	1	695 / 216 / 148	734 / 310 / 136	697 / 304 / 205	732 / 421 / 184	686 / 394 / 273	741 / 526 / 238	554 / 412 / 238	640 / 522 / 197	700 / 234 / 145	744 / 334 / 133	705 / 328 / 200	744 / 452 / 180	701 / 424 / 267	761 / 563 / 232	566 / 435 / 229	665 / 546 / 188	704 / 252 / 142	754 / 358 / 130	712 / 352 / 196	756 / 483 / 175	716 / 453 / 261	782 / 599 / 226	577 / 457 / 220	687 / 567 / 180
	2	734 / 310 / 136	780 / 425 / 121	732 / 429 / 184	789 / 581 / 163	741 / 533 / 238	814 / 692 / 203	640 / 529 / 197	773 / 657 / 162	744 / 334 / 133	796 / 455 / 118	744 / 461 / 180	807 / 621 / 159	761 / 571 / 232	840 / 736 / 197	665 / 554 / 188	796 / 680 / 153	754 / 358 / 130	811 / 485 / 115	756 / 492 / 175	824 / 660 / 155	782 / 607 / 226	839 / 755 / 186	687 / 576 / 180	839 / 719 / 148
	3	756 / 589 / 124	749 / 720 / 100	780 / 531 / 171	834 / 690 / 146	818 / 656 / 220	885 / 811 / 180	728 / 606 / 171	880 / 748 / 139	750 / 614 / 118	765 / 765 / 97	797 / 568 / 167	856 / 734 / 142	821 / 681 / 209	903 / 830 / 168	752 / 629 / 162	929 / 792 / 135	762 / 653 / 115	779 / 808 / 94	813 / 605 / 163	850 / 754 / 134	822 / 702 / 197	947 / 874 / 163	794 / 667 / 157	943 / 806 / 126
	1	751 / 207 / 165	778 / 297 / 151	733 / 285 / 224	770 / 402 / 204	718 / 378 / 306	777 / 513 / 272	585 / 412 / 278	640 / 522 / 231	753 / 224 / 162	785 / 319 / 148	753 / 314 / 224	798 / 442 / 204	731 / 405 / 299	795 / 549 / 265	595 / 435 / 267	665 / 546 / 220	755 / 241 / 158	792 / 341 / 144	758 / 337 / 219	808 / 472 / 200	743 / 433 / 292	813 / 584 / 259	605 / 457 / 257	687 / 567 / 210
	2	778 / 297 / 151	831 / 414 / 137	770 / 410 / 204	833 / 566 / 185	777 / 520 / 272	862 / 692 / 238	640 / 529 / 231	773 / 657 / 189	785 / 319 / 148	843 / 443 / 134	798 / 450 / 204	848 / 605 / 180	795 / 556 / 265	887 / 736 / 231	665 / 554 / 220	796 / 680 / 178	792 / 341 / 144	856 / 472 / 130	808 / 480 / 200	863 / 642 / 175	813 / 592 / 259	883 / 755 / 218	687 / 576 / 210	839 / 719 / 173
	3	809 / 574 / 141	808 / 720 / 116	808 / 505 / 190	893 / 690 / 170	847 / 639 / 252	925 / 811 / 211	728 / 606 / 199	880 / 748 / 163	820 / 614 / 137	822 / 765 / 113	822 / 540 / 185	913 / 734 / 166	871 / 681 / 245	921 / 830 / 197	752 / 629 / 189	929 / 792 / 158	830 / 653 / 134	835 / 808 / 109	857 / 590 / 185	904 / 754 / 156	868 / 702 / 231	947 / 874 / 191	794 / 667 / 184	943 / 806 / 147
Wind Speed [mph]		110								115															
45	1	697 / 281 / 134	743 / 390 / 120	695 / 384 / 180	751 / 526 / 161	701 / 483 / 234	776 / 635 / 202	593 / 477 / 193	706 / 586 / 156	704 / 300 / 131	754 / 414 / 117	703 / 408 / 176	764 / 557 / 157	717 / 512 / 228	796 / 670 / 197	612 / 496 / 185	742 / 619 / 152								
	2	743 / 390 / 120	813 / 528 / 106	751 / 536 / 161	811 / 699 / 138	776 / 644 / 202	858 / 795 / 165	706 / 595 / 156	881 / 758 / 132	754 / 414 / 117	829 / 557 / 103	764 / 567 / 157	804 / 715 / 130	796 / 679 / 197	896 / 834 / 159	742 / 628 / 152	892 / 770 / 123								
	3	721 / 673 / 101	741 / 822 / 81	797 / 642 / 146	842 / 794 / 119	821 / 741 / 175	989 / 916 / 144	810 / 683 / 136	985 / 844 / 111	733 / 710 / 98	753 / 860 / 78	813 / 677 / 142	861 / 832 / 115	853 / 778 / 170	1028 / 955 / 138	848 / 718 / 132	1024 / 880 / 107								
	1	725 / 275 / 142	763 / 381 / 127	719 / 376 / 192	768 / 514 / 171	715 / 472 / 249	801 / 635 / 220	593 / 477 / 211	706 / 586 / 171	730 / 294 / 139	773 / 404 / 124	726 / 400 / 188	779 / 544 / 167	729 / 500 / 244	821 / 670 / 215	612 / 496 / 202	742 / 619 / 166								
	2	763 / 381 / 127	825 / 514 / 112	768 / 523 / 171	841 / 699 / 150	801 / 644 / 220	862 / 795 / 180	706 / 595 / 171	881 / 758 / 144	773 / 404 / 124	839 / 542 / 109	779 / 554 / 167	833 / 715 / 142	821 / 679 / 215	896 / 834 / 174	742 / 628 / 166	892 / 770 / 135								
	3	753 / 673 / 109	767 / 822 / 88	829 / 642 / 159	869 / 794 / 130	844 / 741 / 191	989 / 916 / 157	810 / 683 / 148	985 / 844 / 121	764 / 710 / 106	778 / 860 / 85	845 / 677 / 155	886 / 832 / 125	865 / 778 / 186	1028 / 955 / 151	848 / 718 / 144	1024 / 880 / 117								
	1	757 / 258 / 155	819 / 372 / 144	762 / 359 / 214	817 / 501 / 195	755 / 461 / 286	831 / 618 / 252	613 / 477 / 247	706 / 586 / 199	777 / 281 / 155	825 / 394 / 141	767 / 382 / 209	826 / 530 / 190	767 / 488 / 279	848 / 652 / 245	620 / 496 / 236	742 / 619 / 194								
	2	819 / 372 / 144	867 / 500 / 127	817 / 510 / 195	877 / 679 / 170	831 / 627 / 252	904 / 795 / 211	706 / 595 / 199	881 / 758 / 168	825 / 394 / 141	879 / 527 / 123	826 / 540 / 190	891 / 715 / 166	848 / 661 / 245	924 / 834 / 204	742 / 628 / 194	892 / 770 / 158								
	3	818 / 673 / 127	819 / 822 / 102	870 / 625 / 180	921 / 794 / 151	889 / 741 / 225	989 / 916 / 184	810 / 683 / 173	985 / 844 / 142	827 / 710 / 123	828 / 860 / 99	883 / 659 / 175	937 / 832 / 146	909 / 778 / 218	1028 / 955 / 177	848 / 718 / 168	1024 / 880 / 137								
Wind Speed [mph]		120								130															
45	1	710 / 319 / 128	765 / 438 / 114	711 / 433 / 173	777 / 588 / 153	732 / 541 / 223	792 / 685 / 186	628 / 512 / 177	776 / 650 / 148	704 / 300 / 131	754 / 414 / 117	703 / 408 / 176	764 / 557 / 157	717 / 512 / 228	796 / 670 / 197	612 / 496 / 185	742 / 619 / 152								
	2	765 / 438 / 114	845 / 587 / 101	777 / 599 / 153	820 / 750 / 127	792 / 694 / 186	900 / 840 / 149	776 / 660 / 148	928 / 803 / 119	754 / 414 / 117	829 / 557 / 103	764 / 567 / 157	804 / 715 / 130	796 / 679 / 197	896 / 834 / 159	742 / 628 / 152	892 / 770 / 123								
	3	722 / 723 / 92	764 / 895 / 76	806 / 692 / 134	847 / 839 / 108	860 / 788 / 159	1065 / 991 / 133	884 / 751 / 127	1061 / 913 / 103	733 / 710 / 98	753 / 860 / 78	813 / 677 / 142	861 / 832 / 115	853 / 778 / 170	1028 / 955 / 138	848 / 718 / 132	1024 / 880 / 107								
	1	735 / 312 / 136	782 / 427 / 121	733 / 423 / 184	791 / 573 / 163	742 / 528 / 238	816 / 685 / 203	628 / 512 / 193	776 / 650 / 162	730 / 294 / 139	773 / 404 / 124	726 / 400 / 188	779 / 544 / 167	729 / 500 / 244	821 / 670 / 215	612 / 496 / 202	742 / 619 / 166								
	2	782 / 427 / 121	877 / 587 / 109	791 / 584 / 163	848 / 750 / 138	816 / 694 / 203	900 / 840 / 163	776 / 660 / 162	928 / 803 / 130	773 / 404 / 124	839 / 542 / 109	779 / 554 / 167	833 / 715 / 142	821 / 679 / 215	896 / 834 / 174	742 / 628 / 166	892 / 770 / 135								
	3	751 / 723 / 100	788 / 895 / 82	836 / 692 / 146	871 / 839 / 117	860 / 788 / 174	1065 / 991 / 145	884 / 751 / 139	1061 / 913 / 112	764 / 710 / 106	778 / 860 / 85	845 / 677 / 155	886 / 832 / 125	865 / 778 / 186	1028 / 955 / 151	848 / 718 / 144	1024 / 880 / 117								
	1	779 / 298 / 151	832 / 416 / 137	771 / 404 / 204	835 / 559 / 185	779 / 515 / 272	864 / 685 / 238	628 / 512 / 226	776 / 650 / 189	777 / 281 / 155	825 / 394 / 141	767 / 382 / 209	826 / 530 / 190	767 / 488 / 279	848 / 652 / 245	620 / 496 / 236	742 / 619 / 194								
	2	832 / 416 / 137	915 / 570 / 123	835 / 569 / 185	904 / 750 / 161	864 / 694 / 238	911 / 840 / 191	776 / 660 / 189	928 / 803 / 152	825 / 394 / 141	879 / 527 / 123	826 / 540 / 190	891 / 715 / 166	848 / 661 / 245	924 / 834 / 204	742 / 628 / 194	892 / 770 / 158								
	3	810 / 723 / 116	836 / 895 / 95	895 / 692 / 170	919 / 839 / 136	897 / 788 / 204	1065 / 991 / 170	884 / 751 / 163	1061 / 913 / 131	827 / 710 / 123	828 / 860 / 99	883 / 659 / 175	937 / 832 / 146	909 / 778 / 218	1028 / 955 / 177	848 / 718 / 168	1024 / 880 / 137								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		45	1	717 / 337 / 126	775 / 461 / 112	720 / 457 / 169	789 / 618 / 150	747 / 570 / 218	810 / 717 / 181	657 / 539 / 173	787 / 661 / 140	746 / 382 / 123	816 / 519 / 109	753 / 516 / 165	813 / 676 / 142	775 / 625 / 207	851 / 777 / 170	697 / 577 / 160	847 / 717 / 132	758 / 418 / 117	834 / 563 / 103	768 / 563 / 157	809 / 710 / 130	801 / 677 / 197	905 / 831 / 159	749 / 625 / 152
2	775 / 461 / 112		860 / 615 / 98	789 / 629 / 150	834 / 783 / 123	810 / 727 / 181	932 / 872 / 144	787 / 671 / 140	962 / 835 / 115	816 / 519 / 109	886 / 668 / 92	791 / 670 / 138	831 / 817 / 111	825 / 763 / 165	1027 / 966 / 138	847 / 727 / 132	1023 / 891 / 107	834 / 563 / 103	909 / 717 / 87	809 / 722 / 130	848 / 868 / 104	875 / 814 / 154	1076 / 1016 / 128	900 / 777 / 123	1117 / 977 / 103	
3	731 / 755 / 89		773 / 928 / 73	820 / 725 / 130	864 / 871 / 104	892 / 820 / 154	1098 / 1024 / 128	918 / 782 / 123	1094 / 943 / 99	746 / 815 / 84	787 / 985 / 67	846 / 786 / 123	952 / 965 / 100	950 / 879 / 144	1152 / 1079 / 117	981 / 840 / 95	1201 / 1039 / 95	758 / 868 / 78	852 / 1076 / 64	838 / 812 / 111	997 / 1015 / 92	1038 / 964 / 138	1249 / 1174 / 112	1034 / 889 / 107	1246 / 1081 / 87	
50	1	740 / 330 / 133	811 / 461 / 121	740 / 447 / 180	801 / 602 / 159	756 / 556 / 232	833 / 717 / 197	657 / 539 / 188	787 / 661 / 153	767 / 373 / 130	829 / 506 / 115	771 / 504 / 175	844 / 676 / 155	802 / 625 / 226	864 / 777 / 186	697 / 577 / 175	847 / 717 / 144	776 / 408 / 124	844 / 548 / 109	783 / 549 / 167	838 / 710 / 142	826 / 677 / 215	905 / 831 / 174	749 / 625 / 166	900 / 766 / 135	
	2	811 / 461 / 121	891 / 615 / 106	801 / 613 / 159	861 / 783 / 134	833 / 727 / 197	932 / 872 / 157	787 / 671 / 153	962 / 835 / 126	829 / 506 / 115	916 / 668 / 100	821 / 670 / 150	856 / 817 / 121	837 / 763 / 180	1027 / 966 / 151	847 / 727 / 144	1023 / 891 / 117	844 / 548 / 109	937 / 717 / 94	838 / 722 / 142	871 / 868 / 113	875 / 814 / 168	1076 / 1016 / 139	900 / 777 / 135	1117 / 977 / 112	
	3	759 / 755 / 97	797 / 928 / 79	849 / 725 / 142	884 / 871 / 113	892 / 820 / 168	1098 / 1024 / 139	918 / 782 / 135	1094 / 943 / 108	773 / 815 / 91	809 / 985 / 73	873 / 786 / 134	952 / 965 / 109	950 / 879 / 157	1152 / 1079 / 128	981 / 840 / 126	1201 / 1039 / 103	783 / 868 / 85	852 / 1076 / 70	862 / 812 / 121	997 / 1015 / 100	1038 / 964 / 151	1249 / 1174 / 122	1034 / 889 / 117	1246 / 1081 / 94	
60	1	782 / 315 / 148	838 / 438 / 134	794 / 436 / 204	843 / 587 / 180	790 / 542 / 265	880 / 717 / 231	657 / 539 / 220	787 / 661 / 178	805 / 356 / 144	873 / 492 / 130	802 / 480 / 195	882 / 658 / 175	833 / 609 / 259	908 / 777 / 218	697 / 577 / 205	847 / 717 / 168	829 / 398 / 141	883 / 533 / 123	830 / 536 / 190	896 / 710 / 166	853 / 659 / 245	931 / 831 / 204	749 / 625 / 194	900 / 766 / 158	
	2	838 / 438 / 134	926 / 597 / 120	843 / 597 / 180	916 / 783 / 156	880 / 727 / 231	932 / 872 / 184	787 / 671 / 178	962 / 835 / 147	873 / 492 / 130	945 / 648 / 113	882 / 670 / 175	905 / 817 / 141	879 / 763 / 211	1027 / 966 / 177	847 / 727 / 168	1023 / 891 / 137	883 / 533 / 123	992 / 717 / 109	896 / 722 / 166	917 / 868 / 132	900 / 814 / 197	1076 / 1016 / 163	900 / 777 / 158	1117 / 977 / 131	
	3	817 / 755 / 113	843 / 928 / 92	907 / 725 / 166	930 / 871 / 132	913 / 820 / 197	1098 / 1024 / 163	918 / 782 / 158	1094 / 943 / 126	827 / 815 / 106	852 / 985 / 85	927 / 786 / 156	985 / 965 / 127	950 / 879 / 184	1152 / 1079 / 150	981 / 840 / 147	1201 / 1039 / 121	833 / 868 / 99	892 / 1076 / 81	912 / 812 / 141	998 / 1015 / 117	1038 / 964 / 177	1249 / 1174 / 143	1034 / 889 / 137	1246 / 1081 / 110	
45	1	768 / 453 / 112	850 / 604 / 98	782 / 607 / 150	825 / 756 / 123	800 / 705 / 181	950 / 877 / 149	796 / 669 / 144	946 / 809 / 115	797 / 497 / 109	889 / 660 / 95	793 / 648 / 142	836 / 797 / 115	818 / 745 / 170	987 / 915 / 138	839 / 709 / 136	1020 / 875 / 111	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	850 / 604 / 98	926 / 759 / 81	825 / 770 / 123	918 / 945 / 100	950 / 889 / 149	1111 / 1053 / 117	946 / 820 / 115	1158 / 1015 / 95	889 / 660 / 95	986 / 823 / 78	836 / 811 / 115	947 / 980 / 92	987 / 927 / 138	1186 / 1128 / 112	1020 / 888 / 111	1239 / 1090 / 91									
	3	764 / 912 / 73	876 / 1111 / 59	882 / 887 / 108	1029 / 1052 / 85	1079 / 1006 / 128	1274 / 1200 / 101	1120 / 966 / 103	1337 / 1163 / 82	796 / 985 / 70	933 / 1187 / 56	915 / 926 / 100	1099 / 1127 / 81	1157 / 1083 / 122	1351 / 1275 / 96	1154 / 997 / 95	1423 / 1240 / 78									
50	1	804 / 453 / 121	882 / 604 / 106	815 / 607 / 163	852 / 756 / 134	823 / 705 / 197	950 / 877 / 163	796 / 669 / 157	946 / 809 / 126	811 / 485 / 115	919 / 660 / 103	824 / 648 / 155	861 / 797 / 125	839 / 745 / 186	987 / 915 / 151	839 / 709 / 148	1020 / 875 / 121	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	882 / 604 / 106	952 / 759 / 88	852 / 770 / 134	918 / 945 / 109	950 / 889 / 163	1111 / 1053 / 128	946 / 820 / 126	1158 / 1015 / 103	919 / 660 / 103	997 / 823 / 85	861 / 811 / 125	947 / 980 / 100	987 / 927 / 151	1186 / 1128 / 122	1020 / 888 / 121	1239 / 1090 / 99									
	3	787 / 912 / 79	876 / 1111 / 64	906 / 887 / 117	1029 / 1052 / 92	1079 / 1006 / 139	1274 / 1200 / 110	1120 / 966 / 112	1337 / 1163 / 90	819 / 985 / 76	933 / 1187 / 61	915 / 926 / 109	1099 / 1127 / 88	1157 / 1083 / 134	1351 / 1275 / 105	1154 / 997 / 103	1423 / 1240 / 86									
60	1	832 / 430 / 134	917 / 587 / 120	836 / 576 / 180	906 / 756 / 156	870 / 705 / 231	950 / 877 / 191	796 / 669 / 184	946 / 809 / 147	856 / 472 / 130	951 / 641 / 116	863 / 631 / 175	912 / 797 / 146	883 / 745 / 218	987 / 915 / 177	839 / 709 / 173	1020 / 875 / 142	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	917 / 587 / 120	1004 / 759 / 102	906 / 770 / 156	960 / 945 / 127	950 / 889 / 191	1111 / 1053 / 150	946 / 820 / 147	1158 / 1015 / 121	951 / 641 / 116	1047 / 823 / 99	912 / 811 / 146	961 / 980 / 117	987 / 927 / 177	1186 / 1128 / 143	1020 / 888 / 142	1239 / 1090 / 116									
	3	834 / 912 / 92	887 / 1111 / 74	953 / 887 / 136	1029 / 1052 / 107	1079 / 1006 / 163	1274 / 1200 / 130	1120 / 966 / 131	1337 / 1163 / 105	864 / 985 / 88	933 / 1187 / 71	957 / 926 / 127	1099 / 1127 / 102	1157 / 1083 / 157	1351 / 1275 / 123	1154 / 997 / 121	1423 / 1240 / 100									
45	1	826 / 542 / 106	899 / 694 / 89	801 / 686 / 134	872 / 860 / 111	880 / 806 / 165	1055 / 981 / 133	876 / 743 / 127	1051 / 904 / 103	832 / 572 / 101	935 / 747 / 87	807 / 718 / 127	882 / 889 / 104	910 / 837 / 154	1120 / 1045 / 128	937 / 798 / 123	1116 / 963 / 99	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	899 / 694 / 89	1017 / 853 / 73	841 / 845 / 108	1009 / 1048 / 88	1055 / 995 / 133	1257 / 1198 / 106	1051 / 917 / 103	1317 / 1160 / 87	935 / 747 / 87	1081 / 911 / 70	882 / 905 / 104	1067 / 1112 / 85	1073 / 1015 / 122	1321 / 1263 / 101	1116 / 977 / 99	1388 / 1225 / 82									
	3	802 / 1011 / 64	985 / 1258 / 53	977 / 993 / 96	1164 / 1197 / 77	1175 / 1103 / 112	1420 / 1343 / 91	1228 / 1064 / 91	1501 / 1309 / 74	848 / 1073 / 62	1032 / 1322 / 51	994 / 1014 / 88	1223 / 1261 / 73	1238 / 1165 / 106	1479 / 1401 / 85	1297 / 1126 / 87	1569 / 1371 / 70									
50	1	837 / 528 / 112	928 / 694 / 97	831 / 686 / 146	896 / 860 / 121	880 / 806 / 180	1055 / 981 / 145	876 / 743 / 139	1051 / 904 / 112	864 / 572 / 109	963 / 747 / 94	835 / 718 / 138	897 / 889 / 113	910 / 837 / 168	1120 / 1045 / 139	937 / 798 / 135	1116 / 963 / 108	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	928 / 694 / 97	1017 / 853 / 79	865 / 845 / 117	1009 / 1048 / 96	1055 / 995 / 145	1257 / 1198 / 116	1051 / 917 / 112	1317 / 1160 / 94	963 / 747 / 94	1081 / 911 / 76	897 / 905 / 113	1067 / 1112 / 92	1073 / 1015 / 134	1321 / 1263 / 110	1116 / 977 / 108	1388 / 1225 / 90									
	3	813 / 1011 / 70	985 / 1258 / 58	977 / 993 / 105	1164 / 1197 / 84	1175 / 1103 / 122	1420 / 1343 / 99	1228 / 1064 / 99	1501 / 1309 / 81	848 / 1073 / 67	1032 / 1322 / 55	994 / 1014 / 96	1223 / 1261 / 80	1238 / 1165 / 116	1479 / 1401 / 93	1297 / 1126 / 94	1569 / 1371 / 77									
60	1	879 / 514 / 127	954 / 673 / 109	891 / 686 / 170	945 / 860 / 141	921 / 806 / 211	1055 / 981 / 170	876 / 743 / 163	1051 / 904 / 131	903 / 556 / 123	985 / 723 / 106	891 / 718 / 161	943 / 889 / 132	926 / 837 / 197	1120 / 1045 / 163	937 / 798 / 158	1116 / 963 / 126	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3
	2	954 / 673 / 109	1048 / 853 / 92	913 / 845 / 136	1009 / 1048 / 112	1055 / 995 / 170	1257 / 1198 / 136	1051 / 917 / 131	1317 / 1160 / 110	985 / 723 / 106	1085 / 911 / 88	943 / 905 / 132	1067 / 1112 / 107	1073 / 1015 / 157	1321 / 1263 / 130	1116 / 977 / 126	1388 / 1225 / 105									
	3	854 / 1011 / 81	985 / 1258 / 67	994 / 993 / 122	1164 / 1197 / 98	1175 / 1103 / 143	1420 / 1343 / 116	1228 / 1064 / 116	1501 / 1309 / 95	878 / 1073 / 78	1032 / 1322 / 64	994 / 1014 / 112	1223 / 1261 / 93	1238 / 1165 / 136	1479 / 1401 / 109	1297 / 1126 / 110	1569 / 1371 / 89									

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs												
Wind Speed [mph]		95								100								105												
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45						
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge					
		70	1	781 / 194 / 176	816 / 283 / 164	776 / 273 / 244	821 / 393 / 228	763 / 369 / 346	811 / 500 / 306	603 / 404 / 312	663 / 522 / 264	799 / 214 / 176	840 / 311 / 164	795 / 300 / 244	828 / 421 / 222	773 / 396 / 338	827 / 535 / 298	612 / 426 / 300	673 / 546 / 252	798 / 230 / 172	844 / 333 / 160	797 / 322 / 239	834 / 449 / 217	783 / 423 / 330	843 / 568 / 291	633 / 457 / 294	687 / 567 / 240			
2	816 / 283 / 164		877 / 404 / 152	821 / 400 / 228	874 / 551 / 206	811 / 507 / 306	884 / 672 / 267	663 / 529 / 264	773 / 657 / 216	840 / 311 / 164	887 / 432 / 148	828 / 428 / 222	887 / 588 / 200	827 / 542 / 298	906 / 714 / 259	673 / 554 / 252	796 / 680 / 204	844 / 333 / 160	897 / 459 / 144	834 / 457 / 217	899 / 624 / 194	843 / 576 / 291	927 / 755 / 251	687 / 576 / 240	839 / 719 / 198					
3	859 / 560 / 156		867 / 720 / 132	852 / 492 / 211	926 / 670 / 189	873 / 622 / 283	967 / 811 / 244	728 / 606 / 228	880 / 748 / 186	867 / 598 / 152	879 / 765 / 128	863 / 526 / 206	943 / 712 / 183	894 / 662 / 275	961 / 830 / 228	752 / 629 / 216	929 / 792 / 180	875 / 636 / 148	890 / 808 / 124	873 / 559 / 200	959 / 754 / 178	914 / 702 / 267	984 / 874 / 220	794 / 667 / 210	943 / 806 / 168					
80	1		843 / 185 / 188	867 / 276 / 179	812 / 260 / 262	847 / 373 / 243	785 / 352 / 374	842 / 488 / 338	621 / 396 / 345	688 / 522 / 298	843 / 205 / 188	869 / 296 / 175	831 / 287 / 262	873 / 410 / 243	793 / 378 / 365	856 / 528 / 330	628 / 418 / 331	697 / 546 / 284	835 / 220 / 183	870 / 316 / 170	830 / 307 / 256	878 / 437 / 237	821 / 413 / 365	869 / 553 / 321	647 / 448 / 325	704 / 567 / 271				
	2		867 / 276 / 179	921 / 393 / 166	847 / 380 / 243	912 / 537 / 225	842 / 494 / 338	930 / 672 / 303	688 / 529 / 298	773 / 657 / 244	869 / 296 / 175	928 / 420 / 161	873 / 418 / 243	922 / 572 / 219	856 / 528 / 330	951 / 714 / 294	697 / 554 / 284	796 / 680 / 230	870 / 316 / 170	935 / 446 / 157	878 / 445 / 237	931 / 607 / 212	869 / 561 / 321	970 / 755 / 285	704 / 576 / 271	839 / 719 / 223				
	3		905 / 546 / 170	927 / 720 / 148	893 / 479 / 231	954 / 650 / 206	897 / 605 / 312	1009 / 811 / 276	728 / 606 / 257	880 / 748 / 210	910 / 583 / 166	937 / 765 / 143	901 / 511 / 225	968 / 691 / 200	915 / 643 / 303	1000 / 830 / 258	752 / 629 / 244	929 / 792 / 203	916 / 619 / 161	946 / 808 / 139	908 / 543 / 219	981 / 730 / 194	933 / 681 / 294	1022 / 874 / 250	794 / 667 / 237	943 / 806 / 190				
90	1		920 / 181 / 203	892 / 262 / 188	875 / 254 / 284	890 / 364 / 263	823 / 344 / 408	871 / 475 / 368	637 / 389 / 376	697 / 510 / 323	898 / 195 / 198	915 / 289 / 188	859 / 273 / 277	916 / 400 / 263	828 / 369 / 398	882 / 507 / 359	642 / 409 / 361	721 / 546 / 316	898 / 214 / 198	913 / 308 / 183	878 / 299 / 277	917 / 426 / 256	834 / 393 / 388	893 / 538 / 349	661 / 438 / 353	727 / 567 / 301				
	2		892 / 262 / 188	933 / 372 / 173	890 / 371 / 263	946 / 522 / 243	871 / 481 / 368	948 / 652 / 329	697 / 517 / 323	773 / 657 / 271	915 / 289 / 188	965 / 408 / 173	916 / 407 / 263	953 / 556 / 236	882 / 514 / 359	966 / 693 / 319	721 / 554 / 316	796 / 680 / 256	913 / 308 / 183	969 / 434 / 169	917 / 433 / 256	960 / 589 / 229	893 / 545 / 349	982 / 732 / 309	727 / 576 / 301	839 / 719 / 248				
	3		922 / 517 / 178	986 / 720 / 164	930 / 466 / 250	980 / 630 / 222	918 / 587 / 339	1018 / 785 / 299	747 / 606 / 286	880 / 748 / 233	950 / 567 / 178	994 / 765 / 159	935 / 497 / 243	1023 / 691 / 222	933 / 625 / 329	1040 / 830 / 289	754 / 629 / 271	929 / 792 / 226	953 / 602 / 173	1001 / 808 / 154	940 / 528 / 236	1034 / 730 / 215	948 / 661 / 319	1060 / 874 / 279	794 / 667 / 263	943 / 806 / 211				
70	1	817 / 252 / 172	848 / 354 / 156	799 / 343 / 233	841 / 476 / 211	793 / 450 / 322	858 / 602 / 283	640 / 477 / 282	706 / 586 / 228	817 / 268 / 168	852 / 375 / 152	820 / 373 / 233	870 / 517 / 211	803 / 477 / 314	872 / 634 / 275	646 / 496 / 270	742 / 619 / 222	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
	2	848 / 354 / 156	906 / 486 / 140	841 / 485 / 211	910 / 660 / 189	858 / 610 / 283	947 / 795 / 244	706 / 595 / 228	881 / 758 / 192	852 / 375 / 152	914 / 512 / 136	870 / 526 / 211	949 / 715 / 189	872 / 643 / 275	965 / 834 / 236	742 / 628 / 222	892 / 770 / 180													
	3	882 / 673 / 144	870 / 822 / 116	908 / 608 / 200	974 / 794 / 172	934 / 741 / 259	1006 / 916 / 212	810 / 683 / 198	985 / 844 / 162	889 / 710 / 140	878 / 860 / 112	918 / 641 / 194	988 / 832 / 167	952 / 778 / 251	1028 / 955 / 204	848 / 718 / 192	1024 / 880 / 156													
	80	1	852 / 240 / 183	895 / 345 / 170	850 / 335 / 256	882 / 463 / 231	829 / 439 / 356	882 / 585 / 312	653 / 467 / 311	709 / 586 / 257	850 / 255 / 179	896 / 365 / 166	849 / 355 / 250	910 / 503 / 231	836 / 465 / 347	920 / 634 / 312	671 / 496 / 304													742 / 619 / 250
		2	895 / 345 / 170	941 / 472 / 152	882 / 472 / 231	940 / 640 / 206	882 / 593 / 276	989 / 795 / 257	709 / 595 / 217	881 / 758 / 203	896 / 365 / 166	975 / 512 / 152	910 / 512 / 231	977 / 694 / 206	920 / 643 / 312	1006 / 834 / 267	742 / 628 / 250													892 / 770 / 203
		3	920 / 655 / 157	922 / 822 / 130	942 / 591 / 219	1027 / 794 / 194	949 / 718 / 285	1042 / 916 / 241	810 / 683 / 223	985 / 844 / 183	952 / 710 / 157	928 / 860 / 125	950 / 622 / 212	1039 / 832 / 187	965 / 754 / 276	1061 / 955 / 232	848 / 718 / 217													1024 / 880 / 176
	90	1	881 / 229 / 193	937 / 336 / 183	875 / 310 / 270	919 / 451 / 250	861 / 428 / 388	929 / 585 / 349	679 / 467 / 270	731 / 586 / 286	898 / 249 / 193	936 / 355 / 178	894 / 346 / 270	946 / 489 / 250	867 / 453 / 378	940 / 616 / 339	681 / 485 / 331													752 / 619 / 278
		2	937 / 336 / 183	972 / 458 / 164	919 / 459 / 250	996 / 640 / 229	929 / 593 / 349	998 / 770 / 299	731 / 595 / 286	881 / 758 / 241	936 / 355 / 178	1006 / 497 / 164	946 / 498 / 250	1002 / 673 / 222	940 / 624 / 339	1047 / 834 / 299	752 / 628 / 278													892 / 770 / 226
		3	955 / 636 / 169	974 / 822 / 144	973 / 574 / 236	1044 / 768 / 208	993 / 718 / 319	1079 / 916 / 269	810 / 683 / 248	985 / 844 / 203	986 / 689 / 169	978 / 860 / 139	978 / 604 / 229	1054 / 804 / 201	1007 / 754 / 309	1096 / 955 / 259	848 / 718 / 241													1024 / 880 / 196
70	1	817 / 284 / 164	879 / 406 / 152	822 / 394 / 228	876 / 544 / 206	813 / 503 / 306	886 / 666 / 267	650 / 512 / 258	776 / 650 / 216	817 / 268 / 168	852 / 375 / 152	820 / 373 / 233	870 / 517 / 211	803 / 477 / 314	872 / 634 / 275	646 / 496 / 270	742 / 619 / 222	ASCE Group Zone	Panal Angle	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	
	2	879 / 406 / 152	950 / 554 / 136	876 / 554 / 206	960 / 750 / 183	886 / 675 / 267	949 / 840 / 220	776 / 660 / 216	928 / 803 / 174	852 / 375 / 152	914 / 512 / 136	870 / 526 / 211	949 / 715 / 189	872 / 643 / 275	965 / 834 / 236	742 / 628 / 222	892 / 770 / 180													
	3	869 / 723 / 132	885 / 895 / 108	928 / 673 / 189	966 / 839 / 156	938 / 788 / 236	1065 / 991 / 197	884 / 751 / 186	1061 / 913 / 150	889 / 710 / 140	878 / 860 / 112	918 / 641 / 194	988 / 832 / 167	952 / 778 / 251	1028 / 955 / 204	848 / 718 / 192	1024 / 880 / 156													
	80	1	868 / 277 / 179	897 / 384 / 161	849 / 375 / 243	913 / 529 / 225	844 / 490 / 338	932 / 666 / 303	674 / 512 / 291	776 / 650 / 244	850 / 255 / 179	896 / 365 / 166	849 / 355 / 250	910 / 503 / 231	836 / 465 / 347	920 / 634 / 312	671 / 496 / 304													742 / 619 / 250
		2	897 / 384 / 161	981 / 538 / 148	913 / 539 / 225	985 / 727 / 200	932 / 675 / 303	987 / 840 / 250	776 / 660 / 244	928 / 803 / 196	896 / 365 / 166	975 / 512 / 152	910 / 512 / 231	977 / 694 / 206	920 / 643 / 312	1006 / 834 / 267	742 / 628 / 250													892 / 770 / 203
		3	928 / 723 / 148	933 / 895 / 121	956 / 653 / 206	1014 / 839 / 175	979 / 788 / 267	1077 / 991 / 223	884 / 751 / 210	1061 / 913 / 169	952 / 710 / 157	928 / 860 / 125	950 / 622 / 212	1039 / 832 / 187	965 / 754 / 276	1061 / 955 / 232	848 / 718 / 217													1024 / 880 / 176
	90	1	893 / 263 / 188	935 / 374 / 173	891 / 366 / 263	947 / 515 / 243	872 / 477 / 368	950 / 646 / 329	699 / 512 / 323	776 / 650 / 271	898 / 249 / 193	936 / 355 / 178	894 / 346 / 270	946 / 489 / 250	867 / 453 / 378	940 / 616 / 339	681 / 485 / 331													752 / 619 / 278
		2	935 / 374 / 173	1009 / 521 / 159	947 / 524 / 243	1007 / 705 / 215	950 / 655 / 329	1025 / 840 / 279	776 / 660 / 271	928 / 803 / 218	936 / 355 / 178	1006 / 497 / 164	946 / 498 / 250	1002 / 673 / 222	940 / 624 / 339	1047 / 834 / 299	752 / 628 / 278													892 / 770 / 226
		3	987 / 723 / 164	981 / 895 / 134	982 / 633 / 222	1061 / 839 / 194	1020 / 788 / 299	1111 / 991 / 249	884 / 751 / 233	1061 / 913 / 188	986 / 689 / 169	978 / 860 / 139	978 / 604 / 229	1054 / 804 / 201	1007 / 754 / 309	1096 / 955 / 259	848 / 718 / 241													1024 / 880 / 196

Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
70	1	836 / 307 / 164	883 / 426 / 148	824 / 415 / 222	882 / 571 / 200	822 / 528 / 298	926 / 717 / 267	668 / 539 / 252	787 / 661 / 204	836 / 339 / 156	914 / 479 / 144	848 / 468 / 217	917 / 640 / 194	862 / 593 / 291	951 / 777 / 251	697 / 577 / 234	847 / 717 / 192	856 / 378 / 152	919 / 518 / 136	873 / 522 / 211	926 / 689 / 183	877 / 640 / 275	972 / 831 / 236	749 / 625 / 222	900 / 766 / 180
	2	883 / 426 / 148	958 / 580 / 132	882 / 581 / 200	970 / 783 / 178	926 / 727 / 267	963 / 872 / 212	787 / 671 / 204	962 / 835 / 168	914 / 479 / 144	971 / 628 / 124	917 / 651 / 194	954 / 817 / 161	922 / 763 / 244	1027 / 966 / 204	847 / 727 / 192	1023 / 891 / 156	919 / 518 / 136	1014 / 693 / 120	926 / 701 / 183	963 / 868 / 150	939 / 814 / 228	1076 / 1016 / 189	900 / 777 / 180	1117 / 977 / 150
	3	874 / 755 / 128	890 / 928 / 104	936 / 704 / 183	976 / 871 / 150	953 / 820 / 228	1098 / 1024 / 189	918 / 782 / 180	1094 / 943 / 144	881 / 815 / 120	895 / 985 / 96	982 / 786 / 178	1029 / 965 / 145	977 / 879 / 212	1152 / 1079 / 173	981 / 840 / 168	1201 / 1039 / 138	883 / 868 / 112	933 / 1076 / 92	961 / 812 / 161	1039 / 1015 / 134	1038 / 964 / 204	1249 / 1174 / 165	1034 / 889 / 156	1246 / 1081 / 126
	1	866 / 292 / 175	923 / 415 / 161	870 / 405 / 243	917 / 555 / 219	851 / 514 / 330	944 / 696 / 294	692 / 539 / 284	787 / 661 / 230	882 / 330 / 170	951 / 466 / 157	891 / 456 / 237	949 / 621 / 212	888 / 577 / 321	964 / 753 / 276	707 / 577 / 264	847 / 717 / 217	899 / 369 / 166	951 / 502 / 148	889 / 494 / 225	982 / 689 / 206	899 / 622 / 303	1013 / 831 / 267	749 / 625 / 250	900 / 766 / 203
	2	923 / 415 / 161	986 / 562 / 143	917 / 565 / 219	992 / 759 / 194	944 / 705 / 294	1000 / 872 / 241	787 / 671 / 230	962 / 835 / 190	951 / 466 / 157	1027 / 628 / 139	949 / 633 / 212	1003 / 817 / 181	964 / 763 / 276	1060 / 966 / 232	847 / 727 / 217	1023 / 891 / 176	951 / 502 / 148	1067 / 693 / 134	982 / 701 / 206	1009 / 868 / 169	979 / 814 / 258	1076 / 1016 / 214	900 / 777 / 203	1117 / 977 / 169
	3	931 / 755 / 143	936 / 928 / 117	962 / 682 / 200	1022 / 871 / 169	992 / 820 / 258	1098 / 1024 / 214	918 / 782 / 203	1094 / 943 / 163	934 / 815 / 134	938 / 985 / 108	1004 / 761 / 194	1074 / 965 / 162	1014 / 879 / 241	1152 / 1079 / 196	981 / 840 / 190	1201 / 1039 / 156	933 / 868 / 125	974 / 1076 / 103	1010 / 812 / 181	1079 / 1015 / 150	1068 / 964 / 232	1249 / 1174 / 187	1034 / 889 / 176	1246 / 1081 / 142
	1	911 / 285 / 188	960 / 403 / 173	912 / 395 / 263	948 / 539 / 236	877 / 500 / 359	959 / 675 / 319	715 / 539 / 316	787 / 661 / 256	925 / 321 / 183	985 / 453 / 169	931 / 444 / 256	977 / 603 / 229	911 / 561 / 349	1006 / 753 / 309	729 / 577 / 293	847 / 717 / 241	939 / 359 / 178	1010 / 502 / 164	923 / 481 / 243	1007 / 668 / 222	945 / 622 / 339	1019 / 803 / 289	757 / 625 / 278	900 / 766 / 226
	2	960 / 403 / 173	1011 / 545 / 154	948 / 549 / 236	1045 / 759 / 215	959 / 684 / 319	1036 / 872 / 269	787 / 671 / 256	962 / 835 / 211	985 / 453 / 169	1047 / 607 / 149	977 / 614 / 229	1053 / 817 / 201	1006 / 763 / 309	1095 / 966 / 259	847 / 727 / 241	1023 / 891 / 196	1010 / 502 / 164	1084 / 670 / 144	1007 / 680 / 222	1055 / 868 / 187	1019 / 814 / 289	1107 / 1016 / 239	900 / 777 / 226	1117 / 977 / 188
	3	988 / 755 / 159	983 / 928 / 129	1017 / 682 / 222	1068 / 871 / 187	1032 / 820 / 289	1123 / 1024 / 239	918 / 782 / 226	1094 / 943 / 181	988 / 815 / 149	981 / 985 / 119	1022 / 737 / 208	1118 / 965 / 180	1050 / 879 / 269	1152 / 1079 / 219	981 / 840 / 211	1201 / 1039 / 173	983 / 868 / 139	1015 / 1076 / 114	1059 / 812 / 201	1120 / 1015 / 167	1104 / 964 / 259	1249 / 1174 / 209	1034 / 889 / 196	1246 / 1081 / 158
Wind Speed [mph]		170								180															
70	1	876 / 419 / 148	949 / 569 / 132	874 / 561 / 200	961 / 756 / 178	916 / 705 / 267	986 / 877 / 220	796 / 669 / 210	946 / 809 / 168	897 / 459 / 144	980 / 621 / 128	899 / 613 / 194	963 / 797 / 167	927 / 745 / 251	994 / 915 / 204	839 / 709 / 198	1020 / 875 / 162	ASCE Group Zone							
	2	949 / 569 / 132	1056 / 759 / 116	961 / 770 / 178	1004 / 945 / 145	986 / 889 / 220	1111 / 1053 / 173	946 / 820 / 168	1158 / 1015 / 138	980 / 621 / 128	1097 / 823 / 112	963 / 811 / 167	1002 / 980 / 134	994 / 927 / 204	1186 / 1128 / 165	1020 / 888 / 162	1239 / 1090 / 132	Panal Angle							
	3	880 / 912 / 104	925 / 1111 / 84	1001 / 887 / 156	1038 / 1052 / 122	1079 / 1006 / 189	1274 / 1200 / 149	1120 / 966 / 150	1337 / 1163 / 120	908 / 985 / 100	955 / 1187 / 80	1002 / 926 / 145	1099 / 1127 / 117	1157 / 1083 / 181	1351 / 1275 / 1154	997 / 1423 / 1240 / 114	Mono Slope								
	1	917 / 407 / 161	978 / 552 / 143	910 / 545 / 219	983 / 733 / 194	935 / 684 / 294	1025 / 877 / 250	796 / 669 / 237	946 / 809 / 190	935 / 446 / 157	1005 / 602 / 139	931 / 596 / 212	1014 / 797 / 187	970 / 745 / 285	1030 / 915 / 232	839 / 709 / 223	1020 / 875 / 183	0 - 7.5							
	2	978 / 552 / 143	1070 / 733 / 125	983 / 746 / 194	1048 / 945 / 162	1025 / 889 / 250	1111 / 1053 / 196	946 / 820 / 190	1158 / 1015 / 156	1005 / 602 / 139	1106 / 794 / 121	1014 / 811 / 187	1042 / 980 / 150	1030 / 927 / 232	1186 / 1128 / 187	1020 / 888 / 183	1239 / 1090 / 149	7.5 - 15							
	3	927 / 912 / 117	963 / 1111 / 94	1048 / 887 / 175	1076 / 1052 / 138	1079 / 1006 / 214	1274 / 1200 / 169	1120 / 966 / 136	1337 / 1163 / 129	953 / 985 / 112	991 / 1187 / 90	1046 / 926 / 162	1114 / 1127 / 131	1157 / 1083 / 205	1351 / 1275 / 161	1154 / 997 / 156	1423 / 1240 / 129	15 - 30							
	1	954 / 396 / 173	1035 / 552 / 159	941 / 530 / 236	1036 / 733 / 215	950 / 663 / 319	1063 / 877 / 279	796 / 669 / 211	946 / 809 / 211	969 / 434 / 169	1026 / 582 / 149	960 / 578 / 229	1065 / 797 / 208	982 / 722 / 309	1065 / 915 / 259	839 / 709 / 248	1020 / 875 / 203	30 - 45							
	2	1035 / 552 / 159	1120 / 733 / 139	1036 / 746 / 215	1092 / 945 / 180	1063 / 889 / 279	1111 / 1053 / 211	946 / 820 / 211	1158 / 1015 / 173	1026 / 582 / 149	1155 / 794 / 134	1065 / 811 / 208	1083 / 980 / 167	1065 / 927 / 259	1186 / 1128 / 209	1020 / 888 / 203	1239 / 1090 / 166	1 = 1							
	3	974 / 912 / 129	1000 / 1111 / 104	1096 / 887 / 194	1113 / 1052 / 153	1110 / 1006 / 239	1274 / 1200 / 189	1120 / 966 / 188	1337 / 1163 / 151	998 / 985 / 124	1027 / 1187 / 99	1090 / 926 / 180	1150 / 1127 / 146	1157 / 1083 / 229	1351 / 1275 / 180	1154 / 997 / 173	1423 / 1240 / 143	2 = 2							
Wind Speed [mph]		190								200															
70	1	918 / 500 / 140	1010 / 673 / 124	923 / 666 / 189	995 / 860 / 161	963 / 806 / 244	1055 / 981 / 197	876 / 743 / 186	1051 / 904 / 150	938 / 540 / 136	1039 / 723 / 120	947 / 718 / 183	989 / 889 / 150	966 / 837 / 228	1120 / 1045 / 189	937 / 798 / 180	1116 / 963 / 144	ASCE Group Zone							
	2	1010 / 673 / 124	1095 / 853 / 104	960 / 845 / 156	1036 / 1048 / 128	1055 / 995 / 197	1257 / 1198 / 157	1051 / 917 / 150	1317 / 1160 / 126	1039 / 723 / 120	1130 / 911 / 100	989 / 905 / 150	1067 / 1112 / 122	1073 / 1015 / 181	1321 / 1263 / 149	1116 / 977 / 144	1388 / 1225 / 120	Panal Angle							
	3	896 / 1011 / 92	985 / 1258 / 76	1036 / 993 / 139	1164 / 1197 / 111	1175 / 1103 / 165	1420 / 1343 / 134	1228 / 1064 / 132	1501 / 1309 / 108	917 / 1073 / 88	1032 / 1322 / 72	1025 / 1014 / 128	1223 / 1261 / 106	1238 / 1165 / 157	1479 / 1401 / 126	1297 / 1126 / 126	1569 / 1371 / 102	Mono Slope							
	1	952 / 485 / 152	1031 / 651 / 134	952 / 646 / 206	1044 / 860 / 181	1006 / 806 / 276	1069 / 981 / 223	876 / 743 / 210	1051 / 904 / 169	970 / 524 / 148	1056 / 699 / 130	972 / 697 / 200	1035 / 889 / 169	1006 / 837 / 258	1120 / 1045 / 214	937 / 798 / 203	1116 / 963 / 163	0 - 7.5							
	2	1031 / 651 / 134	1142 / 853 / 117	1008 / 845 / 175	1075 / 1048 / 144	1069 / 995 / 223	1257 / 1198 / 178	1051 / 917 / 169	1317 / 1160 / 142	1056 / 699 / 130	1175 / 911 / 112	1035 / 905 / 169	1105 / 1112 / 138	1073 / 1015 / 205	1321 / 1263 / 169	1116 / 977 / 163	1388 / 1225 / 136	7.5 - 15							
	3	937 / 1011 / 103	1016 / 1258 / 85	1079 / 993 / 156	1164 / 1197 / 125	1175 / 1103 / 187	1420 / 1343 / 152	1228 / 1064 / 149	1501 / 1309 / 122	957 / 1073 / 99	1036 / 1322 / 81	1064 / 1014 / 144	1223 / 1261 / 119	1238 / 1165 / 178	1479 / 1401 / 143	1297 / 1126 / 142	1569 / 1371 / 115	15 - 30							
	1	983 / 471 / 164	1085 / 651 / 149	977 / 627 / 222	1093 / 860 / 201	1014 / 780 / 299	1104 / 981 / 249	876 / 743 / 233	1051 / 904 / 188	997 / 508 / 159	1108 / 699 / 144	1027 / 697 / 222	1080 / 889 / 187	1045 / 837 / 289	1140 / 1045 / 239	937 / 798 / 226	1116 / 963 / 181	30 - 45							
	2	1085 / 651 / 149	1188 / 853 / 129	1056 / 845 / 194	1114 / 1048 / 160	1104 / 995 / 249	1257 / 1198 / 199	1051 / 917 / 188	1317 / 1160 / 158	1108 / 699 / 144	1220 / 911 / 124	1080 / 905 / 187	1142 / 1112 / 153	1092 / 1015 / 229	1321 / 1263 / 189	1116 / 977 / 181	1388 / 1225 / 151	1 = 1							
	3	978 / 1011 / 114	1050 / 1258 / 94	1121 / 993 / 173	1183 / 1197 / 139	1175 / 1103 / 209	1420 / 1343 / 170	1228 / 1064 / 166	1501 / 1309 / 136	996 / 1073 / 109	1069 / 1322 / 89	1103 / 1014 / 160	1223 / 1261 / 132	1238 / 1165 / 199	1479 / 1401 / 160	1297 / 1126 / 158	1569 / 1371 / 128	2 = 2							

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	969 / 172 / 212	935 / 255 / 201	920 / 242 / 297	930 / 354 / 282	857 / 336 / 440	896 / 462 / 396	652 / 381 / 406	721 / 510 / 356	969 / 190 / 212	957 / 281 / 201	920 / 266 / 297	929 / 379 / 274	861 / 359 / 429	905 / 492 / 385	656 / 401 / 389	727 / 533 / 340	944 / 204 / 207	953 / 299 / 196	898 / 284 / 290	954 / 414 / 274	864 / 383 / 418	940 / 538 / 385	673 / 429 / 381	750 / 567 / 331
	2	935 / 255 / 201	968 / 361 / 185	930 / 361 / 282	977 / 507 / 259	896 / 468 / 396	963 / 632 / 352	721 / 517 / 356	791 / 657 / 298	957 / 281 / 201	998 / 397 / 185	929 / 386 / 274	981 / 539 / 251	905 / 499 / 385	1009 / 693 / 352	727 / 541 / 340	796 / 680 / 282	953 / 299 / 196	999 / 421 / 179	954 / 422 / 274	1016 / 589 / 251	940 / 545 / 385	1025 / 732 / 341	750 / 576 / 331	839 / 719 / 273
	3	959 / 503 / 190	1013 / 698 / 174	963 / 453 / 267	1034 / 630 / 244	964 / 587 / 374	1059 / 785 / 330	769 / 606 / 315	880 / 748 / 257	987 / 551 / 190	1051 / 765 / 174	966 / 483 / 259	1043 / 669 / 236	978 / 625 / 363	1079 / 830 / 319	775 / 629 / 298	929 / 792 / 249	987 / 585 / 185	1057 / 808 / 169	998 / 528 / 259	1052 / 707 / 229	992 / 661 / 352	1099 / 874 / 308	800 / 667 / 290	943 / 806 / 232

Wind Speed [mph]		110								115																							
100	1	944 / 223 / 207	977 / 327 / 196	917 / 310 / 290	953 / 438 / 267	891 / 417 / 418	949 / 568 / 374	690 / 457 / 373	752 / 586 / 315	944 / 243 / 207	973 / 345 / 190	911 / 329 / 282	979 / 476 / 267	895 / 441 / 407	958 / 598 / 363	707 / 485 / 364	773 / 619 / 306	977 / 327 / 196	1031 / 458 / 179	953 / 446 / 267	1020 / 621 / 244	949 / 576 / 374	1039 / 770 / 330	752 / 595 / 315	881 / 758 / 265	973 / 345 / 190	1032 / 482 / 174	979 / 484 / 267	1023 / 652 / 236	958 / 606 / 363	1052 / 806 / 319	773 / 628 / 306	892 / 770 / 249
	2	986 / 617 / 179	1026 / 822 / 158	1001 / 557 / 251	1059 / 742 / 221	1004 / 696 / 341	1116 / 916 / 297	810 / 683 / 273	985 / 844 / 224	1016 / 669 / 179	1029 / 860 / 152	1003 / 586 / 244	1103 / 804 / 221	1016 / 730 / 330	1132 / 955 / 286	848 / 718 / 265	1024 / 880 / 215	986 / 617 / 179	1026 / 822 / 158	1001 / 557 / 251	1059 / 742 / 221	1004 / 696 / 341	1116 / 916 / 297	810 / 683 / 273	985 / 844 / 224	1016 / 669 / 179	1029 / 860 / 152	1003 / 586 / 244	1103 / 804 / 221	1016 / 730 / 330	1132 / 955 / 286	848 / 718 / 265	1024 / 880 / 215
	3	936 / 256 / 201	969 / 363 / 185	931 / 356 / 282	978 / 500 / 259	898 / 464 / 396	965 / 626 / 352	723 / 512 / 356	793 / 650 / 298	944 / 243 / 207	973 / 345 / 190	911 / 329 / 282	979 / 476 / 267	895 / 441 / 407	958 / 598 / 363	707 / 485 / 364	773 / 619 / 306	936 / 256 / 201	969 / 363 / 185	931 / 356 / 282	978 / 500 / 259	898 / 464 / 396	965 / 626 / 352	723 / 512 / 356	793 / 650 / 298	944 / 243 / 207	973 / 345 / 190	911 / 329 / 282	979 / 476 / 267	895 / 441 / 407	958 / 598 / 363	707 / 485 / 364	773 / 619 / 306

Wind Speed [mph]		120								130																							
100	1	1015 / 701 / 174	1030 / 895 / 147	1036 / 633 / 244	1109 / 839 / 213	1061 / 788 / 330	1145 / 991 / 275	884 / 751 / 257	1061 / 913 / 207	944 / 243 / 207	973 / 345 / 190	911 / 329 / 282	979 / 476 / 267	895 / 441 / 407	958 / 598 / 363	707 / 485 / 364	773 / 619 / 306	1015 / 701 / 174	1030 / 895 / 147	1036 / 633 / 244	1109 / 839 / 213	1061 / 788 / 330	1145 / 991 / 275	884 / 751 / 257	1061 / 913 / 207	973 / 345 / 190	979 / 484 / 267	1023 / 652 / 236	958 / 606 / 363	1052 / 806 / 319	773 / 628 / 306	892 / 770 / 249	
	2	936 / 256 / 201	969 / 363 / 185	931 / 356 / 282	978 / 500 / 259	898 / 464 / 396	965 / 626 / 352	723 / 512 / 356	793 / 650 / 298	944 / 243 / 207	973 / 345 / 190	911 / 329 / 282	979 / 476 / 267	895 / 441 / 407	958 / 598 / 363	707 / 485 / 364	773 / 619 / 306	936 / 256 / 201	969 / 363 / 185	931 / 356 / 282	978 / 500 / 259	898 / 464 / 396	965 / 626 / 352	723 / 512 / 356	793 / 650 / 298	944 / 243 / 207	973 / 345 / 190	979 / 484 / 267	1023 / 652 / 236	958 / 606 / 363	1052 / 806 / 319	773 / 628 / 306	892 / 770 / 249
	3	936 / 256 / 201	969 / 363 / 185	931 / 356 / 282	978 / 500 / 259	898 / 464 / 396	965 / 626 / 352	723 / 512 / 356	793 / 650 / 298	944 / 243 / 207	973 / 345 / 190	911 / 329 / 282	979 / 476 / 267	895 / 441 / 407	958 / 598 / 363	707 / 485 / 364	773 / 619 / 306	936 / 256 / 201	969 / 363 / 185	931 / 356 / 282	978 / 500 / 259	898 / 464 / 396	965 / 626 / 352	723 / 512 / 356	793 / 650 / 298	944 / 243 / 207	973 / 345 / 190	979 / 484 / 267	1023 / 652 / 236	958 / 606 / 363	1052 / 806 / 319	773 / 628 / 306	892 / 770 / 249

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	954 / 277 / 201	994 / 392 / 185	925 / 374 / 274	976 / 523 / 251	926 / 500 / 396	1003 / 675 / 352	739 / 539 / 348	789 / 661 / 282	965 / 313 / 196	1015 / 439 / 179	967 / 432 / 274	1002 / 585 / 244	931 / 545 / 374	1015 / 728 / 330	751 / 577 / 323	847 / 717 / 265	976 / 349 / 190	1037 / 487 / 174	983 / 481 / 267	1028 / 647 / 236	962 / 604 / 363	1058 / 803 / 319	778 / 625 / 306	900 / 766 / 249
	2	994 / 392 / 185	1067 / 545 / 169	976 / 533 / 251	1062 / 735 / 229	1003 / 684 / 352	1073 / 872 / 297	789 / 671 / 282	962 / 835 / 232	1015 / 439 / 179	1064 / 587 / 158	1002 / 596 / 244	1102 / 817 / 221	1015 / 738 / 330	1131 / 966 / 286	847 / 727 / 265	1023 / 891 / 215	1037 / 487 / 174	1097 / 647 / 152	1028 / 659 / 236	1101 / 868 / 206	1058 / 814 / 319	1140 / 1016 / 264	900 / 777 / 249	1117 / 977 / 207
	3	1046 / 755 / 174	1029 / 928 / 141	1038 / 661 / 236	1114 / 871 / 206	1071 / 820 / 319	1156 / 1024 / 264	918 / 782 / 249	1094 / 943 / 199	1042 / 815 / 163	1024 / 985 / 131	1073 / 737 / 229	1162 / 965 / 198	1087 / 879 / 297	1169 / 1079 / 242	981 / 840 / 232	1201 / 1039 / 191	1033 / 868 / 152	1056 / 1076 / 125	1109 / 812 / 221	1161 / 1015 / 183	1139 / 964 / 286	1249 / 1174 / 231	1034 / 889 / 215	1246 / 1081 / 174

Wind Speed [mph]		170								180																										
100	1	988 / 385 / 185	1058 / 535 / 169	999 / 530 / 259	1054 / 709 / 229	994 / 663 / 352	1101 / 877 / 308	803 / 669 / 290	946 / 809 / 232	999 / 421 / 179	1080 / 582 / 163	1016 / 578 / 251	1079 / 770 / 221	1025 / 722 / 341	1101 / 915 / 286	839 / 709 / 273	1020 / 875 / 224	1058 / 535 / 169	1128 / 707 / 147	1054 / 722 / 229	1136 / 945 / 198	1101 / 889 / 308	1138 / 1053 / 242	946 / 820 / 232	1158 / 1015 / 191	1080 / 582 / 163	1158 / 765 / 141	1079 / 784 / 221	1124 / 980 / 183	1101 / 927 / 286	1186 / 1128 / 231	1020 / 888 / 224	1239 / 1090 / 182			
	2	1020 / 912 / 141	1038 / 1111 / 114	1144 / 887 / 213	1151 / 1052 / 168	1142 / 1006 / 264	1274 / 1200 / 209	1120 / 966 / 207	1337 / 1163 / 166	1043 / 985 / 136	1062 / 1187 / 109	1134 / 926 / 198	1186 / 1127 / 160	1187 / 1083 / 253	1351 / 1275 / 198	1154 / 997 / 191	1423 / 1240 / 158																			
	3																																			

Wind Speed [mph]		190								200																										
100	1	1011 / 457 / 174	1100 / 629 / 158	1032 / 627 / 244	1103 / 830 / 213	1055 / 780 / 330	1138 / 981 / 275	876 / 743 / 257	1051 / 904 / 207	1022 / 492 / 169	1120 / 675 / 152	1047 / 675 / 236	1126 / 889 / 206	1085 / 837 / 319	1173 / 1045 / 264	937 / 798 / 249	1116 / 963 / 199	1100 / 629 / 158	1187 / 821 / 136	1103 / 845 / 213	1153 / 1048 / 175	1138 / 995 / 275	1257 / 1198 / 220	1051 / 917 / 207	1317 / 1160 / 174	1120 / 675 / 152	1214 / 874 / 131	1126 / 905 / 206	1179 / 1112 / 168	1124 / 1015 / 253	1321 / 1263 / 209	1116 / 977 / 199	1388 / 1225 / 166			
	2	1019 / 1011 / 125	1084 / 1258 / 104	1164 / 993 / 191	1217 / 1197 / 153	1175 / 1103 / 231	1420 / 1343 / 187	1228 / 1064 / 182	1501 / 1309 / 149	1035 / 1073 / 120	1101 / 1322 / 98	1142 / 1014 / 175	1245 / 1261 / 145	1238 / 1165 / 220	1479 / 1401 / 176	1297 / 1126 / 174	1569 / 1371 / 141																			
	3																																			

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
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B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
		0	1	500 / 358 / 44	593 / 454 / 36	524 / 472 / 47	603 / 572 / 38	620 / 537 / 48	749 / 672 / 39	613 / 497 / 52	743 / 620 / 43	522 / 380 / 43	616 / 477 / 35	536 / 489 / 45	640 / 613 / 37	644 / 563 / 46	772 / 696 / 37	637 / 520 / 50	766 / 642 / 41	532 / 394 / 40	652 / 510 / 34	556 / 513 / 43	660 / 636 / 35	666 / 587 / 44	814 / 738 / 36	659 / 542 / 48
0	2	593 / 454 / 36	717 / 574 / 30	603 / 583 / 38	717 / 717 / 31	729 / 663 / 38	898 / 836 / 32	743 / 629 / 43	894 / 771 / 35	616 / 477 / 35	760 / 613 / 29	625 / 609 / 36	758 / 762 / 30	772 / 706 / 37	914 / 854 / 30	766 / 652 / 41	942 / 816 / 34	652 / 510 / 34	780 / 633 / 28	643 / 631 / 34	772 / 781 / 28	790 / 726 / 35	958 / 898 / 29	808 / 691 / 40	989 / 859 / 33	
0	3	591 / 711 / 28	696 / 862 / 22	697 / 679 / 33	834 / 834 / 27	855 / 780 / 34	1031 / 957 / 28	850 / 719 / 37	1027 / 882 / 30	606 / 735 / 26	731 / 909 / 22	718 / 704 / 32	848 / 852 / 25	873 / 801 / 32	1038 / 967 / 26	898 / 763 / 36	1077 / 928 / 29	637 / 777 / 25	764 / 955 / 21	734 / 724 / 30	888 / 896 / 24	917 / 844 / 31	1081 / 1010 / 25	913 / 778 / 34	1125 / 971 / 28	
5	1	500 / 358 / 44	593 / 454 / 36	524 / 472 / 55	603 / 572 / 44	620 / 537 / 59	749 / 672 / 49	613 / 497 / 60	743 / 620 / 49	522 / 380 / 43	616 / 477 / 35	536 / 489 / 52	640 / 613 / 43	644 / 563 / 57	772 / 696 / 46	637 / 520 / 57	766 / 642 / 47	532 / 394 / 40	652 / 510 / 34	556 / 513 / 50	660 / 636 / 41	666 / 587 / 54	814 / 738 / 45	659 / 542 / 54	808 / 681 / 45	
5	2	593 / 454 / 36	717 / 574 / 30	603 / 583 / 44	717 / 717 / 35	729 / 663 / 47	898 / 836 / 40	743 / 629 / 49	894 / 771 / 40	616 / 477 / 35	760 / 613 / 29	625 / 609 / 42	758 / 762 / 34	772 / 706 / 46	914 / 854 / 37	766 / 652 / 47	942 / 816 / 39	652 / 510 / 34	780 / 633 / 28	643 / 631 / 40	772 / 781 / 32	790 / 726 / 44	958 / 898 / 36	808 / 691 / 45	989 / 859 / 37	
5	3	591 / 711 / 28	696 / 862 / 22	697 / 679 / 39	834 / 834 / 31	855 / 780 / 42	1031 / 957 / 34	850 / 719 / 43	1027 / 882 / 35	606 / 735 / 26	731 / 909 / 22	718 / 704 / 36	848 / 852 / 29	873 / 801 / 40	1038 / 967 / 32	898 / 763 / 41	1077 / 928 / 33	637 / 777 / 25	764 / 955 / 21	734 / 724 / 34	888 / 896 / 28	917 / 844 / 38	1081 / 1010 / 31	913 / 778 / 39	1125 / 971 / 32	
10	1	521 / 358 / 52	593 / 454 / 43	525 / 472 / 71	603 / 572 / 56	620 / 537 / 77	749 / 672 / 63	613 / 497 / 73	743 / 620 / 60	532 / 380 / 51	616 / 477 / 41	536 / 489 / 67	640 / 613 / 55	644 / 563 / 74	772 / 696 / 60	637 / 520 / 69	766 / 642 / 57	532 / 394 / 48	652 / 510 / 40	556 / 513 / 64	660 / 636 / 52	666 / 587 / 70	814 / 738 / 58	659 / 542 / 66	808 / 681 / 55	
10	2	593 / 454 / 43	717 / 574 / 36	603 / 583 / 56	717 / 717 / 46	729 / 663 / 62	898 / 836 / 51	743 / 629 / 60	894 / 771 / 49	616 / 477 / 41	760 / 613 / 35	625 / 609 / 54	758 / 762 / 44	772 / 706 / 60	914 / 854 / 48	766 / 652 / 57	942 / 816 / 47	652 / 510 / 40	780 / 633 / 33	643 / 631 / 51	772 / 781 / 42	790 / 726 / 57	958 / 898 / 46	808 / 691 / 55	989 / 859 / 45	
10	3	591 / 711 / 33	696 / 862 / 26	697 / 679 / 50	834 / 834 / 40	855 / 780 / 55	1031 / 957 / 45	850 / 719 / 52	1027 / 882 / 42	606 / 735 / 31	731 / 909 / 26	718 / 704 / 47	848 / 852 / 38	873 / 801 / 51	1038 / 967 / 41	898 / 763 / 50	1077 / 928 / 41	637 / 777 / 30	764 / 955 / 25	734 / 724 / 44	888 / 896 / 36	917 / 844 / 50	1081 / 1010 / 40	913 / 778 / 47	1125 / 971 / 39	
0	1	562 / 421 / 39	671 / 530 / 32	575 / 536 / 41	676 / 657 / 33	702 / 623 / 43	829 / 755 / 34	696 / 575 / 46	849 / 718 / 38	580 / 440 / 38	688 / 547 / 31	591 / 557 / 39	709 / 693 / 32	718 / 641 / 41	866 / 792 / 33	713 / 592 / 44	861 / 731 / 36									
0	2	671 / 530 / 32	819 / 669 / 27	676 / 669 / 33	809 / 822 / 27	829 / 765 / 34	999 / 939 / 28	849 / 729 / 38	1033 / 900 / 31	688 / 547 / 31	831 / 682 / 25	689 / 686 / 32	843 / 860 / 26	866 / 803 / 33	1037 / 978 / 27	861 / 741 / 36	1075 / 938 / 30									
0	3	646 / 792 / 24	795 / 997 / 20	770 / 763 / 29	926 / 938 / 24	959 / 885 / 30	1121 / 1049 / 24	954 / 816 / 33	1168 / 1010 / 27	673 / 830 / 23	823 / 1037 / 19	804 / 801 / 28	961 / 976 / 23	998 / 925 / 29	1211 / 1135 / 24	994 / 852 / 31	1207 / 1046 / 26									
5	1	562 / 421 / 39	671 / 530 / 32	575 / 536 / 48	676 / 657 / 39	702 / 623 / 53	829 / 755 / 42	696 / 575 / 53	849 / 718 / 44	580 / 440 / 38	688 / 547 / 31	591 / 557 / 46	709 / 693 / 38	718 / 641 / 50	866 / 792 / 41	713 / 592 / 50	861 / 731 / 41									
5	2	671 / 530 / 32	819 / 669 / 27	676 / 669 / 39	809 / 822 / 31	829 / 765 / 34	999 / 939 / 34	849 / 729 / 44	1033 / 900 / 36	688 / 547 / 31	831 / 682 / 25	689 / 686 / 36	843 / 860 / 30	866 / 803 / 41	1037 / 978 / 33	861 / 741 / 41	1075 / 938 / 35									
5	3	646 / 792 / 24	795 / 997 / 20	770 / 763 / 33	926 / 938 / 27	959 / 885 / 37	1121 / 1049 / 29	954 / 816 / 37	1168 / 1010 / 31	673 / 830 / 23	823 / 1037 / 19	804 / 801 / 32	961 / 976 / 26	998 / 925 / 36	1211 / 1135 / 29	994 / 852 / 36	1207 / 1046 / 29									
10	1	562 / 421 / 47	671 / 530 / 39	575 / 536 / 62	676 / 657 / 50	702 / 623 / 68	829 / 755 / 55	696 / 575 / 65	849 / 718 / 53	580 / 440 / 45	688 / 547 / 37	591 / 557 / 59	709 / 693 / 48	718 / 641 / 65	866 / 792 / 53	713 / 592 / 61	861 / 731 / 50									
10	2	671 / 530 / 39	819 / 669 / 32	676 / 669 / 50	809 / 822 / 40	829 / 765 / 55	999 / 939 / 45	849 / 729 / 53	1033 / 900 / 44	688 / 547 / 37	831 / 682 / 30	689 / 686 / 47	843 / 860 / 39	866 / 803 / 53	1037 / 978 / 43	861 / 741 / 50	1075 / 938 / 42									
10	3	646 / 792 / 28	795 / 997 / 24	770 / 763 / 43	926 / 938 / 35	959 / 885 / 48	1121 / 1049 / 38	954 / 816 / 45	1168 / 1010 / 37	673 / 830 / 27	823 / 1037 / 23	804 / 801 / 42	961 / 976 / 34	998 / 925 / 46	1211 / 1135 / 38	994 / 852 / 44	1207 / 1046 / 36									
0	1	596 / 456 / 36	720 / 576 / 30	606 / 575 / 38	720 / 707 / 31	752 / 675 / 39	902 / 828 / 32	746 / 623 / 43	897 / 763 / 35	580 / 440 / 38	688 / 547 / 31	591 / 557 / 39	709 / 693 / 32	718 / 641 / 41	866 / 792 / 33	713 / 592 / 44	861 / 731 / 36									
0	2	720 / 576 / 30	866 / 714 / 25	720 / 720 / 31	876 / 897 / 25	872 / 811 / 31	1072 / 1013 / 26	897 / 775 / 35	1113 / 973 / 29	688 / 547 / 31	831 / 682 / 25	689 / 686 / 32	843 / 860 / 26	866 / 803 / 33	1037 / 978 / 27	861 / 741 / 36	1075 / 938 / 30									
0	3	698 / 865 / 22	849 / 1073 / 18	837 / 838 / 27	993 / 1012 / 22	1035 / 961 / 28	1245 / 1170 / 23	1031 / 886 / 30	1242 / 1077 / 25	673 / 830 / 23	823 / 1037 / 19	804 / 801 / 28	961 / 976 / 23	998 / 925 / 29	1211 / 1135 / 24	994 / 852 / 31	1207 / 1046 / 26									
5	1	596 / 456 / 36	720 / 576 / 30	606 / 575 / 44	720 / 707 / 35	752 / 675 / 49	902 / 828 / 40	746 / 623 / 49	897 / 763 / 40	580 / 440 / 38	688 / 547 / 31	591 / 557 / 46	709 / 693 / 38	718 / 641 / 50	866 / 792 / 41	713 / 592 / 50	861 / 731 / 41									
5	2	720 / 576 / 30	866 / 714 / 25	720 / 720 / 35	876 / 897 / 29	872 / 811 / 38	1072 / 1013 / 32	897 / 775 / 40	1113 / 973 / 33	688 / 547 / 31	831 / 682 / 25	689 / 686 / 36	843 / 860 / 30	866 / 803 / 41	1037 / 978 / 33	861 / 741 / 41	1075 / 938 / 35									
5	3	698 / 865 / 22	849 / 1073 / 18	837 / 838 / 31	993 / 1012 / 25	1035 / 961 / 34	1245 / 1170 / 28	1031 / 886 / 35	1242 / 1077 / 28	673 / 830 / 23	823 / 1037 / 19	804 / 801 / 32	961 / 976 / 26	998 / 925 / 36	1211 / 1135 / 29	994 / 852 / 36	1207 / 1046 / 29									
10	1	596 / 456 / 43	720 / 576 / 36	606 / 575 / 56	720 / 707 / 46	752 / 675 / 63	902 / 828 / 51	746 / 623 / 60	897 / 763 / 49	580 / 440 / 45	688 / 547 / 37	591 / 557 / 59	709 / 693 / 48	718 / 641 / 65	866 / 792 / 53	713 / 592 / 61	861 / 731 / 50									
10	2	720 / 576 / 36	866 / 714 / 29	720 / 720 / 46	876 / 897 / 38	872 / 811 / 50	1072 / 1013 / 41	897 / 775 / 49	1113 / 973 / 41	688 / 547 / 37	831 / 682 / 30	689 / 686 / 47	843 / 860 / 39	866 / 803 / 53	1037 / 978 / 43	861 / 741 / 50	1075 / 938 / 42									
10	3	698 / 865 / 26	849 / 1073 / 22	837 / 838 / 40	993 / 1012 / 32	1035 / 961 / 45	1245 / 1170 / 36	1031 / 886 / 42	1242 / 1077 / 34	673 / 830 / 27	823 / 1037 / 23	804 / 801 / 42	961 / 976 / 34	998 / 925 / 46	1211 / 1135 / 38	994 / 852 / 44	1207 / 1046 / 36									

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	623 / 482 / 36	751 / 605 / 29	633 / 605 / 37	749 / 740 / 30	763 / 688 / 37	936 / 862 / 31	779 / 653 / 42	931 / 795 / 34	662 / 520 / 33	787 / 641 / 27	668 / 647 / 34	803 / 800 / 28	821 / 747 / 35	997 / 923 / 29	816 / 689 / 38	993 / 851 / 31	694 / 553 / 31	839 / 689 / 25	696 / 681 / 32	851 / 854 / 26	874 / 800 / 33	1047 / 974 / 27	870 / 738 / 36	1043 / 898 / 29	751 / 605 / 29	899 / 744 / 24	749 / 753 / 30	906 / 931 / 24	903 / 843 / 30	1103 / 1045 / 25	931 / 806 / 34	1148 / 1006 / 28	787 / 641 / 27	959 / 800 / 22	777 / 788 / 27	960 / 992 / 23	960 / 901 / 28	1154 / 1097 / 23	993 / 863 / 31	1205 / 1059 / 26	839 / 689 / 25	1010 / 847 / 21	822 / 839 / 25	1002 / 1040 / 21	1047 / 987 / 27	1248 / 1190 / 22
0	2	722 / 898 / 22	872 / 1104 / 18	838 / 842 / 25	1022 / 1044 / 21	1068 / 995 / 27	1274 / 1199 / 22	1065 / 917 / 29	1334 / 1159 / 25	764 / 957 / 20	907 / 1154 / 16	890 / 900 / 24	1069 / 1096 / 19	1126 / 1052 / 25	1387 / 1309 / 21	1171 / 1011 / 28	1384 / 1205 / 22	831 / 1047 / 19	978 / 1249 / 15	971 / 986 / 23	1155 / 1189 / 18	1167 / 1095 / 23	1410 / 1333 / 18	1219 / 1056 / 26	1490 / 1300 / 21	722 / 898 / 22	872 / 1104 / 18	838 / 842 / 25	1022 / 1044 / 21	1068 / 995 / 27	1274 / 1199 / 22	1065 / 917 / 29	1334 / 1159 / 25	764 / 957 / 20	907 / 1154 / 16	890 / 900 / 24	1069 / 1096 / 19	1126 / 1052 / 25	1387 / 1309 / 21	1171 / 1011 / 28	1384 / 1205 / 22	831 / 1047 / 19	978 / 1249 / 15	971 / 986 / 23	1155 / 1189 / 18	1167 / 1095 / 23	1410 / 1333 / 18	1219 / 1056 / 26	1490 / 1300 / 21
5	1	623 / 482 / 36	751 / 605 / 29	633 / 605 / 43	749 / 740 / 34	763 / 688 / 46	936 / 862 / 38	779 / 653 / 48	931 / 795 / 39	662 / 520 / 33	787 / 641 / 27	668 / 647 / 40	803 / 800 / 32	821 / 747 / 44	997 / 923 / 36	816 / 689 / 44	993 / 851 / 36	694 / 553 / 31	839 / 689 / 25	696 / 681 / 36	851 / 854 / 30	874 / 800 / 41	1047 / 974 / 33	870 / 738 / 41	1043 / 898 / 33	751 / 605 / 29	899 / 744 / 24	749 / 753 / 34	906 / 931 / 28	903 / 843 / 37	1103 / 1045 / 31	931 / 806 / 39	1148 / 1006 / 32	787 / 641 / 27	959 / 800 / 22	777 / 788 / 31	960 / 992 / 26	960 / 901 / 34	1154 / 1097 / 28	993 / 863 / 36	1205 / 1059 / 29	839 / 689 / 25	1010 / 847 / 21	822 / 839 / 29	1002 / 1040 / 24	1047 / 987 / 33	1248 / 1190 / 27	1043 / 911 / 33	1307 / 1152 / 28
5	2	722 / 898 / 22	872 / 1104 / 18	838 / 842 / 29	1022 / 1044 / 24	1068 / 995 / 33	1274 / 1199 / 27	1065 / 917 / 33	1334 / 1159 / 28	764 / 957 / 20	907 / 1154 / 16	890 / 900 / 27	1069 / 1096 / 22	1126 / 1052 / 31	1387 / 1309 / 25	1171 / 1011 / 32	1384 / 1205 / 25	831 / 1047 / 19	978 / 1249 / 15	971 / 986 / 26	1155 / 1189 / 21	1167 / 1095 / 28	1410 / 1333 / 23	1219 / 1056 / 29	1490 / 1300 / 24	722 / 898 / 22	872 / 1104 / 18	838 / 842 / 29	1022 / 1044 / 24	1068 / 995 / 33	1274 / 1199 / 27	1065 / 917 / 33	1334 / 1159 / 28	764 / 957 / 20	907 / 1154 / 16	890 / 900 / 27	1069 / 1096 / 22	1126 / 1052 / 31	1387 / 1309 / 25	1171 / 1011 / 32	1384 / 1205 / 25	831 / 1047 / 19	978 / 1249 / 15	971 / 986 / 26	1155 / 1189 / 21	1167 / 1095 / 28	1410 / 1333 / 23	1219 / 1056 / 29	1490 / 1300 / 24
5	3	722 / 898 / 22	872 / 1104 / 18	838 / 842 / 29	1022 / 1044 / 24	1068 / 995 / 33	1274 / 1199 / 27	1065 / 917 / 33	1334 / 1159 / 28	764 / 957 / 20	907 / 1154 / 16	890 / 900 / 27	1069 / 1096 / 22	1126 / 1052 / 31	1387 / 1309 / 25	1171 / 1011 / 32	1384 / 1205 / 25	831 / 1047 / 19	978 / 1249 / 15	971 / 986 / 26	1155 / 1189 / 21	1167 / 1095 / 28	1410 / 1333 / 23	1219 / 1056 / 29	1490 / 1300 / 24	722 / 898 / 22	872 / 1104 / 18	838 / 842 / 29	1022 / 1044 / 24	1068 / 995 / 33	1274 / 1199 / 27	1065 / 917 / 33	1334 / 1159 / 28	764 / 957 / 20	907 / 1154 / 16	890 / 900 / 27	1069 / 1096 / 22	1126 / 1052 / 31	1387 / 1309 / 25	1171 / 1011 / 32	1384 / 1205 / 25	831 / 1047 / 19	978 / 1249 / 15	971 / 986 / 26	1155 / 1189 / 21	1167 / 1095 / 28	1410 / 1333 / 23	1219 / 1056 / 29	1490 / 1300 / 24
10	1	623 / 482 / 42	751 / 605 / 35	633 / 605 / 55	749 / 740 / 44	763 / 688 / 60	936 / 862 / 50	779 / 653 / 58	931 / 795 / 47	662 / 520 / 39	787 / 641 / 32	668 / 647 / 51	803 / 800 / 42	821 / 747 / 57	997 / 923 / 46	816 / 689 / 53	993 / 851 / 44	694 / 553 / 37	839 / 689 / 30	696 / 681 / 47	851 / 854 / 39	874 / 800 / 53	1047 / 974 / 43	870 / 738 / 50	1043 / 898 / 41	751 / 605 / 35	899 / 744 / 28	749 / 753 / 44	906 / 931 / 36	903 / 843 / 48	1103 / 1045 / 40	931 / 806 / 47	1148 / 1006 / 39	787 / 641 / 32	959 / 800 / 26	777 / 788 / 40	960 / 992 / 34	960 / 901 / 45	1154 / 1097 / 36	993 / 863 / 44	1205 / 1059 / 36	839 / 689 / 30	1010 / 847 / 25	822 / 839 / 38	1002 / 1040 / 31	1047 / 987 / 43	1248 / 1190 / 34	1043 / 911 / 41	1307 / 1152 / 34
10	2	751 / 605 / 35	899 / 744 / 28	749 / 753 / 44	906 / 931 / 36	903 / 843 / 48	1103 / 1045 / 40	931 / 806 / 47	1148 / 1006 / 39	787 / 641 / 32	959 / 800 / 26	777 / 788 / 40	960 / 992 / 34	960 / 901 / 45	1154 / 1097 / 36	993 / 863 / 44	1205 / 1059 / 36	839 / 689 / 30	1010 / 847 / 25	822 / 839 / 38	1002 / 1040 / 31	1047 / 987 / 43	1248 / 1190 / 34	1043 / 911 / 41	1307 / 1152 / 34	751 / 605 / 35	899 / 744 / 28	749 / 753 / 44	906 / 931 / 36	903 / 843 / 48	1103 / 1045 / 40	931 / 806 / 47	1148 / 1006 / 39	787 / 641 / 32	959 / 800 / 26	777 / 788 / 40	960 / 992 / 34	960 / 901 / 45	1154 / 1097 / 36	993 / 863 / 44	1205 / 1059 / 36	839 / 689 / 30	1010 / 847 / 25	822 / 839 / 38	1002 / 1040 / 31	1047 / 987 / 43	1248 / 1190 / 34	1043 / 911 / 41	1307 / 1152 / 34
10	3	722 / 898 / 26	872 / 1104 / 21	838 / 842 / 38	1022 / 1044 / 31	1068 / 995 / 43	1274 / 1199 / 34	1065 / 917 / 41	1334 / 1159 / 34	764 / 957 / 24	907 / 1154 / 19	890 / 900 / 35	1069 / 1096 / 28	1126 / 1052 / 40	1387 / 1309 / 33	1171 / 1011 / 39	1384 / 1205 / 31	831 / 1047 / 23	978 / 1249 / 18	971 / 986 / 34	1155 / 1189 / 27	1167 / 1095 / 36	1410 / 1333 / 29	1219 / 1056 / 36	1490 / 1300 / 29	722 / 898 / 26	872 / 1104 / 21	838 / 842 / 38	1022 / 1044 / 31	1068 / 995 / 43	1274 / 1199 / 34	1065 / 917 / 41	1334 / 1159 / 34	764 / 957 / 24	907 / 1154 / 19	890 / 900 / 35	1069 / 1096 / 28	1126 / 1052 / 40	1387 / 1309 / 33	1171 / 1011 / 39	1384 / 1205 / 31	831 / 1047 / 23	978 / 1249 / 18	971 / 986 / 34	1155 / 1189 / 27	1167 / 1095 / 36	1410 / 1333 / 29	1219 / 1056 / 36	1490 / 1300 / 29
Wind Speed [mph]		170																180																															
0	1	739 / 594 / 29	884 / 732 / 24	737 / 727 / 30	891 / 899 / 24	920 / 847 / 31	1085 / 1013 / 25	916 / 781 / 34	1128 / 974 / 28	780 / 633 / 28	955 / 795 / 23	772 / 767 / 28	923 / 935 / 23	958 / 886 / 29	1161 / 1088 / 24	989 / 847 / 33	1210 / 1048 / 27	739 / 594 / 29	884 / 732 / 24	737 / 727 / 30	891 / 899 / 24	920 / 847 / 31	1085 / 1013 / 25	916 / 781 / 34	1128 / 974 / 28	780 / 633 / 28	955 / 795 / 23	772 / 767 / 28	923 / 935 / 23	958 / 886 / 29	1161 / 1088 / 24	989 / 847 / 33	1210 / 1048 / 27	739 / 594 / 29	884 / 732 / 24	737 / 727 / 30	891 / 899 / 24	920 / 847 / 31	1085 / 1013 / 25	916 / 781 / 34	1128 / 974 / 28	780 / 633 / 28	955 / 795 / 23	772 / 767 / 28	923 / 935 / 23	958 / 886 / 29	1161 / 1088 / 24	989 / 847 / 33	1210 / 1048 / 27
0	2	884 / 732 / 24	1093 / 921 / 20	891 / 915 / 24	1079 / 1125 / 20	1085 / 1027 / 25	1336 / 1277 / 21	1128 / 988 / 28	1404 / 1239 / 23	955 / 795 / 23	1174 / 993 / 19	923 / 952 / 23	1098 / 1148 / 18	1161 / 1103 / 24	1418 / 1358 / 19	1210 / 1063 / 27	1415 / 1251 / 21	884 / 732 / 24	1093 / 921 / 20	891 / 915 / 24	1079 / 1125 / 20	1085 / 1027 / 25	1336 / 1277 / 21	1128 / 988 / 28	1404 / 1239 / 23	955 / 795 / 23	1174 / 993 / 19	923 / 952 / 23	1098 / 1148 / 18	1161 / 1103 / 24	1418 / 1358 / 19	1210 / 1063 / 27	1415 / 1251 / 21	884 / 732 / 24	1093 / 921 / 20	891 / 915 / 24	1079 / 1125 / 20	1085 / 1027 / 25	1336 / 1277 / 21	1128 / 988 / 28	1404 / 1239 / 23	955 / 795 / 23	1174 / 993 / 19	923 / 952 / 23	1098 / 1148 / 18	1161 / 1103 / 24	1418 / 1358 / 19	1210 / 1063 / 27	1415 / 1251 / 21
0	3	858 / 1085 / 18	1044 / 1337 / 15	1005 / 1026 / 21	1237 / 1276 / 17	1252 / 1178 / 22	1496 / 1418 / 17	1312 / 1139 / 25	1587 / 1387 / 20	915 / 1163 / 17	1103 / 1417 / 14	1075 / 1101 / 20	1311 / 1357 / 16	1332 / 1256 / 21	1399 / 1217 / 23	1673 / 1464 / 19	858 / 1085 / 18	1044 / 1337 / 15	1005 / 1026 / 21	1237 / 1276 / 17	1252 / 1178 / 22	1496 / 1418 / 17	1312 / 1139 / 25	1587 / 1387 / 20	915 / 1163 / 17	1103 / 1417 / 14	1075 / 1101 / 20	1311 / 1357 / 16	1332 / 1256 / 21	1399 / 1217 / 23	1673 / 1464 / 19	858 / 1085 / 18	1044 / 1337 / 15	1005 / 1026 / 21	1237 / 1276 / 17	1252 / 1178 / 22	1496 / 1418 / 17	1312 / 1139 / 25	1587 / 1387 / 20	915 / 1163 / 17	1103 / 1417 / 14	1075 / 1101 / 20	1311 / 1357 / 16	1332 / 1256 / 21	1399 / 1217 / 23	1673 / 1464 / 19			
5	1	739 / 594 / 29	884 / 732 / 24	737 / 727 / 34	891 / 899 / 28	920 / 847 / 38	1085 / 1013 / 31	916 / 781 / 39	1128 / 974 / 32	780 / 633 / 28	955 / 795 / 23	772 / 767 / 32	923 / 935 / 26	958 / 886 / 36	1161 / 1088 / 29	989 / 847 / 37	1210 / 1048 / 31	739 / 594 / 29	884 / 732 / 24	737 / 727 / 34	891 / 899 / 28	920 / 847 / 38	1085 / 1013 / 31	916 / 781 / 39	1128 / 974 / 32	780 / 633 / 28	955 / 795 / 23	772 / 767 / 32	923 / 935 / 26	958 / 886 / 36	1161 / 1088 / 29	989 / 847 / 37	1210 / 1048 / 31	739 / 594 / 29	884 / 732 / 24	737 / 727 / 34	891 / 899 / 28	920 / 847 / 38	1085 / 1013 / 31	916 / 781 / 39	1128 / 974 / 32	780 / 633 / 28	955 / 795 / 23	772 / 767 / 32	923 / 935 / 26	958 / 886 / 36	1161 / 1088 / 29	989 / 847 / 37	1210 / 1048 / 31
5	2	884 / 732 / 24	1093 / 921 / 20	891 / 915 / 28	1079 / 1125 / 23	1085 / 1027 / 31	1336 / 1277 / 25	1128 / 988 / 32	1404 / 1239 / 27	955 / 795 / 23	1174 / 993 / 19	923 / 952 / 26	1098 / 1148 / 21	1161 / 1103 / 29	1418 / 1358 / 24	1210 / 1063 / 31	1415 / 1251 / 24	884 / 732 / 24	1093 / 921 / 20	891 / 915 / 28	1079 / 1125 / 23	1085 / 1027 / 31	1336 / 1277 / 25	1128 / 988 / 32	1404 / 1239 / 27	955 / 795 / 23	1174 / 9																						

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
15	1	566 / 345 / 59	620 / 454 / 50	584 / 472 / 87	604 / 572 / 69	620 / 537 / 95	749 / 672 / 78	613 / 497 / 85	743 / 620 / 70	585 / 373 / 58	629 / 477 / 48	582 / 489 / 82	640 / 613 / 67	644 / 563 / 90	772 / 696 / 74	637 / 520 / 82	766 / 642 / 66	593 / 394 / 56	652 / 510 / 47	590 / 513 / 79	660 / 636 / 64	666 / 587 / 86	814 / 738 / 72	659 / 542 / 78	808 / 681 / 65	
	2	620 / 454 / 50	717 / 574 / 42	604 / 583 / 69	717 / 717 / 56	729 / 663 / 76	898 / 836 / 63	743 / 629 / 70	894 / 771 / 57	629 / 477 / 48	760 / 613 / 41	625 / 609 / 66	758 / 762 / 54	772 / 706 / 74	914 / 854 / 59	766 / 652 / 66	942 / 816 / 55	652 / 510 / 47	780 / 633 / 38	643 / 631 / 62	772 / 781 / 51	790 / 726 / 70	958 / 898 / 57	808 / 691 / 65	989 / 859 / 53	
	3	591 / 711 / 38	696 / 862 / 31	697 / 679 / 61	834 / 834 / 49	855 / 780 / 67	1031 / 957 / 55	850 / 719 / 61	1027 / 882 / 50	606 / 735 / 36	731 / 909 / 30	718 / 704 / 58	848 / 852 / 46	873 / 801 / 63	1038 / 967 / 51	898 / 763 / 59	1077 / 928 / 48	637 / 777 / 35	764 / 955 / 29	734 / 724 / 54	888 / 896 / 45	917 / 844 / 61	1081 / 1010 / 49	913 / 778 / 55	1125 / 971 / 46	
	1	607 / 333 / 65	674 / 454 / 58	620 / 454 / 99	651 / 572 / 82	620 / 537 / 117	749 / 672 / 96	613 / 497 / 99	743 / 620 / 82	623 / 359 / 64	681 / 477 / 55	626 / 479 / 95	674 / 613 / 80	644 / 563 / 112	772 / 696 / 91	637 / 520 / 95	766 / 642 / 77	627 / 378 / 61	703 / 510 / 54	644 / 513 / 93	679 / 636 / 76	666 / 587 / 106	814 / 738 / 88	659 / 542 / 91	808 / 681 / 75	
	2	674 / 454 / 58	727 / 574 / 48	651 / 583 / 82	717 / 717 / 66	729 / 663 / 94	898 / 836 / 78	743 / 629 / 82	894 / 771 / 66	681 / 477 / 55	760 / 613 / 46	658 / 609 / 78	758 / 762 / 64	772 / 706 / 91	914 / 854 / 73	766 / 652 / 77	942 / 816 / 64	703 / 510 / 54	780 / 633 / 44	662 / 631 / 74	772 / 781 / 60	790 / 726 / 86	958 / 898 / 70	808 / 691 / 75	989 / 859 / 62	
	3	617 / 711 / 44	696 / 862 / 35	698 / 679 / 72	834 / 834 / 58	855 / 780 / 83	1031 / 957 / 68	850 / 719 / 71	1027 / 882 / 58	619 / 735 / 41	731 / 909 / 34	718 / 704 / 68	848 / 852 / 55	873 / 801 / 78	1038 / 967 / 63	898 / 763 / 69	1077 / 928 / 55	637 / 777 / 40	764 / 955 / 33	734 / 724 / 64	888 / 896 / 53	917 / 844 / 75	1081 / 1010 / 60	913 / 778 / 64	1125 / 971 / 53	
	1	607 / 333 / 65	674 / 454 / 58	620 / 454 / 99	651 / 572 / 82	628 / 537 / 140	749 / 672 / 116	613 / 497 / 117	743 / 620 / 96	623 / 359 / 64	681 / 477 / 55	626 / 479 / 95	674 / 613 / 80	644 / 563 / 134	772 / 696 / 109	637 / 520 / 111	766 / 642 / 91	627 / 378 / 61	703 / 510 / 54	644 / 513 / 93	679 / 636 / 76	666 / 587 / 128	814 / 738 / 106	659 / 542 / 106	808 / 681 / 88	
	2	674 / 454 / 58	727 / 574 / 48	651 / 583 / 82	717 / 717 / 66	729 / 663 / 112	898 / 836 / 94	743 / 629 / 96	894 / 771 / 78	681 / 477 / 55	760 / 613 / 46	658 / 609 / 78	758 / 762 / 64	772 / 706 / 109	914 / 854 / 88	766 / 652 / 91	942 / 816 / 75	703 / 510 / 54	780 / 633 / 44	662 / 631 / 74	772 / 781 / 60	790 / 726 / 103	958 / 898 / 84	808 / 691 / 88	989 / 859 / 73	
	3	617 / 711 / 44	696 / 862 / 35	698 / 679 / 72	834 / 834 / 58	855 / 780 / 100	1031 / 957 / 81	850 / 719 / 83	1027 / 882 / 68	619 / 735 / 41	731 / 909 / 34	718 / 704 / 68	848 / 852 / 55	873 / 801 / 94	1038 / 967 / 75	898 / 763 / 80	1077 / 928 / 65	637 / 777 / 40	764 / 955 / 33	734 / 724 / 64	888 / 896 / 53	917 / 844 / 91	1081 / 1010 / 72	913 / 778 / 75	1125 / 971 / 62	
15	1	611 / 421 / 55	671 / 530 / 45	597 / 536 / 75	676 / 657 / 61	702 / 623 / 84	829 / 755 / 67	696 / 575 / 76	849 / 718 / 63	617 / 440 / 53	688 / 547 / 43	602 / 557 / 72	709 / 693 / 59	718 / 641 / 80	866 / 792 / 65	713 / 592 / 72	861 / 731 / 59									
	2	671 / 530 / 45	819 / 669 / 37	676 / 669 / 61	809 / 822 / 49	829 / 765 / 67	999 / 939 / 55	849 / 729 / 63	1033 / 900 / 51	688 / 547 / 43	831 / 682 / 35	689 / 686 / 58	843 / 860 / 48	866 / 803 / 65	1037 / 978 / 53	861 / 741 / 59	1075 / 938 / 50									
	3	646 / 792 / 33	795 / 997 / 28	770 / 763 / 53	926 / 938 / 43	959 / 885 / 59	1121 / 1049 / 47	954 / 816 / 53	1168 / 1010 / 44	673 / 830 / 32	823 / 1037 / 27	804 / 801 / 51	961 / 976 / 41	998 / 925 / 57	1211 / 1135 / 47	994 / 852 / 51	1207 / 1046 / 42									
	1	644 / 404 / 60	708 / 530 / 51	649 / 536 / 89	682 / 657 / 72	702 / 623 / 104	829 / 755 / 83	696 / 575 / 88	849 / 718 / 73	660 / 431 / 59	710 / 547 / 49	652 / 557 / 85	709 / 693 / 70	718 / 641 / 99	866 / 792 / 81	713 / 592 / 84	861 / 731 / 69									
	2	708 / 530 / 51	819 / 669 / 43	682 / 669 / 72	809 / 822 / 58	829 / 765 / 83	999 / 939 / 68	849 / 729 / 73	1033 / 900 / 60	710 / 547 / 49	831 / 682 / 40	689 / 686 / 68	843 / 860 / 57	866 / 803 / 81	1037 / 978 / 65	861 / 741 / 69	1075 / 938 / 58									
	3	646 / 792 / 38	795 / 997 / 31	770 / 763 / 62	926 / 938 / 51	959 / 885 / 73	1121 / 1049 / 57	954 / 816 / 62	1168 / 1010 / 51	673 / 830 / 36	823 / 1037 / 30	804 / 801 / 60	961 / 976 / 49	998 / 925 / 70	1211 / 1135 / 57	994 / 852 / 60	1207 / 1046 / 49									
	1	644 / 404 / 60	708 / 530 / 51	649 / 536 / 89	682 / 657 / 72	702 / 623 / 125	829 / 755 / 100	696 / 575 / 104	849 / 718 / 86	660 / 431 / 59	710 / 547 / 49	652 / 557 / 85	709 / 693 / 70	718 / 641 / 119	866 / 792 / 97	713 / 592 / 98	861 / 731 / 80									
	2	708 / 530 / 51	819 / 669 / 43	682 / 669 / 72	809 / 822 / 58	829 / 765 / 100	999 / 939 / 81	849 / 729 / 86	1033 / 900 / 70	710 / 547 / 49	831 / 682 / 40	689 / 686 / 68	843 / 860 / 57	866 / 803 / 97	1037 / 978 / 78	861 / 741 / 80	1075 / 938 / 68									
	3	646 / 792 / 38	795 / 997 / 31	770 / 763 / 62	926 / 938 / 51	959 / 885 / 88	1121 / 1049 / 69	954 / 816 / 73	1168 / 1010 / 60	673 / 830 / 36	823 / 1037 / 30	804 / 801 / 60	961 / 976 / 49	998 / 925 / 84	1211 / 1135 / 69	994 / 852 / 70	1207 / 1046 / 57									
15	1	621 / 456 / 50	720 / 576 / 42	606 / 575 / 69	720 / 707 / 56	752 / 675 / 78	902 / 828 / 63	746 / 623 / 70	897 / 763 / 57	617 / 440 / 53	688 / 547 / 43	602 / 557 / 72	709 / 693 / 59	718 / 641 / 80	866 / 792 / 65	713 / 592 / 72	861 / 731 / 59									
	2	720 / 576 / 42	866 / 714 / 34	720 / 720 / 56	876 / 897 / 46	872 / 811 / 61	1072 / 1013 / 51	897 / 775 / 57	1113 / 973 / 48	688 / 547 / 43	831 / 682 / 35	689 / 686 / 58	843 / 860 / 48	866 / 803 / 65	1037 / 978 / 53	861 / 741 / 59	1075 / 938 / 50									
	3	698 / 865 / 31	849 / 1073 / 25	837 / 838 / 49	993 / 1012 / 40	1035 / 961 / 55	1245 / 1170 / 44	1031 / 886 / 50	1242 / 1077 / 40	673 / 830 / 32	823 / 1037 / 27	804 / 801 / 51	961 / 976 / 41	998 / 925 / 57	1211 / 1135 / 47	994 / 852 / 51	1207 / 1046 / 42									
	1	676 / 456 / 58	729 / 576 / 48	653 / 575 / 82	720 / 707 / 66	752 / 675 / 96	902 / 828 / 78	746 / 623 / 82	897 / 763 / 66	660 / 431 / 59	710 / 547 / 49	652 / 557 / 85	709 / 693 / 70	718 / 641 / 99	866 / 792 / 81	713 / 592 / 84	861 / 731 / 69									
	2	729 / 576 / 48	866 / 714 / 39	720 / 720 / 66	876 / 897 / 55	872 / 811 / 75	1072 / 1013 / 63	897 / 775 / 66	1113 / 973 / 55	710 / 547 / 49	831 / 682 / 40	689 / 686 / 68	843 / 860 / 57	866 / 803 / 81	1037 / 978 / 65	861 / 741 / 69	1075 / 938 / 58									
	3	698 / 865 / 35	849 / 1073 / 29	837 / 838 / 58	993 / 1012 / 47	1035 / 961 / 68	1245 / 1170 / 55	1031 / 886 / 58	1242 / 1077 / 47	673 / 830 / 36	823 / 1037 / 30	804 / 801 / 60	961 / 976 / 49	998 / 925 / 70	1211 / 1135 / 57	994 / 852 / 60	1207 / 1046 / 49									
	1	676 / 456 / 58	729 / 576 / 48	653 / 575 / 82	720 / 707 / 66	752 / 675 / 116	902 / 828 / 94	746 / 623 / 96	897 / 763 / 78	660 / 431 / 59	710 / 547 / 49	652 / 557 / 85	709 / 693 / 70	718 / 641 / 119	866 / 792 / 97	713 / 592 / 98	861 / 731 / 80									
	2	729 / 576 / 48	866 / 714 / 39	720 / 720 / 66	876 / 897 / 55	872 / 811 / 91	1072 / 1013 / 75	897 / 775 / 78	1113 / 973 / 65	710 / 547 / 49	831 / 682 / 40	689 / 686 / 68	843 / 860 / 57	866 / 803 / 97	1037 / 978 / 78	861 / 741 / 80	1075 / 938 / 68									
	3	698 / 865 / 35	849 / 1073 / 29	837 / 838 / 58	993 / 1012 / 47	1035 / 961 / 81	1245 / 1170 / 66	1031 / 886 / 68	1242 / 1077 / 55	673 / 830 / 36	823 / 1037 / 30	804 / 801 / 60	961 / 976 / 49	998 / 925 / 84	1211 / 1135 / 69	994 / 852 / 70	1207 / 1046 / 57									
15	1	621 / 456 / 50	720 / 576 / 42	606 / 575 / 69	720 / 707 / 56	752 / 675 / 78	902 / 828 / 63	746 / 623 / 70	897 / 763 / 57	617 / 440 / 53	688 / 547 / 43	602 / 557 / 72	709 / 693 / 59	718 / 641 / 80	866 / 792 / 65	713 / 592 / 72	861 / 731 / 59									
	2	720 / 576 / 42	866 / 714 / 34	720 / 720 / 56	876 / 897 / 46	872 / 811 / 61	1072 / 1013 / 51	897 / 775 / 57	1113 / 973 / 48	688 / 547 / 43	831 / 682 / 35	689 / 686 / 58	843 / 860 / 48	866 / 803 / 65	1037 / 978 / 53	861 / 741 / 59	1075 / 938 / 50									
	3	698 / 865 / 31	849 / 1073 / 25	837 / 838 / 49	993 / 1012 / 40	1035 / 961 / 55	1245 / 1170 / 44	1031 / 886 / 50	1242 / 1077 / 40	673 / 830 / 32	823 / 1037 / 27	804 / 801 / 51	961 / 976 / 41	998 / 925 / 57	1211 / 1135 / 47	994 / 852 / 51	1207 / 1046 / 42									
	1	676 / 456 / 58	729 / 576 / 48	653 / 575 / 82	720 / 707 / 66	752 / 675 / 96	902 / 828 / 78	746 / 623 / 82	897 / 763 / 66	660 / 431 / 59	710 / 547 / 49	652 / 557 / 85														

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																																											
Wind Speed [mph]		140										150										160																											
Panal Angle		0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45														
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge													
		15	1	638/482/49	751/605/41	633/605/67	749/740/54	763/688/74	936/862/61	779/653/68	931/795/55	662/520/46	787/641/37	668/647/62	803/800/51	821/747/70	997/923/57	816/689/63	993/851/51	694/553/43	839/689/35	696/681/58	851/854/48	874/800/65	1047/974/53	870/738/59	1043/898/48	751/605/41	899/744/33	749/753/54	906/931/45	903/843/59	1103/1045/49	931/806/55	1148/1006/46	787/641/37	959/800/31	777/788/49	960/992/41	960/901/55	1154/1097/44	993/863/51	1205/1059/42	839/689/35	1010/847/29	822/839/46	1002/1040/38	1047/987/53	1248/1190/42
15	2	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34
15	3	676/471/55	751/605/46	669/605/80	749/740/64	763/688/91	936/862/75	779/653/80	931/795/64	706/520/53	787/641/43	681/647/74	803/800/60	821/747/86	997/923/70	816/689/73	993/851/60	715/553/49	839/689/40	696/681/68	851/854/57	874/800/81	1047/974/65	870/738/69	1043/898/55	751/605/46	899/744/38	749/753/64	906/931/53	903/843/73	1103/1045/60	931/806/64	1148/1006/53	787/641/43	959/800/35	777/788/58	960/992/49	960/901/68	1154/1097/55	993/863/60	1205/1059/49	839/689/40	1010/847/33	822/839/55	1002/1040/45	1047/987/65	1248/1190/52	1043/911/55	1307/1152/47
20	1	751/605/46	899/744/38	749/753/64	906/931/53	903/843/73	1103/1045/60	931/806/64	1148/1006/53	787/641/43	959/800/35	777/788/58	960/992/49	960/901/68	1154/1097/55	993/863/60	1205/1059/49	839/689/40	1010/847/33	822/839/55	1002/1040/45	1047/987/65	1248/1190/52	1043/911/55	1307/1152/47	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34
20	2	676/471/55	751/605/46	669/605/80	749/740/64	763/688/91	936/862/75	779/653/80	931/795/64	706/520/53	787/641/43	681/647/74	803/800/60	821/747/86	997/923/70	816/689/73	993/851/60	715/553/49	839/689/40	696/681/68	851/854/57	874/800/81	1047/974/65	870/738/69	1043/898/55	751/605/46	899/744/38	749/753/64	906/931/53	903/843/73	1103/1045/60	931/806/64	1148/1006/53	787/641/43	959/800/35	777/788/58	960/992/49	960/901/68	1154/1097/55	993/863/60	1205/1059/49	839/689/40	1010/847/33	822/839/55	1002/1040/45	1047/987/65	1248/1190/52	1043/911/55	1307/1152/47
20	3	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34
25	1	676/471/55	751/605/46	669/605/80	749/740/64	763/688/91	936/862/75	779/653/80	931/795/64	706/520/53	787/641/43	681/647/74	803/800/60	821/747/86	997/923/70	816/689/73	993/851/60	715/553/49	839/689/40	696/681/68	851/854/57	874/800/81	1047/974/65	870/738/69	1043/898/55	751/605/46	899/744/38	749/753/64	906/931/53	903/843/73	1103/1045/60	931/806/64	1148/1006/53	787/641/43	959/800/35	777/788/58	960/992/49	960/901/68	1154/1097/55	993/863/60	1205/1059/49	839/689/40	1010/847/33	822/839/55	1002/1040/45	1047/987/65	1248/1190/52	1043/911/55	1307/1152/47
25	2	751/605/46	899/744/38	749/753/64	906/931/53	903/843/73	1103/1045/60	931/806/64	1148/1006/53	787/641/43	959/800/35	777/788/58	960/992/49	960/901/68	1154/1097/55	993/863/60	1205/1059/49	839/689/40	1010/847/33	822/839/55	1002/1040/45	1047/987/65	1248/1190/52	1043/911/55	1307/1152/47	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34
25	3	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34	722/898/30	872/1104/24	838/842/46	1022/1044/38	1068/995/53	1274/1199/42	1065/917/48	1334/1159/40	764/957/28	907/1154/22	890/900/43	1069/1096/35	1126/1052/49	1387/1309/40	1171/1011/46	1384/1205/36	831/1047/27	978/1249/21	971/986/41	1155/1189/33	1167/1095/44	1410/1333/36	1219/1056/42	1490/1300/34
15	1	739/594/41	884/732/33	737/727/54	891/899/45	920/847/61	1085/1013/49	916/781/55	1128/974/46	780/633/38	955/795/32	772/767/51	923/935/41	958/886/57	1161/1088/47	989/847/53	1210/1048/44	739/594/41	884/732/33	737/727/54	891/899/45	920/847/61	1085/1013/49	916/781/55	1128/974/46	780/633/38	955/795/32	772/767/51	923/935/41	958/886/57	1161/1088/47	989/847/53	1210/1048/44	739/594/41	884/732/33	737/727/54	891/899/45	920/847/61	1085/1013/49	916/781/55	1128/974/46	780/633/38	955/795/32	772/767/51	923/935/41	958/886/57	1161/1088/47	989/847/53	1210/1048/44
15	2	884/732/33	1093/921/28	891/915/45	1079/1125/36	1085/1027/49	1336/1277/40	1128/988/46	1404/1239/38	955/795/32	1174/993/27	923/952/41	1098/1148/33	1161/1103/47	1418/1358/38	1210/1063/44	1415/1251/34	884/732/33	1093/921/28	891/915/45	1079/1125/36	1085/1027/49	1336/1277/40	1128/988/46	1404/1239/38	955/795/32	1174/993/27	923/952/41	1098/1148/33	1161/1103/47	1418/1358/38	1210/1063/44	1415/1251/34	884/732/33	1093/921/28	891/915/45	1079/1125/36	1085/1027/49	1336/1277/40	1128/988/46	1404/1239/38	955/795/32	1174/993/27	923/952/41	1098/1148/33	1161/1103/47	1418/1358/38	1210/1063/44	1415/1251/34
15	3	858/1085/24	1044/1337/20	1005/1026/38	1237/1276/31	1252/1178/42	1496/1418/34	1312/1139/40	1587/1387/33	915/1163/23	1103/1417/19	1075/1101/36	1311/1357/30	1332/1256/40	1399/1217/38	1673/1464/31	858/1085/24	1044/1337/20	1005/1026/38	1237/1276/31	1252/1178/42	1496/1418/34	1312/1139/40	1587/1387/33	915/1163/23	1103/1417/19	1075/1101/36	1311/1357/30	1332/1256/40	1399/1217/38	1673/1464/31	858/1085/24	1044/1337/20	1005/1026/38	1237/1276/31	1252/1178/42	1496/1418/34	1312/1139/40	1587/1387/33	915/1163/23	1103/1417/19	1075/1101/36	1311/1357/30	1332/1256/40	1399/1217/38	1673/1464/31			
20	1	739/594/46	884/732/38	737/727/64	891/899/53	920/847/75	1085/1013/60	916/781/64	1128/974/53	780/633/44	955/795/36	772/767/60	923/935/49	958/886/70	1161/1088/57	989/847/62	1210/1048/51	739/594/46	884/732/38	737/727/64	891/899/53	920/847/75	1085/1013/60	916/781/64	1128/974/53	780/633/44	955/795/36	772/767/60	923/935/49	958/886/70	1161/1088/57	989/847/62	1210/1048/51	739/594/46	884/732/38	737/727/64	891/899/53	920/847/75	1085/1013/60	916/781/64	1128/974/53	780/633/44	955/795/36	772/767/60	923/935/49	958/886/70	1161/1088/57	989/847/62	1210/1048/51
20	2	884/732/38	1093/921/31	891/915/53	1079/1125/43	1085/1027/60	1336/1277/50	1128/988/53	1404/1239/44	955/795/36	1174/993/30	923/952/49	1098/1148/39	1161/1103/57	1418/1358/47	1210/1063/51	1415/1251/40	884/732/38	1093/921/31	891/915/53	1079/1125/43	1085/1027/60	1336/1277/50	1128/988/53	1404/1239/44	955/795/36	1174/993/30	923/952/49	1098/1148/39	1161/1103/57	1418/1358/47	1210/1063/51	1415/1251/40	884/732/38	1093/921/31	891/915/53	1079/1125/43	1085/1027/60	1336/1277/50	1128/988/53	1404/1239/44	955/795/36	1174/993/30	923/952/49	1098/1148/39	1161/1103/57	1418/1358/47	1210/1063/51	

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge			
		30	1	627 / 326 / 68	688 / 445 / 60	638 / 445 / 105	677 / 572 / 88	659 / 537 / 164	749 / 672 / 135	613 / 497 / 134	743 / 620 / 110	643 / 352 / 67	709 / 477 / 59	642 / 469 / 101	699 / 613 / 86	668 / 563 / 157	772 / 696 / 128	637 / 520 / 104	766 / 642 / 104	645 / 371 / 64	714 / 498 / 56	659 / 503 / 99	703 / 636 / 82	676 / 587 / 150	814 / 738 / 124	659 / 542 / 122
2	688 / 445 / 60		751 / 574 / 51	677 / 583 / 88	719 / 717 / 72	729 / 663 / 131	898 / 836 / 110	743 / 629 / 110	894 / 771 / 89	709 / 477 / 59	777 / 613 / 49	682 / 609 / 84	758 / 762 / 70	772 / 706 / 128	914 / 854 / 102	766 / 652 / 104	942 / 816 / 86	714 / 498 / 56	781 / 633 / 47	685 / 631 / 80	772 / 781 / 65	790 / 726 / 120	958 / 898 / 99	808 / 691 / 101	989 / 859 / 83	
3	640 / 711 / 47		696 / 862 / 38	720 / 679 / 78	834 / 834 / 63	855 / 780 / 117	1031 / 957 / 95	850 / 719 / 95	1027 / 882 / 77	640 / 735 / 44	731 / 909 / 36	725 / 704 / 74	848 / 852 / 59	873 / 801 / 110	1038 / 967 / 88	898 / 763 / 92	1077 / 928 / 74	657 / 777 / 43	764 / 955 / 35	734 / 724 / 70	888 / 896 / 57	917 / 844 / 106	1081 / 1010 / 84	913 / 778 / 86	1125 / 971 / 71	
35	1		647 / 314 / 71	712 / 435 / 64	653 / 427 / 114	712 / 572 / 100	689 / 537 / 188	749 / 672 / 154	613 / 497 / 151	743 / 620 / 124	660 / 338 / 70	732 / 467 / 62	669 / 460 / 112	734 / 613 / 98	698 / 563 / 179	772 / 696 / 146	637 / 520 / 144	766 / 642 / 117	674 / 363 / 68	733 / 487 / 60	684 / 492 / 110	736 / 636 / 93	704 / 587 / 171	814 / 738 / 142	659 / 542 / 137	808 / 681 / 114
	2		712 / 435 / 64	785 / 574 / 55	712 / 583 / 100	748 / 717 / 81	729 / 663 / 150	898 / 836 / 125	743 / 629 / 124	894 / 771 / 101	732 / 467 / 62	811 / 613 / 54	716 / 609 / 95	772 / 762 / 79	772 / 706 / 146	914 / 854 / 117	766 / 652 / 117	942 / 816 / 97	733 / 487 / 60	812 / 633 / 51	717 / 631 / 91	772 / 781 / 74	790 / 726 / 138	958 / 898 / 113	808 / 691 / 114	989 / 859 / 94
	3		671 / 711 / 51	704 / 862 / 41	752 / 679 / 88	834 / 834 / 72	855 / 780 / 134	1031 / 957 / 109	850 / 719 / 107	1027 / 882 / 87	669 / 735 / 48	731 / 909 / 39	755 / 704 / 84	848 / 852 / 67	873 / 801 / 125	1038 / 967 / 100	898 / 763 / 104	1077 / 928 / 84	686 / 777 / 47	764 / 955 / 38	755 / 724 / 79	888 / 896 / 65	917 / 844 / 121	1081 / 1010 / 96	913 / 778 / 97	1125 / 971 / 81
40	1		676 / 307 / 122	734 / 425 / 110	679 / 418 / 164	748 / 572 / 147	704 / 525 / 212	772 / 672 / 179	613 / 497 / 168	743 / 620 / 138	688 / 331 / 120	752 / 456 / 107	693 / 450 / 161	769 / 613 / 143	710 / 550 / 203	777 / 696 / 169	637 / 520 / 160	766 / 642 / 131	700 / 355 / 117	770 / 487 / 105	708 / 481 / 157	769 / 636 / 136	732 / 587 / 198	814 / 738 / 164	659 / 542 / 153	808 / 681 / 127
	2		734 / 425 / 110	819 / 574 / 97	748 / 583 / 147	777 / 717 / 119	751 / 663 / 174	898 / 836 / 145	743 / 629 / 138	894 / 771 / 112	752 / 456 / 107	821 / 596 / 92	750 / 609 / 140	800 / 762 / 115	777 / 706 / 169	914 / 854 / 135	766 / 652 / 131	942 / 816 / 108	770 / 487 / 105	844 / 633 / 89	749 / 631 / 133	797 / 781 / 108	790 / 726 / 159	958 / 898 / 130	808 / 691 / 127	989 / 859 / 105
	3		702 / 711 / 89	729 / 862 / 72	783 / 679 / 129	836 / 834 / 105	855 / 780 / 154	1031 / 957 / 126	850 / 719 / 119	1027 / 882 / 97	699 / 735 / 84	748 / 909 / 69	785 / 704 / 122	848 / 852 / 98	873 / 801 / 145	1038 / 967 / 116	898 / 763 / 116	1077 / 928 / 93	715 / 777 / 82	765 / 955 / 67	783 / 724 / 115	888 / 896 / 94	917 / 844 / 140	1081 / 1010 / 111	913 / 778 / 108	1125 / 971 / 90
30	1	660 / 396 / 63	734 / 530 / 55	677 / 536 / 97	705 / 657 / 78	702 / 623 / 146	829 / 755 / 117	696 / 575 / 119	849 / 718 / 98	675 / 421 / 61	735 / 547 / 52	678 / 557 / 93	724 / 693 / 76	718 / 641 / 139	866 / 792 / 113	713 / 592 / 113	861 / 731 / 92	ASCE Group Zone	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3			
	2	734 / 530 / 55	819 / 669 / 45	705 / 669 / 78	809 / 822 / 63	829 / 765 / 117	999 / 939 / 95	849 / 729 / 98	1033 / 900 / 80	735 / 547 / 52	831 / 682 / 43	704 / 686 / 74	843 / 860 / 61	866 / 803 / 113	1037 / 978 / 91	861 / 741 / 92	1075 / 938 / 77				1 = 1	2 = 2	3 = 3			
	3	653 / 792 / 40	795 / 997 / 34	770 / 763 / 67	926 / 938 / 55	959 / 885 / 102	1121 / 1049 / 80	954 / 816 / 83	1168 / 1010 / 69	673 / 830 / 39	823 / 1037 / 32	804 / 801 / 65	961 / 976 / 53	998 / 925 / 99	1211 / 1135 / 80	994 / 852 / 80	1207 / 1046 / 66				1 = 1	2 = 2	3 = 3			
	35	1	687 / 388 / 67	752 / 517 / 58	700 / 524 / 107	736 / 657 / 88	726 / 623 / 167	829 / 755 / 134	696 / 575 / 134	849 / 718 / 111	700 / 412 / 65	770 / 547 / 57	716 / 557 / 105	754 / 693 / 86	728 / 641 / 159	866 / 792 / 130	713 / 592 / 127			861 / 731 / 104	7.5 - 15	Mono Slope	1 = 1	2 = 2	3 = 3	
		2	752 / 517 / 58	835 / 669 / 49	736 / 669 / 88	809 / 822 / 72	829 / 765 / 134	999 / 939 / 109	849 / 729 / 111	1033 / 900 / 91	770 / 547 / 57	832 / 682 / 47	733 / 686 / 84	843 / 860 / 69	866 / 803 / 130	1037 / 978 / 105	861 / 741 / 104			1075 / 938 / 87			1 = 1	2 = 2	3 = 3	
		3	679 / 792 / 44	795 / 997 / 37	775 / 763 / 76	926 / 938 / 62	959 / 885 / 117	1121 / 1049 / 92	954 / 816 / 94	1168 / 1010 / 77	693 / 830 / 42	823 / 1037 / 35	804 / 801 / 74	961 / 976 / 60	998 / 925 / 113	1211 / 1135 / 92	994 / 852 / 91			1207 / 1046 / 74			1 = 1	2 = 2	3 = 3	
	40	1	712 / 379 / 115	787 / 517 / 102	722 / 513 / 154	768 / 657 / 129	753 / 623 / 193	829 / 755 / 154	696 / 575 / 149	849 / 718 / 123	724 / 403 / 112	805 / 547 / 100	736 / 544 / 150	785 / 693 / 126	754 / 641 / 183	866 / 792 / 150	713 / 592 / 142			861 / 731 / 116	15 - 30	Mono Slope	1 = 1	2 = 2	3 = 3	
		2	787 / 517 / 102	866 / 669 / 87	768 / 669 / 129	817 / 822 / 105	829 / 765 / 154	999 / 939 / 126	849 / 729 / 123	1033 / 900 / 101	805 / 547 / 100	860 / 682 / 82	763 / 686 / 122	843 / 860 / 101	866 / 803 / 150	1037 / 978 / 121	861 / 741 / 116			1075 / 938 / 97			1 = 1	2 = 2	3 = 3	
		3	706 / 792 / 77	795 / 997 / 64	803 / 763 / 112	926 / 938 / 91	959 / 885 / 135	1121 / 1049 / 106	954 / 816 / 105	1168 / 1010 / 86	719 / 830 / 74	823 / 1037 / 61	821 / 801 / 108	961 / 976 / 87	998 / 925 / 130	1211 / 1135 / 106	994 / 852 / 101			1207 / 1046 / 82			1 = 1	2 = 2	3 = 3	
30	1	690 / 447 / 60	753 / 576 / 51	678 / 575 / 88	721 / 707 / 72	752 / 675 / 135	902 / 828 / 110	746 / 623 / 110	897 / 763 / 89	675 / 421 / 61	735 / 547 / 52	678 / 557 / 93	724 / 693 / 76	718 / 641 / 139	866 / 792 / 113	713 / 592 / 113	861 / 731 / 92	ASCE Group Zone	Mono Slope	30 - 45	1 = 1	2 = 2	3 = 3			
	2	753 / 576 / 51	866 / 714 / 42	721 / 720 / 72	876 / 897 / 59	872 / 811 / 106	1072 / 1013 / 88	897 / 775 / 89	1113 / 973 / 74	735 / 547 / 52	831 / 682 / 43	704 / 686 / 74	843 / 860 / 61	866 / 803 / 113	1037 / 978 / 91	861 / 741 / 92	1075 / 938 / 77				1 = 1	2 = 2	3 = 3			
	3	698 / 865 / 38	849 / 1073 / 31	837 / 838 / 63	993 / 1012 / 51	1035 / 961 / 95	1245 / 1170 / 77	1031 / 886 / 77	1242 / 1077 / 63	673 / 830 / 39	823 / 1037 / 32	804 / 801 / 65	961 / 976 / 53	998 / 925 / 99	1211 / 1135 / 80	994 / 852 / 80	1207 / 1046 / 66				1 = 1	2 = 2	3 = 3			
	35	1	714 / 437 / 64	787 / 576 / 55	714 / 575 / 100	750 / 707 / 81	752 / 675 / 154	902 / 828 / 125	746 / 623 / 124	897 / 763 / 101	700 / 412 / 65	770 / 547 / 57	716 / 557 / 105	754 / 693 / 86	728 / 641 / 159	866 / 792 / 130	713 / 592 / 127			861 / 731 / 104	7.5 - 15	Mono Slope	1 = 1	2 = 2	3 = 3	
		2	787 / 576 / 55	866 / 714 / 45	750 / 720 / 81	876 / 897 / 67	872 / 811 / 121	1072 / 1013 / 100	897 / 775 / 101	1113 / 973 / 84	770 / 547 / 57	832 / 682 / 47	733 / 686 / 84	843 / 860 / 69	866 / 803 / 130	1037 / 978 / 105	861 / 741 / 104			1075 / 938 / 87			1 = 1	2 = 2	3 = 3	
		3	706 / 865 / 41	849 / 1073 / 34	837 / 838 / 72	993 / 1012 / 57	1035 / 961 / 109	1245 / 1170 / 88	1031 / 886 / 87	1242 / 1077 / 71	693 / 830 / 42	823 / 1037 / 35	804 / 801 / 74	961 / 976 / 60	998 / 925 / 113	1211 / 1135 / 92	994 / 852 / 91			1207 / 1046 / 74			1 = 1	2 = 2	3 = 3	
	40	1	736 / 427 / 110	821 / 576 / 97	750 / 575 / 147	779 / 707 / 119	774 / 675 / 179	902 / 828 / 145	746 / 623 / 138	897 / 763 / 112	724 / 403 / 112	805 / 547 / 100	736 / 544 / 150	785 / 693 / 126	754 / 641 / 183	866 / 792 / 150	713 / 592 / 142			861 / 731 / 116	15 - 30	Mono Slope	1 = 1	2 = 2	3 = 3	
		2	821 / 576 / 97	879 / 714 / 79	779 / 720 / 119	876 / 897 / 98	872 / 811 / 140	1072 / 1013 / 116	897 / 775 / 112	1113 / 973 / 93	805 / 547 / 100	860 / 682 / 82	763 / 686 / 122	843 / 860 / 101	866 / 803 / 150	1037 / 978 / 121	861 / 741 / 116			1075 / 938 / 97			1 = 1	2 = 2	3 = 3	
		3	731 / 865 / 72	849 / 1073 / 59	839 / 838 / 105	993 / 1012 / 84	1035 / 961 / 126	1245 / 1170 / 102	1031 / 886 / 97	1242 / 1077 / 79	719 / 830 / 74	823 / 1037 / 61	821 / 801 / 108	961 / 976 / 87	998 / 925 / 130	1211 / 1135 / 106	994 / 852 / 101			1207 / 1046 / 82			1 = 1	2 = 2	3 = 3	

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																											
Wind Speed [mph]			140												150												160											
Panal Angle			0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45							
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge													
																										30	1	704 / 471 / 59	771 / 605 / 49	693 / 605 / 86	749 / 740 / 70	763 / 688 / 128	936 / 862 / 106	779 / 653 / 107	931 / 795 / 86	732 / 520 / 56	787 / 641 / 45	704 / 647 / 80
	2	771 / 605 / 49	899 / 744 / 40	749 / 753 / 70	906 / 931 / 57	903 / 843 / 102	1103 / 1045 / 84	931 / 806 / 86	1148 / 1006 / 71	787 / 641 / 45	959 / 800 / 38	777 / 788 / 63	960 / 992 / 53	960 / 901 / 95	1154 / 1097 / 77	993 / 863 / 80	1205 / 1059 / 66	839 / 689 / 43	1010 / 847 / 35	822 / 839 / 59	1002 / 1040 / 49	1047 / 987 / 91	1248 / 1190 / 73	1043 / 911 / 74	1307 / 1152 / 63													
	3	722 / 898 / 36	872 / 1104 / 30	838 / 842 / 59	1022 / 1044 / 49	1068 / 995 / 91	1274 / 1199 / 73	1065 / 917 / 74	1334 / 1159 / 63	764 / 957 / 34	907 / 1154 / 27	890 / 900 / 55	1069 / 1096 / 44	1126 / 1052 / 84	1387 / 1309 / 70	1171 / 1011 / 71	1384 / 1205 / 57	831 / 1047 / 32	978 / 1249 / 26	971 / 986 / 53	1155 / 1189 / 42	1167 / 1095 / 77	1410 / 1333 / 62	1219 / 1056 / 66	1490 / 1300 / 54													
	1	727 / 461 / 62	804 / 605 / 54	728 / 605 / 98	766 / 740 / 79	763 / 688 / 146	936 / 862 / 121	779 / 653 / 121	931 / 795 / 97	751 / 508 / 60	812 / 641 / 49	736 / 647 / 91	803 / 800 / 74	821 / 747 / 138	997 / 923 / 113	816 / 689 / 111	993 / 851 / 91	774 / 553 / 57	839 / 689 / 47	738 / 681 / 84	851 / 854 / 69	874 / 800 / 130	1047 / 974 / 105	870 / 738 / 104	1043 / 898 / 84													
	2	804 / 605 / 54	899 / 744 / 44	766 / 753 / 79	906 / 931 / 65	903 / 843 / 117	1103 / 1045 / 96	931 / 806 / 97	1148 / 1006 / 81	812 / 641 / 49	959 / 800 / 41	777 / 788 / 72	960 / 992 / 60	960 / 901 / 109	1154 / 1097 / 88	993 / 863 / 91	1205 / 1059 / 74	839 / 689 / 47	1010 / 847 / 38	822 / 839 / 67	1002 / 1040 / 55	1047 / 987 / 105	1248 / 1190 / 84	1043 / 911 / 84	1307 / 1152 / 71													
	3	722 / 898 / 39	872 / 1104 / 32	838 / 842 / 67	1022 / 1044 / 55	1068 / 995 / 105	1274 / 1199 / 84	1065 / 917 / 84	1334 / 1159 / 71	764 / 957 / 37	907 / 1154 / 29	890 / 900 / 62	1069 / 1096 / 50	1126 / 1052 / 96	1387 / 1309 / 80	1171 / 1011 / 81	1384 / 1205 / 64	831 / 1047 / 35	978 / 1249 / 28	971 / 986 / 60	1155 / 1189 / 48	1167 / 1095 / 88	1410 / 1333 / 71	1219 / 1056 / 74	1490 / 1300 / 61													
	1	747 / 450 / 107	837 / 605 / 94	763 / 605 / 143	794 / 740 / 115	771 / 688 / 169	936 / 862 / 140	779 / 653 / 134	931 / 795 / 108	769 / 495 / 102	842 / 641 / 87	768 / 647 / 133	820 / 800 / 108	821 / 747 / 159	997 / 923 / 130	816 / 689 / 123	993 / 851 / 101	789 / 538 / 97	866 / 689 / 82	768 / 681 / 122	851 / 854 / 101	874 / 800 / 150	1047 / 974 / 121	870 / 738 / 116	1043 / 898 / 93													
	2	837 / 605 / 94	899 / 744 / 77	794 / 753 / 115	906 / 931 / 94	903 / 843 / 135	1103 / 1045 / 111	931 / 806 / 108	1148 / 1006 / 90	842 / 641 / 87	959 / 800 / 72	794 / 788 / 105	960 / 992 / 87	960 / 901 / 126	1154 / 1097 / 102	993 / 863 / 101	1205 / 1059 / 82	866 / 689 / 82	1010 / 847 / 67	822 / 839 / 98	1002 / 1040 / 81	1047 / 987 / 121	1248 / 1190 / 97	1043 / 911 / 93	1307 / 1152 / 79													
	3	742 / 898 / 69	872 / 1104 / 56	838 / 842 / 98	1022 / 1044 / 81	1068 / 995 / 121	1274 / 1199 / 97	1065 / 917 / 93	1334 / 1159 / 79	764 / 957 / 64	907 / 1154 / 51	890 / 900 / 91	1069 / 1096 / 74	1126 / 1052 / 111	1387 / 1309 / 92	1171 / 1011 / 90	1384 / 1205 / 71	831 / 1047 / 61	978 / 1249 / 49	971 / 986 / 87	1155 / 1189 / 70	1167 / 1095 / 102	1410 / 1333 / 82	1219 / 1056 / 82	1490 / 1300 / 67													
Wind Speed [mph]			170												180																							
	1	762 / 594 / 49	884 / 732 / 40	737 / 727 / 70	891 / 899 / 57	920 / 847 / 106	1085 / 1013 / 84	916 / 781 / 86	1128 / 974 / 71	781 / 633 / 47	955 / 795 / 39	772 / 767 / 65	923 / 935 / 53	958 / 886 / 99	1161 / 1088 / 80	989 / 847 / 83	1210 / 1048 / 69																					
	2	884 / 732 / 40	1093 / 921 / 34	891 / 915 / 57	1079 / 1125 / 47	1085 / 1027 / 84	1336 / 1277 / 70	1128 / 988 / 71	1404 / 1239 / 60	955 / 795 / 39	1174 / 993 / 32	923 / 952 / 53	1098 / 1148 / 42	1161 / 1103 / 80	1418 / 1358 / 66	1210 / 1063 / 69	1415 / 1251 / 54																					
	3	858 / 1085 / 30	1044 / 1337 / 24	1005 / 1026 / 49	1237 / 1276 / 40	1252 / 1178 / 73	1496 / 1418 / 59	1312 / 1139 / 63	1587 / 1387 / 51	915 / 1163 / 28	1103 / 1417 / 23	1075 / 1101 / 47	1311 / 1357 / 38	1332 / 1256 / 70		1399 / 1217 / 60	1673 / 1464 / 48																					
	1	795 / 594 / 54	884 / 732 / 44	757 / 727 / 79	891 / 899 / 65	920 / 847 / 121	1085 / 1013 / 96	916 / 781 / 97	1128 / 974 / 81	812 / 633 / 51	955 / 795 / 42	772 / 767 / 74	923 / 935 / 60	958 / 886 / 113	1161 / 1088 / 92	989 / 847 / 94	1210 / 1048 / 77																					
	2	884 / 732 / 44	1093 / 921 / 37	891 / 915 / 65	1079 / 1125 / 53	1085 / 1027 / 96	1336 / 1277 / 80	1128 / 988 / 81	1404 / 1239 / 67	955 / 795 / 42	1174 / 993 / 35	923 / 952 / 60	1098 / 1148 / 48	1161 / 1103 / 92	1418 / 1358 / 75	1210 / 1063 / 77	1415 / 1251 / 61																					
	3	858 / 1085 / 32	1044 / 1337 / 26	1005 / 1026 / 55	1237 / 1276 / 46	1252 / 1178 / 84	1496 / 1418 / 67	1312 / 1139 / 71	1587 / 1387 / 57	915 / 1163 / 31	1103 / 1417 / 25	1075 / 1101 / 53	1311 / 1357 / 43	1332 / 1256 / 80		1399 / 1217 / 67	1673 / 1464 / 54																					
	1	828 / 594 / 94	885 / 732 / 77	785 / 727 / 115	891 / 899 / 94	920 / 847 / 140	1085 / 1013 / 111	916 / 781 / 108	1128 / 974 / 90	844 / 633 / 89	955 / 795 / 74	797 / 767 / 108	923 / 935 / 87	958 / 886 / 130	1161 / 1088 / 106	989 / 847 / 105	1210 / 1048 / 86																					
	2	885 / 732 / 77	1093 / 921 / 64	891 / 915 / 94	1079 / 1125 / 77	1085 / 1027 / 111	1336 / 1277 / 92	1128 / 988 / 90	1404 / 1239 / 75	955 / 795 / 74	1174 / 993 / 61	923 / 952 / 87	1098 / 1148 / 70	1161 / 1103 / 106	1418 / 1358 / 87	1210 / 1063 / 86	1415 / 1251 / 67																					
	3	858 / 1085 / 56	1044 / 1337 / 46	1005 / 1026 / 81	1237 / 1276 / 67	1252 / 1178 / 97	1496 / 1418 / 77	1312 / 1139 / 79	1587 / 1387 / 64	915 / 1163 / 54	1103 / 1417 / 44	1075 / 1101 / 77	1311 / 1357 / 63	1332 / 1256 / 92		1399 / 1217 / 75	1673 / 1464 / 60																					
Wind Speed [mph]			190												200																							
	1	815 / 667 / 44	988 / 826 / 36	830 / 829 / 63	984 / 1002 / 51	1025 / 952 / 95	1233 / 1158 / 77	1021 / 877 / 77	1230 / 1067 / 63	873 / 719 / 43	1051 / 883 / 35	855 / 859 / 59	1043 / 1065 / 49	1046 / 975 / 88	1299 / 1223 / 73	1086 / 935 / 74	1296 / 1127 / 60																					
	2	988 / 826 / 36	1196 / 1016 / 30	984 / 1020 / 51	1160 / 1216 / 40	1233 / 1174 / 77	1490 / 1430 / 62	1230 / 1082 / 63	1487 / 1318 / 51	1051 / 883 / 35	1263 / 1076 / 28	1043 / 1084 / 49	1216 / 1278 / 38	1299 / 1240 / 73	1552 / 1492 / 59	1296 / 1143 / 60	1647 / 1461 / 51																					
	3	969 / 1235 / 27	1155 / 1487 / 22	1142 / 1173 / 44	1378 / 1429 / 36	1404 / 1327 / 66		1479 / 1289 / 57		1018 / 1301 / 26		1203 / 1239 / 42	1436 / 1491 / 34	1468 / 1389 / 62		1551 / 1354 / 54																						
	1	826 / 667 / 48	988 / 826 / 39	830 / 829 / 72	984 / 1002 / 57	1025 / 952 / 109	1233 / 1158 / 88	1021 / 877 / 87	1230 / 1067 / 71	873 / 719 / 47	1051 / 883 / 38	855 / 859 / 67	1043 / 1065 / 55	1046 / 975 / 100	1299 / 1223 / 84	1086 / 935 / 84	1296 / 1127 / 67																					
	2	988 / 826 / 39	1196 / 1016 / 32	984 / 1020 / 57	1160 / 1216 / 46	1233 / 1174 / 88	1490 / 1430 / 71	1230 / 1082 / 71	1487 / 1318 / 57	1051 / 883 / 38	1263 / 1076 / 31	1043 / 1084 / 55	1216 / 1278 / 43	1299 / 1240 / 84	1552 / 1492 / 67	1296 / 1143 / 67	1647 / 1461 / 57																					
	3	969 / 1235 / 29	1155 / 1487 / 24	1142 / 1173 / 50	1378 / 1429 / 41	1404 / 1327 / 75		1479 / 1289 / 64		1018 / 1301 / 28		1203 / 1239 / 48	1436 / 1491 / 38	1468 / 1389 / 71		1551 / 1354 / 61																						
	1	856 / 667 / 84	988 / 826 / 69	833 / 829 / 105	984 / 1002 / 84	1025 / 952 / 126	1233 / 1158 / 102	1021 / 877 / 97	1230 / 1067 / 79	891 / 719 / 82	1051 / 883 / 67	855 / 859 / 98	1043 / 1065 / 81	1046 / 975 / 116	1299 / 1223 / 97	1086 / 935 / 93	1296 / 1127 / 75																					
	2	988 / 826 / 69	1196 / 1016 / 56	984 / 1020 / 84	1160 / 1216 / 67	1233 / 1174 / 102	1490 / 1430 / 82	1230 / 1082 / 79	1487 / 1318 / 64	1051 / 883 / 67	1263 / 1076 / 54	1043 / 1084 / 81	1216 / 1278 / 63	1299 / 1240 / 97	1552 / 1492 / 77	1296 / 1143 / 75	1647 / 1461 / 64																					
	3	969 / 1235 / 51	1155 / 1487 / 41	1142 / 1173 / 74	1378 / 1429 / 60	1404 / 1327 / 87		1479 / 1289 / 71		1018 / 1301 / 49		1203 / 1239 / 70	1436 / 1491 / 56	1468 / 1389 / 82		1551 / 1354 / 67																						

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	45	1	704 / 301 / 131	755 / 415 / 117	704 / 409 / 176	765 / 559 / 157	718 / 514 / 228	797 / 672 / 197	613 / 497 / 185	743 / 620 / 152	715 / 324 / 128	771 / 445 / 114	717 / 440 / 173	784 / 598 / 153	739 / 550 / 223	801 / 696 / 186	637 / 520 / 177	766 / 642 / 144	726 / 348 / 126	787 / 475 / 112	729 / 471 / 169	802 / 636 / 150	760 / 587 / 218	826 / 738 / 181	659 / 542 / 168
45	2	755 / 415 / 117	831 / 559 / 103	765 / 569 / 157	806 / 717 / 130	775 / 663 / 191	898 / 836 / 159	743 / 629 / 152	894 / 771 / 123	771 / 445 / 114	853 / 596 / 101	784 / 609 / 153	828 / 762 / 127	801 / 706 / 186	914 / 854 / 149	766 / 652 / 144	942 / 816 / 119	787 / 475 / 112	875 / 633 / 98	782 / 631 / 146	824 / 781 / 119	802 / 726 / 175	958 / 898 / 144	808 / 691 / 140	989 / 859 / 115
45	3	734 / 711 / 98	754 / 862 / 78	815 / 679 / 142	862 / 834 / 115	855 / 780 / 170	1031 / 957 / 138	850 / 719 / 132	1027 / 882 / 107	728 / 735 / 92	772 / 909 / 76	814 / 704 / 134	857 / 852 / 108	873 / 801 / 159	1038 / 967 / 128	898 / 763 / 127	1077 / 928 / 103	743 / 777 / 89	789 / 955 / 73	811 / 724 / 127	888 / 896 / 104	917 / 844 / 154	1081 / 1010 / 122	913 / 778 / 119	1125 / 971 / 99
50	1	731 / 294 / 139	774 / 405 / 124	727 / 401 / 188	780 / 545 / 167	730 / 502 / 244	822 / 672 / 215	613 / 497 / 202	743 / 620 / 166	740 / 317 / 136	788 / 434 / 121	738 / 430 / 184	797 / 583 / 163	749 / 537 / 238	825 / 696 / 203	637 / 520 / 193	766 / 642 / 157	749 / 340 / 133	802 / 463 / 118	749 / 460 / 180	814 / 620 / 159	769 / 572 / 232	850 / 738 / 197	659 / 542 / 184	808 / 681 / 153
50	2	774 / 405 / 124	840 / 544 / 109	780 / 555 / 167	835 / 717 / 142	800 / 663 / 209	898 / 836 / 174	743 / 629 / 166	894 / 771 / 135	788 / 434 / 121	861 / 580 / 106	797 / 593 / 163	856 / 762 / 138	825 / 706 / 203	914 / 854 / 163	766 / 652 / 157	942 / 816 / 130	802 / 463 / 118	881 / 615 / 103	814 / 631 / 159	850 / 781 / 130	825 / 726 / 191	958 / 898 / 157	808 / 691 / 153	989 / 859 / 126
50	3	765 / 711 / 106	779 / 862 / 85	846 / 679 / 155	887 / 834 / 125	866 / 780 / 186	1031 / 957 / 151	850 / 719 / 144	1027 / 882 / 117	758 / 735 / 100	796 / 909 / 82	844 / 704 / 146	881 / 852 / 117	873 / 801 / 174	1038 / 967 / 139	898 / 763 / 139	1077 / 928 / 112	772 / 777 / 97	812 / 955 / 79	839 / 724 / 138	902 / 896 / 113	917 / 844 / 168	1081 / 1010 / 134	913 / 778 / 130	1125 / 971 / 108
60	1	778 / 282 / 155	826 / 395 / 141	768 / 383 / 209	827 / 531 / 190	768 / 490 / 279	849 / 654 / 245	621 / 497 / 236	743 / 620 / 194	784 / 303 / 151	838 / 423 / 137	776 / 411 / 204	841 / 568 / 185	786 / 524 / 272	873 / 696 / 238	637 / 520 / 226	766 / 642 / 184	790 / 324 / 148	850 / 451 / 134	784 / 439 / 200	856 / 604 / 180	803 / 558 / 265	896 / 738 / 231	659 / 542 / 215	808 / 681 / 178
60	2	826 / 395 / 141	880 / 529 / 123	827 / 541 / 190	892 / 717 / 166	849 / 663 / 245	926 / 836 / 204	743 / 629 / 194	894 / 771 / 158	838 / 423 / 137	897 / 563 / 120	841 / 578 / 185	912 / 762 / 161	873 / 706 / 238	921 / 854 / 191	766 / 652 / 184	942 / 816 / 152	850 / 451 / 134	914 / 597 / 116	856 / 615 / 180	903 / 781 / 151	870 / 726 / 225	958 / 898 / 184	808 / 691 / 178	989 / 859 / 147
60	3	828 / 711 / 123	829 / 862 / 99	884 / 661 / 175	938 / 834 / 146	910 / 780 / 218	1031 / 957 / 177	850 / 719 / 168	1027 / 882 / 137	817 / 735 / 116	845 / 909 / 95	903 / 704 / 170	928 / 852 / 136	907 / 801 / 204	1038 / 967 / 163	898 / 763 / 163	1077 / 928 / 131	829 / 777 / 113	858 / 955 / 92	895 / 724 / 161	948 / 896 / 132	932 / 844 / 197	1081 / 1010 / 157	913 / 778 / 152	1125 / 971 / 126
Wind Speed [mph]		110								115															
45	1	736 / 371 / 123	803 / 504 / 109	742 / 501 / 165	799 / 657 / 142	761 / 607 / 207	829 / 755 / 170	696 / 575 / 164	849 / 718 / 136	746 / 394 / 120	818 / 533 / 106	755 / 531 / 161	816 / 693 / 138	780 / 641 / 202	866 / 792 / 165	713 / 592 / 156	861 / 731 / 127	ASCE Group Zone							
	2	803 / 504 / 109	896 / 669 / 95	799 / 669 / 142	843 / 822 / 115	829 / 765 / 170	999 / 939 / 138	849 / 729 / 136	1033 / 900 / 111	818 / 533 / 106	889 / 682 / 89	793 / 686 / 134	861 / 860 / 111	866 / 803 / 165	1037 / 978 / 133	861 / 741 / 127	1075 / 938 / 107								
	3	733 / 792 / 84	804 / 997 / 70	830 / 763 / 123	926 / 938 / 100	959 / 885 / 149	1121 / 1049 / 117	954 / 816 / 115	1168 / 1010 / 95	745 / 830 / 81	823 / 1037 / 67	848 / 801 / 119	961 / 976 / 96	998 / 925 / 144	1211 / 1135 / 117	994 / 852 / 111	1207 / 1046 / 91								
50	1	758 / 362 / 130	816 / 491 / 115	760 / 489 / 175	830 / 657 / 155	788 / 607 / 226	847 / 755 / 186	696 / 575 / 180	849 / 718 / 148	767 / 385 / 127	830 / 519 / 112	771 / 519 / 171	846 / 693 / 150	806 / 641 / 220	868 / 792 / 180	713 / 592 / 171	861 / 731 / 139	ASCE Group Zone							
	2	816 / 491 / 115	900 / 649 / 100	830 / 669 / 155	868 / 822 / 125	847 / 765 / 186	999 / 939 / 151	849 / 729 / 148	1033 / 900 / 121	830 / 519 / 112	918 / 682 / 97	823 / 686 / 146	886 / 860 / 121	868 / 803 / 180	1037 / 978 / 145	861 / 741 / 139	1075 / 938 / 117								
	3	760 / 792 / 91	826 / 997 / 76	857 / 763 / 134	926 / 938 / 109	959 / 885 / 163	1121 / 1049 / 128	954 / 816 / 126	1168 / 1010 / 103	771 / 830 / 88	838 / 1037 / 73	874 / 801 / 130	961 / 976 / 105	998 / 925 / 157	1211 / 1135 / 128	994 / 852 / 121	1207 / 1046 / 99								
60	1	796 / 346 / 144	861 / 478 / 130	812 / 478 / 200	869 / 639 / 175	819 / 591 / 259	890 / 755 / 218	696 / 575 / 210	849 / 718 / 173	802 / 366 / 141	872 / 505 / 127	821 / 506 / 195	882 / 674 / 170	836 / 624 / 252	910 / 792 / 211	713 / 592 / 199	861 / 731 / 163	ASCE Group Zone							
	2	861 / 478 / 130	959 / 649 / 116	869 / 651 / 175	919 / 822 / 146	890 / 765 / 218	999 / 939 / 177	849 / 729 / 173	1033 / 900 / 142	872 / 505 / 127	975 / 682 / 113	882 / 686 / 170	935 / 860 / 141	910 / 803 / 211	1037 / 978 / 170	861 / 741 / 163	1075 / 938 / 137								
	3	814 / 792 / 106	871 / 997 / 88	911 / 763 / 156	966 / 938 / 127	959 / 885 / 191	1121 / 1049 / 150	954 / 816 / 147	1168 / 1010 / 121	823 / 830 / 102	881 / 1037 / 85	927 / 801 / 151	982 / 976 / 122	998 / 925 / 184	1211 / 1135 / 150	994 / 852 / 142	1207 / 1046 / 116								
Wind Speed [mph]		120								130															
45	1	756 / 417 / 117	833 / 561 / 103	767 / 561 / 157	808 / 707 / 130	799 / 675 / 197	902 / 828 / 159	746 / 623 / 152	897 / 763 / 123	746 / 394 / 120	818 / 533 / 106	755 / 531 / 161	816 / 693 / 138	780 / 641 / 202	866 / 792 / 165	713 / 592 / 156	861 / 731 / 127	ASCE Group Zone							
	2	833 / 561 / 103	907 / 714 / 87	808 / 720 / 130	878 / 897 / 108	872 / 811 / 154	1072 / 1013 / 128	897 / 775 / 123	1113 / 973 / 103	818 / 533 / 106	889 / 682 / 89	793 / 686 / 134	861 / 860 / 111	866 / 803 / 165	1037 / 978 / 133	861 / 741 / 127	1075 / 938 / 107								
	3	756 / 865 / 78	849 / 1073 / 64	864 / 838 / 115	993 / 1012 / 92	1035 / 961 / 138	1245 / 1170 / 112	1031 / 886 / 107	1242 / 1077 / 87	745 / 830 / 81	823 / 1037 / 67	848 / 801 / 119	961 / 976 / 96	998 / 925 / 144	1211 / 1135 / 117	994 / 852 / 111	1207 / 1046 / 91								
50	1	775 / 407 / 124	842 / 546 / 109	782 / 547 / 167	837 / 707 / 142	824 / 675 / 215	902 / 828 / 174	746 / 623 / 166	897 / 763 / 135	767 / 385 / 127	830 / 519 / 112	771 / 519 / 171	846 / 693 / 150	806 / 641 / 220	868 / 792 / 180	713 / 592 / 171	861 / 731 / 139	ASCE Group Zone							
	2	842 / 546 / 109	934 / 714 / 94	837 / 720 / 142	901 / 897 / 117	872 / 811 / 168	1072 / 1013 / 139	897 / 775 / 135	1113 / 973 / 112	830 / 519 / 112	918 / 682 / 97	823 / 686 / 146	886 / 860 / 121	868 / 803 / 180	1037 / 978 / 145	861 / 741 / 139	1075 / 938 / 117								
	3	781 / 865 / 85	849 / 1073 / 70	890 / 838 / 125	993 / 1012 / 100	1035 / 961 / 151	1245 / 1170 / 122	1031 / 886 / 117	1242 / 1077 / 94	771 / 830 / 88	838 / 1037 / 73	874 / 801 / 130	961 / 976 / 105	998 / 925 / 157	1211 / 1135 / 128	994 / 852 / 121	1207 / 1046 / 99								
60	1	828 / 397 / 141	882 / 531 / 123	829 / 534 / 190	894 / 707 / 166	851 / 657 / 245	929 / 828 / 204	746 / 623 / 194	897 / 763 / 158	802 / 366 / 141	872 / 505 / 127	821 / 506 / 195	882 / 674 / 170	836 / 624 / 252	910 / 792 / 211	713 / 592 / 199	861 / 731 / 163	ASCE Group Zone							
	2	882 / 531 / 123	990 / 714 / 109	894 / 720 / 166	949 / 897 / 136	898 / 811 / 197	1072 / 1013 / 163	897 / 775 / 158	1113 / 973 / 131	872 / 505 / 127	975 / 682 / 113	882 / 686 / 170	935 / 860 / 141	910 / 803 / 211	1037 / 978 / 170	861 / 741 / 163	1075 / 938 / 137								
	3	831 / 865 / 99	890 / 1073 / 81	941 / 838 / 146	995 / 1012 / 117	1035 / 961 / 177	1245 / 1170 / 143	1031 / 886 / 137	1242 / 1077 / 110	823 / 830 / 102	881 / 1037 / 85	927 / 801 / 151	982 / 976 / 122	998 / 925 / 184	1211 / 1135 / 150	994 / 852 / 142	1207 / 1046 / 116								

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																																																												
Wind Speed [mph]		140																150																160																																												
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																																
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																														
		45	1	766/439/114	847/589/101	779/590/153	822/740/127	795/688/186	936/862/154	779/653/148	931/795/119	785/483/109	873/641/95	801/647/146	847/800/119	826/747/175	997/923/144	816/689/136	993/851/111	823/538/106	895/689/89	798/681/134	867/854/111	874/800/165	1047/974/133	870/738/127	1043/898/103	45	2	847/589/101	923/744/84	822/753/127	906/931/104	903/843/149	1103/1045/122	931/806/119	1148/1006/99	873/641/95	959/800/78	820/788/115	960/992/96	960/901/138	1154/1097/112	993/863/111	1205/1059/91	895/689/89	1010/847/73	837/839/108	1002/1040/88	1047/987/133	1248/1190/106	1043/911/103	1307/1152/87	3	766/898/76	872/1104/62	850/842/108	1022/1044/88	1068/995/133	1274/1199/106	1065/917/103	1334/1159/87	781/957/70	907/1154/56	890/900/100	1069/1096/81	1126/1052/122	1387/1309/101	1171/1011/99	1384/1205/78	831/1047/67	978/1249/53	971/986/96	1155/1189/77	1167/1095/112	1410/1333/91	1219/1056/91	1490/1300/74
1	783/429/121		879/589/109	792/576/163	850/740/138	818/688/203	936/862/168	779/653/162	931/795/130	820/483/118	903/641/103	833/647/159	873/800/130	848/747/191	997/923/157	816/689/148	993/851/121	834/524/112	923/689/97	827/681/146	892/854/121	874/800/180	1047/974/145	870/738/139	1043/898/112	50	2		879/589/109	950/744/91	850/753/138	916/931/113	903/843/163	1103/1045/134	931/806/130	1148/1006/108	903/641/103	977/800/85	845/788/125	960/992/105	960/901/151	1154/1097/122	993/863/121	1205/1059/99	923/689/97	1010/847/79	861/839/117	1002/1040/96	1047/987/145	1248/1190/116	1043/911/112	1307/1152/94	3	790/898/82	872/1104/67	873/842/117	1022/1044/96	1068/995/145	1274/1199/116	1065/917/112	1334/1159/94	803/957/76	907/1154/61	895/900/109	1069/1096/88	1126/1052/134	1387/1309/110	1171/1011/108	1384/1205/86	844/1047/73	978/1249/58	971/986/105	1155/1189/84	1167/1095/122	1410/1333/99	1219/1056/99	1490/1300/81	
1	834/418/137		917/572/123	836/561/185	906/740/161	866/688/238	946/862/197	779/653/189	931/795/152	844/458/130	936/622/116	874/630/180	926/800/151	893/747/225	997/923/184	816/689/173	993/851/142	876/510/127	981/689/113	887/681/170	941/854/141	916/800/211	1047/974/170	870/738/163	1043/898/131		60		2	917/572/123	1004/744/106	906/753/161	961/931/132	913/843/197	1103/1045/157	931/806/152	1148/1006/126	936/622/116	1027/800/99	896/788/146	981/992/122	960/901/177	1154/1097/143	993/863/142	1205/1059/116	981/689/113	1043/847/92	909/839/136	1002/1040/112	1047/987/170	1248/1190/136	1043/911/131	1307/1152/110	3	838/898/95	896/1104/78	921/842/136	1022/1044/112	1068/995/170	1274/1199/136	1065/917/131	1334/1159/110	848/957/88	907/1154/71	939/900/127	1069/1096/102	1126/1052/157	1387/1309/130	1171/1011/126	1384/1205/100	887/1047/85	978/1249/67	989/986/122	1155/1189/98	1167/1095/143	1410/1333/116	1219/1056/116	1490/1300/95
45	1		838/578/101	912/732/84	813/727/127	891/899/104	920/847/154	1085/1013/122	916/781/119	1128/974/99	875/633/98	957/795/81	824/767/119	923/935/96	958/886/144	1161/1088/117	989/847/115	1210/1048/95	ASCE Group Zone	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2				3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3																																											
	2		912/732/84	1093/921/70	891/915/104	1079/1125/85	1085/1027/122	1336/1277/101	1128/988/99	1404/1239/82	957/795/81	1174/993/67	923/952/96	1098/1148/77	1161/1103/117	1418/1358/96	1210/1063/95	1415/1251/74																		0 - 7.5																																										
	3		858/1085/62	1044/1337/51	1005/1026/88	1237/1276/73	1252/1178/106	1496/1418/85	1312/1139/87	1587/1387/70	915/1163/59	1103/1417/48	1075/1101/85	1311/1357/69	1332/1256/101	1399/1217/82	1673/1464/66	7.5 - 15																																																												
	1		870/578/109	939/732/91	841/727/138	904/899/113	920/847/168	1085/1013/134	916/781/130	1128/974/108	881/615/103	983/795/88	850/767/130	923/935/105	958/886/157	1161/1088/128	989/847/126	1210/1048/103																		15 - 30																																										
	2		939/732/91	1093/921/76	904/915/113	1079/1125/92	1085/1027/134	1336/1277/110	1128/988/90	1404/1239/90	983/795/88	1174/993/73	923/952/105	1098/1148/84	1161/1103/128	1418/1358/105	1210/1063/103	1415/1251/81																		30 - 45																																										
	3		858/1085/67	1044/1337/55	1005/1026/96	1237/1276/80	1252/1178/116	1496/1418/93	1312/1139/94	1587/1387/77	915/1163/64	1103/1417/52	1075/1101/92	1311/1357/75	1332/1256/110	1399/1217/90	1673/1464/72	7.5 - 15																																																												
	1	909/562/123	993/732/106	897/727/161	950/899/132	934/847/197	1085/1013/157	916/781/152	1128/974/126	914/597/116	1035/795/102	903/767/151	953/935/122	958/886/184	1161/1088/150	989/847/147	1210/1048/121	15 - 30																																																												
	2	993/732/106	1095/921/88	950/915/132	1079/1125/107	1085/1027/157	1336/1277/130	1128/988/126	1404/1239/105	1035/795/102	1174/993/85	953/952/122	1098/1148/98	1161/1103/150	1418/1358/123	1210/1063/121	1415/1251/95	30 - 45																																																												
	3	885/1085/78	1044/1337/64	1005/1026/112	1237/1276/93	1252/1178/136	1496/1418/109	1312/1139/110	1587/1387/89	917/1163/74	1103/1417/60	1075/1101/107	1311/1357/88	1332/1256/130	1399/1217/105	1673/1464/84	7.5 - 15																																																													
45	1	885/667/92	988/826/76	859/829/115	984/1002/92	1025/952/138	1233/1158/112	1021/877/107	1230/1067/87	920/719/89	1051/883/73	862/859/108	1043/1065/88	1046/975/128	1299/1223/106	1086/935/103	1296/1127/82	ASCE Group Zone	Mono Slope	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3	1 = 1	2 = 2	3 = 3																																																		
	2	988/826/76	1196/1016/62	984/1020/92	1160/1216/73	1233/1174/112	1490/1430/91	1230/1082/87	1487/1318/70	1051/883/73	1263/1076/59	1043/1084/88	1216/1278/69	1299/1240/106	1552/1492/85	1296/1143/82	1647/1461/70												0 - 7.5																																																	
	3	969/1235/56	1155/1487/45	1142/1173/81	1378/1429/65	1404/1327/96	1479/1289/78	1479/1289/78	1479/1289/78	1018/1301/53	1103/1417/59	1075/1101/88	1311/1357/77	1332/1256/91	1399/1217/74	1673/1464/70	7.5 - 15																																																													
	1	915/667/100	989/826/82	884/829/125	984/1002/100	1025/952/151	1233/1158/122	1021/877/117	1230/1067/94	949/719/97	1051/883/79	886/859/117	1043/1065/96	1046/975/139	1299/1223/116	1086/935/112	1296/1127/90												15 - 30																																																	
	2	989/826/82	1196/1016/67	984/1020/100	1160/1216/80	1233/1174/122	1490/1430/99	1230/1082/94	1487/1318/77	1051/883/79	1263/1076/64	1043/1084/96	1216/1278/75	1299/1240/116	1552/1492/93	1296/1143/90	1647/1461/77												30 - 45																																																	
	3	969/1235/61	1155/1487/49	1142/1173/88	1378/1429/71	1404/1327/105	1479/1289/86	1479/1289/86	1479/1289/86	1018/1301/58	1103/1417/64	1075/1101/96	1311/1357/67	1332/1256/99	1399/1217/81	1673/1464/77	7.5 - 15																																																													
	1	944/647/113	1037/826/95	935/829/146	988/1002/117	1025/952/177	1233/1158/143	1021/877/137	1230/1067/110	975/696/109	1074/883/92	933/859/136	1043/1065/112	1046/975/163	1299/1223/136	1086/935/131	1296/1127/105												15 - 30																																																	
	2	1037/826/95	1196/1016/78	988/1020/117	1160/1216/93	1233/1174/143	1490/1430/116	1230/1082/110	1487/1318/89	1074/883/92	1263/1076/74	1043/1084/112	1216/1278/88	1299/1240/136	1552/1492/109	1296/1143/105	1647/1461/89												30 - 45																																																	
	3	969/1235/71	1155/1487/57	1142/1173/102	1378/1429/83	1404/1327/123	1479/1289/100	1479/1289/100	1479/1289/100	1018/1301/67	1103/1417/74	1075/1101/98	1311/1357/78	1332/1256/116	1399/1217/95	1673/1464/89	7.5 - 15																																																													

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs									
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
	70	1	818 / 269 / 168	853 / 376 / 152	821 / 374 / 233	870 / 518 / 211	804 / 478 / 314	873 / 636 / 275	647 / 497 / 270	743 / 620 / 222	821 / 289 / 164	885 / 412 / 152	827 / 401 / 228	882 / 553 / 206	819 / 511 / 306	894 / 676 / 267	657 / 520 / 258	766 / 642 / 210	824 / 309 / 160	894 / 439 / 148	833 / 428 / 222	894 / 588 / 200	834 / 544 / 298	915 / 716 / 259	665 / 542 / 246	808 / 681 / 204	
	2	853 / 376 / 152	915 / 514 / 136	870 / 527 / 211	950 / 717 / 189	873 / 644 / 275	967 / 836 / 236	743 / 629 / 222	894 / 771 / 180	885 / 412 / 152	930 / 547 / 132	882 / 563 / 206	968 / 762 / 183	894 / 686 / 267	959 / 854 / 220	766 / 652 / 210	942 / 816 / 174	894 / 439 / 148	973 / 597 / 132	894 / 598 / 200	955 / 781 / 172	915 / 726 / 259	982 / 898 / 212	808 / 691 / 204	989 / 859 / 168		
	3	890 / 711 / 140	879 / 862 / 112	919 / 642 / 194	989 / 834 / 167	954 / 780 / 251	1031 / 957 / 204	850 / 719 / 192	1027 / 882 / 156	876 / 735 / 132	893 / 909 / 108	935 / 684 / 189	976 / 852 / 156	948 / 801 / 236	1038 / 967 / 189	898 / 763 / 186	1077 / 928 / 150	887 / 777 / 128	905 / 955 / 104	951 / 724 / 183	994 / 896 / 150	971 / 844 / 228	1081 / 1010 / 181	913 / 778 / 174	1125 / 971 / 144		
80	1	850 / 256 / 179	897 / 366 / 166	850 / 356 / 250	910 / 504 / 231	837 / 466 / 347	895 / 617 / 303	672 / 497 / 304	743 / 620 / 250	872 / 282 / 179	903 / 391 / 161	853 / 381 / 243	920 / 538 / 225	850 / 498 / 338	913 / 657 / 294	681 / 520 / 291	766 / 642 / 237	873 / 301 / 175	934 / 427 / 161	878 / 417 / 243	928 / 571 / 219	863 / 529 / 330	960 / 716 / 294	688 / 542 / 277	808 / 681 / 230		
	2	897 / 366 / 166	948 / 498 / 148	910 / 513 / 231	978 / 696 / 206	895 / 626 / 303	1008 / 836 / 267	743 / 629 / 250	894 / 771 / 203	903 / 391 / 161	989 / 547 / 148	920 / 548 / 225	994 / 739 / 200	913 / 665 / 294	997 / 854 / 250	766 / 652 / 237	942 / 816 / 196	934 / 427 / 161	1001 / 579 / 143	928 / 582 / 219	1008 / 781 / 194	960 / 726 / 294	1019 / 898 / 241	808 / 691 / 230	989 / 859 / 190		
	3	953 / 711 / 157	929 / 862 / 125	951 / 624 / 212	1040 / 834 / 187	966 / 756 / 276	1063 / 957 / 232	850 / 719 / 217	1027 / 882 / 176	935 / 735 / 148	941 / 909 / 121	964 / 664 / 206	1023 / 852 / 175	989 / 801 / 267	1046 / 967 / 214	898 / 763 / 210	1077 / 928 / 169	944 / 777 / 143	952 / 955 / 117	977 / 702 / 200	1040 / 896 / 169	1011 / 844 / 258	1081 / 1010 / 205	913 / 778 / 196	1125 / 971 / 163		
90	1	899 / 250 / 193	937 / 356 / 178	895 / 347 / 270	947 / 491 / 250	868 / 454 / 378	941 / 617 / 339	682 / 486 / 331	753 / 620 / 278	897 / 268 / 188	940 / 380 / 173	896 / 372 / 263	953 / 523 / 243	878 / 485 / 368	958 / 657 / 329	706 / 520 / 323	766 / 642 / 263	919 / 294 / 188	971 / 415 / 173	896 / 396 / 256	959 / 555 / 236	888 / 515 / 359	974 / 695 / 319	712 / 542 / 308	808 / 681 / 256		
	2	937 / 356 / 178	1007 / 498 / 164	947 / 500 / 250	1003 / 675 / 222	941 / 626 / 339	1049 / 836 / 299	753 / 629 / 278	894 / 771 / 226	940 / 380 / 173	1016 / 530 / 159	953 / 533 / 243	1015 / 716 / 215	958 / 665 / 329	1036 / 854 / 279	766 / 652 / 263	942 / 816 / 218	971 / 415 / 173	1025 / 561 / 154	959 / 565 / 236	1026 / 756 / 208	974 / 704 / 319	1056 / 898 / 269	808 / 691 / 256	989 / 859 / 211		
	3	986 / 691 / 169	980 / 862 / 139	979 / 606 / 229	1055 / 806 / 201	1009 / 756 / 309	1098 / 957 / 259	850 / 719 / 241	1027 / 882 / 196	994 / 735 / 164	990 / 909 / 134	989 / 643 / 222	1071 / 852 / 194	1030 / 801 / 299	1079 / 967 / 239	898 / 763 / 233	1077 / 928 / 188	1001 / 777 / 159	998 / 955 / 129	999 / 680 / 215	1086 / 896 / 187	1050 / 844 / 289	1099 / 1010 / 229	913 / 778 / 218	1125 / 971 / 181		
70	1	848 / 337 / 160	902 / 465 / 144	839 / 455 / 217	904 / 621 / 194	848 / 576 / 291	934 / 755 / 251	696 / 575 / 240	849 / 718 / 198	851 / 357 / 156	910 / 491 / 140	844 / 481 / 211	915 / 654 / 189	862 / 608 / 283	952 / 792 / 244	713 / 592 / 228	861 / 731 / 186										
	2	902 / 465 / 144	987 / 629 / 128	904 / 633 / 194	970 / 822 / 167	934 / 765 / 251	1003 / 939 / 204	849 / 729 / 198	1033 / 900 / 162	910 / 491 / 140	1000 / 661 / 124	915 / 666 / 189	984 / 860 / 161	952 / 803 / 244	1037 / 978 / 197	861 / 741 / 186	1075 / 938 / 156										
	3	867 / 792 / 120	916 / 997 / 100	966 / 763 / 178	1010 / 938 / 145	993 / 885 / 220	1121 / 1049 / 173	954 / 816 / 168	1168 / 1010 / 138	875 / 830 / 116	924 / 1037 / 96	979 / 801 / 172	1024 / 976 / 139	1012 / 925 / 212	1211 / 1135 / 173	994 / 852 / 162	1207 / 1046 / 132										
80	1	874 / 320 / 170	940 / 452 / 157	882 / 443 / 237	936 / 604 / 212	875 / 560 / 321	978 / 755 / 285	711 / 575 / 271	849 / 718 / 223	898 / 348 / 170	945 / 477 / 152	885 / 468 / 231	944 / 635 / 206	886 / 591 / 312	995 / 792 / 276	714 / 592 / 257	861 / 731 / 210										
	2	940 / 452 / 157	1011 / 610 / 139	936 / 615 / 212	1021 / 822 / 187	978 / 765 / 285	1039 / 939 / 232	849 / 729 / 223	1033 / 900 / 183	945 / 477 / 152	1021 / 640 / 134	944 / 647 / 206	1033 / 860 / 181	995 / 803 / 276	1056 / 978 / 223	861 / 741 / 210	1075 / 938 / 176										
	3	921 / 792 / 134	960 / 997 / 112	988 / 740 / 194	1054 / 938 / 162	1031 / 885 / 250	1121 / 1049 / 196	954 / 816 / 190	1168 / 1010 / 156	927 / 830 / 130	967 / 1037 / 108	1032 / 801 / 194	1067 / 976 / 156	1049 / 925 / 241	1211 / 1135 / 196	994 / 852 / 183	1207 / 1046 / 149										
90	1	917 / 312 / 183	974 / 439 / 169	921 / 431 / 256	965 / 586 / 229	898 / 545 / 349	990 / 731 / 309	733 / 575 / 301	849 / 718 / 248	940 / 339 / 183	976 / 463 / 164	922 / 455 / 250	1000 / 635 / 229	934 / 591 / 349	1004 / 767 / 299	736 / 592 / 286	861 / 731 / 233										
	2	974 / 439 / 169	1033 / 590 / 149	965 / 597 / 229	1072 / 822 / 208	990 / 741 / 309	1074 / 939 / 259	849 / 729 / 248	1033 / 900 / 203	976 / 463 / 164	1075 / 640 / 149	1000 / 647 / 229	1083 / 860 / 201	1004 / 777 / 299	1090 / 978 / 249	861 / 741 / 233	1075 / 938 / 196										
	3	975 / 792 / 149	1005 / 997 / 124	1041 / 740 / 215	1098 / 938 / 180	1069 / 885 / 279	1121 / 1049 / 219	954 / 816 / 211	1168 / 1010 / 173	979 / 830 / 144	1010 / 1037 / 119	1050 / 775 / 208	1109 / 976 / 173	1086 / 925 / 269	1211 / 1135 / 219	994 / 852 / 203	1207 / 1046 / 166										
70	1	854 / 377 / 152	917 / 516 / 136	872 / 520 / 211	924 / 686 / 183	875 / 638 / 275	970 / 828 / 236	746 / 623 / 222	897 / 763 / 180	851 / 357 / 156	910 / 491 / 140	844 / 481 / 211	915 / 654 / 189	862 / 608 / 283	952 / 792 / 244	713 / 592 / 228	861 / 731 / 186										
	2	917 / 516 / 136	1012 / 691 / 120	924 / 699 / 183	997 / 897 / 156	937 / 811 / 228	1072 / 1013 / 189	897 / 775 / 180	1113 / 973 / 150	910 / 491 / 140	1000 / 661 / 124	915 / 666 / 189	984 / 860 / 161	952 / 803 / 244	1037 / 978 / 197	861 / 741 / 186	1075 / 938 / 156										
	3	881 / 865 / 112	931 / 1073 / 92	992 / 838 / 167	1036 / 1012 / 134	1035 / 961 / 204	1245 / 1170 / 165	1031 / 886 / 156	1242 / 1077 / 126	875 / 830 / 116	924 / 1037 / 96	979 / 801 / 172	1024 / 976 / 139	1012 / 925 / 212	1211 / 1135 / 173	994 / 852 / 162	1207 / 1046 / 132										
80	1	898 / 367 / 166	949 / 501 / 148	912 / 506 / 231	980 / 686 / 206	897 / 620 / 303	1011 / 828 / 267	746 / 623 / 250	897 / 763 / 203	898 / 348 / 170	945 / 477 / 152	885 / 468 / 231	944 / 635 / 206	886 / 591 / 312	995 / 792 / 276	714 / 592 / 257	861 / 731 / 210										
	2	949 / 501 / 148	1065 / 691 / 134	980 / 699 / 206	1044 / 897 / 175	977 / 811 / 258	1072 / 1013 / 214	897 / 775 / 203	1113 / 973 / 169	945 / 477 / 152	1021 / 640 / 134	944 / 647 / 206	1033 / 860 / 181	995 / 803 / 276	1056 / 978 / 223	861 / 741 / 210	1075 / 938 / 176										
	3	932 / 865 / 125	972 / 1073 / 103	1043 / 838 / 187	1077 / 1012 / 150	1066 / 961 / 232	1245 / 1170 / 187	1031 / 886 / 176	1242 / 1077 / 142	927 / 830 / 130	967 / 1037 / 108	1032 / 801 / 194	1067 / 976 / 156	1049 / 925 / 241	1211 / 1135 / 196	994 / 852 / 183	1207 / 1046 / 149										
90	1	938 / 357 / 178	1009 / 501 / 164	922 / 479 / 243	1005 / 666 / 222	943 / 620 / 339	1016 / 800 / 289	756 / 623 / 278	897 / 763 / 226	940 / 339 / 183	976 / 463 / 164	922 / 455 / 250	1000 / 635 / 229	934 / 591 / 349	1004 / 767 / 299	736 / 592 / 286	861 / 731 / 233										
	2	1009 / 501 / 164	1082 / 668 / 144	1005 / 678 / 222	1092 / 897 / 194	1016 / 811 / 289	1104 / 1013 / 239	897 / 775 / 226	1113 / 973 / 188	976 / 463 / 164	1075 / 640 / 149	1000 / 647 / 229	1083 / 860 / 201	1004 / 777 / 299	1090 / 978 / 249	861 / 741 / 233	1075 / 938 / 196										
	3	982 / 865 / 139	1013 / 1073 / 114	1057 / 810 / 201	1118 / 1012 / 167	1101 / 961 / 259	1245 / 1170 / 209	1031 / 886 / 196	1242 / 1077 / 158	979 / 830 / 144	1010 / 1037 / 119	1050 / 775 / 208	1109 / 976 / 173	1086 / 925 / 269	1211 / 1135 / 219	994 / 852 / 203	1207 / 1046 / 166										

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			0-30ft							92.5in x 45.9in							Load: Up / Down / Side , lbs																																	
Wind Speed [mph]			140														150														160																			
Panal Angle			0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge													
																																						1	2	3	1	2	3	1	2	3	1	2	3	1
70	1	880 / 407 / 152	952 / 556 / 136	877 / 546 / 206	962 / 740 / 183	888 / 668 / 267	985 / 862 / 228	779 / 653 / 216	931 / 795 / 174	885 / 446 / 144	965 / 604 / 128	912 / 613 / 200	978 / 800 / 172	939 / 747 / 259	1011 / 923 / 212	816 / 689 / 198	993 / 851 / 162	914 / 496 / 140	1006 / 668 / 124	919 / 661 / 189	990 / 854 / 161	959 / 800 / 244	1047 / 974 / 197	870 / 738 / 186	1043 / 898 / 150	952 / 556 / 136	1022 / 720 / 116	962 / 753 / 183	1007 / 931 / 150	951 / 843 / 220	1103 / 1045 / 181	931 / 806 / 174	1148 / 1006 / 144	965 / 604 / 128	1077 / 800 / 112	947 / 788 / 167	1023 / 992 / 139	974 / 901 / 204	1154 / 1097 / 165	993 / 863 / 162	1205 / 1059 / 132	1006 / 668 / 124	1090 / 847 / 104	956 / 839 / 156	1030 / 1040 / 128	1047 / 987 / 197	1248 / 1190 / 157	1043 / 911 / 150	1307 / 1152 / 126	
70	2	887 / 898 / 108	935 / 1104 / 88	969 / 842 / 156	1046 / 1044 / 128	1068 / 995 / 197	1274 / 1199 / 157	1065 / 917 / 150	1334 / 1159 / 126	892 / 957 / 100	936 / 1154 / 80	983 / 900 / 145	1069 / 1096 / 117	1126 / 1052 / 181	1387 / 1309 / 149	1171 / 1011 / 144	1384 / 1205 / 114	930 / 1047 / 96	978 / 1249 / 76	1031 / 986 / 139	1155 / 1189 / 111	1167 / 1095 / 165	1410 / 1333 / 134	1219 / 1056 / 132	1490 / 1300 / 108	887 / 898 / 108	935 / 1104 / 88	969 / 842 / 156	1046 / 1044 / 128	1068 / 995 / 197	1274 / 1199 / 157	1065 / 917 / 150	1334 / 1159 / 126	892 / 957 / 100	936 / 1154 / 80	983 / 900 / 145	1069 / 1096 / 117	1126 / 1052 / 181	1387 / 1309 / 149	1171 / 1011 / 144	1384 / 1205 / 114	930 / 1047 / 96	978 / 1249 / 76	1031 / 986 / 139	1155 / 1189 / 111	1167 / 1095 / 165	1410 / 1333 / 134	1219 / 1056 / 132	1490 / 1300 / 108	
70	3	898 / 386 / 161	983 / 540 / 148	915 / 531 / 225	987 / 717 / 200	934 / 668 / 303	1025 / 862 / 258	779 / 653 / 244	931 / 795 / 196	923 / 434 / 157	990 / 585 / 139	946 / 596 / 219	1031 / 800 / 194	954 / 724 / 285	1048 / 923 / 241	816 / 689 / 223	993 / 851 / 183	949 / 482 / 152	1027 / 646 / 134	948 / 642 / 206	1039 / 854 / 181	1001 / 800 / 276	1064 / 974 / 223	870 / 738 / 210	1043 / 898 / 169	898 / 386 / 161	983 / 540 / 148	915 / 531 / 225	987 / 717 / 200	934 / 668 / 303	1025 / 862 / 258	779 / 653 / 244	931 / 795 / 196	923 / 434 / 157	990 / 585 / 139	946 / 596 / 219	1031 / 800 / 194	954 / 724 / 285	1048 / 923 / 241	816 / 689 / 223	993 / 851 / 183	949 / 482 / 152	1027 / 646 / 134	948 / 642 / 206	1039 / 854 / 181	1001 / 800 / 276	1064 / 974 / 223	870 / 738 / 210	1043 / 898 / 169	
80	1	983 / 540 / 148	1074 / 720 / 130	987 / 730 / 200	1053 / 931 / 169	989 / 843 / 250	1103 / 1045 / 205	931 / 806 / 196	1148 / 1006 / 163	990 / 585 / 139	1087 / 771 / 121	998 / 788 / 187	1066 / 992 / 156	1009 / 901 / 232	1154 / 1097 / 187	993 / 863 / 183	1205 / 1059 / 149	1027 / 646 / 134	1136 / 847 / 117	1004 / 839 / 175	1070 / 1040 / 144	1064 / 987 / 223	1248 / 1190 / 178	1043 / 911 / 169	1307 / 1152 / 142	983 / 540 / 148	1074 / 720 / 130	987 / 730 / 200	1053 / 931 / 169	989 / 843 / 250	1103 / 1045 / 205	931 / 806 / 196	1148 / 1006 / 163	990 / 585 / 139	1087 / 771 / 121	998 / 788 / 187	1066 / 992 / 156	1009 / 901 / 232	1154 / 1097 / 187	993 / 863 / 183	1205 / 1059 / 149	1027 / 646 / 134	1136 / 847 / 117	1004 / 839 / 175	1070 / 1040 / 144	1064 / 987 / 223	1248 / 1190 / 178	1043 / 911 / 169	1307 / 1152 / 142	
80	2	935 / 898 / 121	974 / 1104 / 99	1016 / 842 / 175	1085 / 1044 / 144	1080 / 995 / 223	1274 / 1199 / 178	1065 / 917 / 169	1334 / 1159 / 142	937 / 957 / 112	972 / 1154 / 90	1027 / 900 / 162	1092 / 1096 / 131	1126 / 1052 / 205	1387 / 1309 / 169	1171 / 1011 / 163	1384 / 1205 / 129	973 / 1047 / 108	1010 / 1249 / 85	1074 / 986 / 156	1155 / 1189 / 125	1167 / 1095 / 187	1410 / 1333 / 152	1219 / 1056 / 149	1490 / 1300 / 122	935 / 898 / 121	974 / 1104 / 99	1016 / 842 / 175	1085 / 1044 / 144	1080 / 995 / 223	1274 / 1199 / 178	1065 / 917 / 169	1334 / 1159 / 142	937 / 957 / 112	972 / 1154 / 90	1027 / 900 / 162	1092 / 1096 / 131	1126 / 1052 / 205	1387 / 1309 / 169	1171 / 1011 / 163	1384 / 1205 / 129	973 / 1047 / 108	1010 / 1249 / 85	1074 / 986 / 156	1155 / 1189 / 125	1167 / 1095 / 187	1410 / 1333 / 152	1219 / 1056 / 149	1490 / 1300 / 122	
80	3	936 / 375 / 173	1011 / 523 / 159	949 / 517 / 243	1009 / 695 / 215	952 / 648 / 329	1064 / 862 / 289	779 / 653 / 271	931 / 795 / 218	958 / 421 / 169	1045 / 585 / 154	976 / 579 / 236	1049 / 774 / 208	998 / 724 / 319	1085 / 923 / 269	816 / 689 / 248	993 / 851 / 203	980 / 468 / 164	1081 / 646 / 149	1005 / 642 / 229	1089 / 854 / 201	1010 / 774 / 299	1098 / 974 / 249	870 / 738 / 233	1043 / 898 / 188	936 / 375 / 173	1011 / 523 / 159	949 / 517 / 243	1009 / 695 / 215	952 / 648 / 329	1064 / 862 / 289	779 / 653 / 271	931 / 795 / 218	958 / 421 / 169	1045 / 585 / 154	976 / 579 / 236	1049 / 774 / 208	998 / 724 / 319	1085 / 923 / 269	816 / 689 / 248	993 / 851 / 203	980 / 468 / 164	1081 / 646 / 149	1005 / 642 / 229	1089 / 854 / 201	1010 / 774 / 299	1098 / 974 / 249	870 / 738 / 233	1043 / 898 / 188	
90	1	1011 / 523 / 159	1087 / 695 / 139	1009 / 707 / 215	1099 / 931 / 187	1028 / 843 / 279	1115 / 1045 / 229	931 / 806 / 218	1148 / 1006 / 181	1045 / 585 / 154	1135 / 771 / 134	1049 / 788 / 208	1108 / 992 / 173	1045 / 901 / 259	1154 / 1097 / 209	993 / 863 / 203	1205 / 1059 / 166	1081 / 646 / 149	1183 / 847 / 129	1051 / 839 / 194	1109 / 1040 / 160	1098 / 987 / 249	1248 / 1190 / 199	1043 / 911 / 188	1307 / 1152 / 158	1011 / 523 / 159	1087 / 695 / 139	1009 / 707 / 215	1099 / 931 / 187	1028 / 843 / 279	1115 / 1045 / 229	931 / 806 / 218	1148 / 1006 / 181	1045 / 585 / 154	1135 / 771 / 134	1049 / 788 / 208	1108 / 992 / 173	1045 / 901 / 259	1154 / 1097 / 209	993 / 863 / 203	1205 / 1059 / 166	1081 / 646 / 149	1183 / 847 / 129	1051 / 839 / 194	1109 / 1040 / 160	1098 / 987 / 249	1248 / 1190 / 199	1043 / 911 / 188	1307 / 1152 / 158	
90	2	983 / 898 / 134	1014 / 1104 / 109	1064 / 842 / 194	1124 / 1044 / 160	1114 / 995 / 249	1274 / 1199 / 199	1065 / 917 / 188	1334 / 1159 / 158	982 / 957 / 124	1008 / 1154 / 99	1071 / 900 / 180	1128 / 1096 / 146	1132 / 1052 / 229	1387 / 1309 / 189	1171 / 1011 / 181	1384 / 1205 / 143	1016 / 1047 / 119	1044 / 1249 / 94	1116 / 986 / 173	1177 / 1189 / 139	1167 / 1095 / 209	1410 / 1333 / 170	1219 / 1056 / 166	1490 / 1300 / 136	983 / 898 / 134	1014 / 1104 / 109	1064 / 842 / 194	1124 / 1044 / 160	1114 / 995 / 249	1274 / 1199 / 199	1065 / 917 / 188	1334 / 1159 / 158	982 / 957 / 124	1008 / 1154 / 99	1071 / 900 / 180	1128 / 1096 / 146	1132 / 1052 / 229	1387 / 1309 / 189	1171 / 1011 / 181	1384 / 1205 / 143	1016 / 1047 / 119	1044 / 1249 / 94	1116 / 986 / 173	1177 / 1189 / 139	1167 / 1095 / 209	1410 / 1333 / 170	1219 / 1056 / 166	1490 / 1300 / 136	
90	3	944 / 546 / 136	1046 / 732 / 120	953 / 727 / 183	996 / 899 / 150	974 / 847 / 228	1085 / 1013 / 181	916 / 781 / 174	1128 / 974 / 144	973 / 597 / 132	1049 / 767 / 112	955 / 767 / 172	995 / 935 / 139	982 / 886 / 212	1161 / 1088 / 173	989 / 847 / 168	1210 / 1048 / 138	1049 / 767 / 112	1187 / 993 / 96	995 / 952 / 139	1098 / 1148 / 111	1161 / 1103 / 173	1418 / 1358 / 142	1210 / 1063 / 138	1415 / 1251 / 108	944 / 546 / 136	1046 / 732 / 120	953 / 727 / 183	996 / 899 / 150	974 / 847 / 228	1085 / 1013 / 181	916 / 781 / 174	1128 / 974 / 144	973 / 597 / 132	1049 / 767 / 112	955 / 767 / 172	995 / 935 / 139	982 / 886 / 212	1161 / 1088 / 173	989 / 847 / 168	1210 / 1048 / 138	1049 / 767 / 112	1187 / 993 / 96	995 / 952 / 139	1098 / 1148 / 111	1161 / 1103 / 173	1418 / 1358 / 142	1210 / 1063 / 138	1415 / 1251 / 108	
70	1	1046 / 732 / 120	1139 / 921 / 100	996 / 915 / 150	1079 / 1125 / 122	1085 / 1027 / 181	1336 / 1277 / 149	1128 / 988 / 144	1404 / 1239 / 120	955 / 1163 / 84	1103 / 1417 / 68	1075 / 1101 / 122	1311 / 1357 / 100	1332 / 1256 / 149	1399 / 1217 / 120	1673 / 1464 / 96	1001 / 579 / 143	1099 / 767 / 125	1008 / 767 / 194	1038 / 935 / 156	1019 / 886 / 241	1161 / 1088 / 196	989 / 847 / 190	1210 / 1048 / 156	1046 / 732 / 120	1139 / 921 / 100	996 / 915 / 150	1079 / 1125 / 122	1085 / 1027 / 181	1336 / 1277 / 149	1128 / 988 / 144	1404 / 1239 / 120	955 / 1163 / 84	1103 / 1417 / 68	1075 / 1101 / 122	1311 / 1357 / 100	1332 / 1256 / 149	1399 / 1217 / 120	1673 / 1464 / 96	1001 / 579 / 143	1099 / 767 / 125	1008 / 767 / 194	1038 / 935 / 156	1019 / 886 / 241	1161 / 1088 / 196	989 / 847 / 190	1210 / 1048 / 156			
70	2	1063 / 707 / 130	1184 / 921 / 112	1042 / 915 / 169	1114 / 1125 / 138	1085 / 1027 / 205	1336 / 1277 / 169	1128 / 988 / 163	1404 / 1239 / 136	1099 / 767 / 125	1230 / 993 / 108	1038 / 952 / 156	1100 / 1148 / 125	1161 / 1103 / 196	1418 / 1358 / 161	1210 / 1063 / 156	1415 / 1251 / 122	1099 / 767 / 125	1230 / 993 / 108	1038 / 952 / 156	1100 / 1148 / 125	1161 / 1103 / 196	1418 / 1358 / 161	1210 / 1063 / 156	1415 / 1251 / 122	1063 / 707 / 130	1184 / 921 / 112	1042 / 915 / 169	1114 / 1125 / 138	1085 / 1027 / 205	1336 / 1277 / 169	1128 / 988 / 163	1404 / 1239 / 136	1099 / 767 / 125	1230 / 993 / 108	1038 / 952 / 156	1100 / 1148 / 125	1161 / 1103 / 196	1418 / 1358 / 161	1210 / 1063 / 156	1415 / 1251 / 122	1099 / 767 / 125	1230 / 993 / 108	1038 / 952 / 156	1100 / 1148 / 125	1161 / 1103 / 196	1418 / 1358 / 161	1210 / 1063 / 156	1415 / 1251 / 122	
70	3	964 / 1085 / 99	1045 / 1337 / 81	1072 / 1026 / 144	1237 / 1276 / 119	1252 / 1178 / 178	1496 / 1418 / 143	1312 / 1139 / 142	1587 / 1387 / 115	992 / 1163 / 94	1103 / 1417 / 76	1111 / 1101 / 138	1311 / 1357 / 113	1332 / 1256 / 169	1399 / 1217 / 136	1673 / 1464 / 109	1003 / 514 / 159	1077 / 683 / 139	1000 / 683 / 215	1088 / 899 / 187	1053 / 847 / 289	1101 / 1013 / 229	916 / 781 / 218	1128 / 974 / 181	1210 / 1048 / 173																									

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																											
Wind Speed [mph]		95										100										105											
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45									
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
100	1	944 / 243 / 207	974 / 346 / 190	912 / 329 / 282	980 / 477 / 267	895 / 442 / 407	959 / 599 / 363	708 / 486 / 364	774 / 620 / 306	939 / 261 / 201	974 / 369 / 185	935 / 362 / 282	984 / 508 / 259	904 / 472 / 396	973 / 637 / 352	713 / 508 / 348	780 / 642 / 290	935 / 278 / 196	1004 / 404 / 185	933 / 385 / 274	987 / 539 / 251	912 / 501 / 385	986 / 673 / 341	735 / 542 / 340	808 / 681 / 282								
	2	974 / 346 / 190	1034 / 483 / 174	980 / 486 / 267	1024 / 654 / 236	959 / 608 / 363	1053 / 808 / 319	774 / 629 / 306	894 / 771 / 249	974 / 369 / 185	1040 / 513 / 169	984 / 517 / 259	1033 / 693 / 229	973 / 645 / 352	1074 / 854 / 308	780 / 652 / 290	942 / 816 / 240	1004 / 404 / 185	1046 / 543 / 163	987 / 548 / 251	1077 / 756 / 229	986 / 682 / 341	1093 / 898 / 297	808 / 691 / 282	989 / 859 / 232								
	3	1017 / 671 / 179	1030 / 862 / 152	1004 / 587 / 244	1104 / 806 / 221	1017 / 731 / 330	1134 / 957 / 286	850 / 719 / 265	1027 / 882 / 215	1021 / 713 / 174	1038 / 909 / 147	1044 / 643 / 244	1119 / 852 / 213	1035 / 774 / 319	1111 / 967 / 264	898 / 763 / 257	1077 / 928 / 207	1025 / 753 / 169	1045 / 955 / 141	1051 / 680 / 236	1131 / 896 / 206	1090 / 844 / 319	1130 / 1010 / 253	913 / 778 / 240	1125 / 971 / 199								
Wind Speed [mph]		110										115																					
100	1	957 / 303 / 196	1004 / 427 / 179	958 / 420 / 274	1021 / 586 / 251	946 / 545 / 385	1032 / 731 / 341	756 / 575 / 331	849 / 718 / 273	952 / 321 / 190	1004 / 449 / 174	956 / 443 / 267	1024 / 616 / 244	954 / 574 / 374	1045 / 767 / 330	757 / 592 / 315	861 / 731 / 257	1004 / 427 / 179	1086 / 590 / 163	1021 / 597 / 251	1086 / 794 / 221	1032 / 741 / 341	1110 / 939 / 286	849 / 729 / 273	1033 / 900 / 224	1004 / 449 / 174	1091 / 618 / 158	1024 / 627 / 244	1093 / 831 / 213	1045 / 777 / 330	1125 / 978 / 275	861 / 741 / 257	1075 / 938 / 215
	2	1004 / 427 / 179	1086 / 590 / 163	1021 / 597 / 251	1086 / 794 / 221	1032 / 741 / 341	1110 / 939 / 286	849 / 729 / 273	1033 / 900 / 224	1004 / 449 / 174	1091 / 618 / 158	1024 / 627 / 244	1093 / 831 / 213	1045 / 777 / 330	1125 / 978 / 275	861 / 741 / 257	1075 / 938 / 215	1028 / 792 / 163	1050 / 997 / 136	1058 / 716 / 229	1143 / 938 / 198	1107 / 885 / 308	1146 / 1049 / 242	954 / 816 / 232	1168 / 1010 / 191	1031 / 830 / 158	1053 / 1037 / 131	1064 / 750 / 221	1152 / 976 / 191	1123 / 925 / 297	1213 / 1135 / 242	994 / 852 / 224	1207 / 1046 / 182
	3	1028 / 792 / 163	1050 / 997 / 136	1058 / 716 / 229	1143 / 938 / 198	1107 / 885 / 308	1146 / 1049 / 242	954 / 816 / 232	1168 / 1010 / 191	1031 / 830 / 158	1053 / 1037 / 131	1064 / 750 / 221	1152 / 976 / 191	1123 / 925 / 297	1213 / 1135 / 242	994 / 852 / 224	1207 / 1046 / 182																
Wind Speed [mph]		120										130																					
100	1	975 / 347 / 190	1035 / 485 / 174	982 / 479 / 267	1026 / 645 / 236	961 / 602 / 363	1056 / 800 / 319	777 / 623 / 306	897 / 763 / 249	952 / 321 / 190	1004 / 449 / 174	956 / 443 / 267	1024 / 616 / 244	954 / 574 / 374	1045 / 767 / 330	757 / 592 / 315	861 / 731 / 257	1035 / 485 / 174	1095 / 645 / 152	1026 / 656 / 236	1139 / 897 / 213	1056 / 811 / 319	1137 / 1013 / 264	897 / 775 / 249	1113 / 973 / 207	1004 / 449 / 174	1091 / 618 / 158	1024 / 627 / 244	1093 / 831 / 213	1045 / 777 / 330	1125 / 978 / 275	861 / 741 / 257	1075 / 938 / 215
	2	1035 / 485 / 174	1095 / 645 / 152	1026 / 656 / 236	1139 / 897 / 213	1056 / 811 / 319	1137 / 1013 / 264	897 / 775 / 249	1113 / 973 / 207	1004 / 449 / 174	1091 / 618 / 158	1024 / 627 / 244	1093 / 831 / 213	1045 / 777 / 330	1125 / 978 / 275	861 / 741 / 257	1075 / 938 / 215	1032 / 865 / 152	1054 / 1073 / 125	1107 / 810 / 221	1159 / 1012 / 183	1137 / 961 / 286	1245 / 1170 / 231	1031 / 886 / 215	1242 / 1077 / 174	1031 / 830 / 158	1053 / 1037 / 131	1064 / 750 / 221	1152 / 976 / 191	1123 / 925 / 297	1213 / 1135 / 242	994 / 852 / 224	1207 / 1046 / 182
	3	1032 / 865 / 152	1054 / 1073 / 125	1107 / 810 / 221	1159 / 1012 / 183	1137 / 961 / 286	1245 / 1170 / 231	1031 / 886 / 215	1242 / 1077 / 174	1031 / 830 / 158	1053 / 1037 / 131	1064 / 750 / 221	1152 / 976 / 191	1123 / 925 / 297	1213 / 1135 / 242	994 / 852 / 224	1207 / 1046 / 182																

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof | 0-30ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
100	1	970 / 364 / 185	1034 / 507 / 169	980 / 502 / 259	1062 / 695 / 236	967 / 629 / 352	1066 / 832 / 308	795 / 653 / 298	931 / 795 / 240	989 / 409 / 179	1065 / 566 / 163	1004 / 562 / 251	1063 / 749 / 221	1009 / 702 / 341	1122 / 923 / 297	816 / 689 / 273	993 / 851 / 224	1008 / 453 / 174	1096 / 625 / 158	1028 / 622 / 244	1099 / 824 / 213	1051 / 774 / 330	1132 / 974 / 275	870 / 738 / 257	1043 / 898 / 207
	2	1034 / 507 / 169	1137 / 695 / 152	1062 / 707 / 236	1145 / 931 / 206	1066 / 843 / 308	1147 / 1045 / 253	931 / 806 / 240	1148 / 1006 / 199	1065 / 566 / 163	1184 / 771 / 147	1063 / 762 / 221	1151 / 992 / 191	1080 / 901 / 286	1157 / 1097 / 231	993 / 863 / 224	1205 / 1059 / 182	1096 / 625 / 158	1182 / 815 / 136	1099 / 839 / 213	1148 / 1040 / 175	1132 / 987 / 275	1248 / 1190 / 220	1043 / 911 / 207	1307 / 1152 / 174
	3	1032 / 898 / 147	1053 / 1104 / 120	1111 / 842 / 213	1163 / 1044 / 175	1148 / 995 / 275	1274 / 1199 / 220	1065 / 917 / 207	1334 / 1159 / 174	1027 / 957 / 136	1043 / 1154 / 109	1116 / 900 / 198	1163 / 1096 / 160	1163 / 1052 / 253	1387 / 1309 / 209	1171 / 1011 / 199	1384 / 1205 / 158	1059 / 1047 / 131	1078 / 1249 / 104	1159 / 986 / 191	1211 / 1189 / 153	1167 / 1095 / 231	1410 / 1333 / 187	1219 / 1056 / 182	1490 / 1300 / 149

Wind Speed [mph]		170								180																										
100	1	1027 / 498 / 169	1127 / 683 / 152	1053 / 683 / 236	1134 / 899 / 206	1055 / 818 / 308	1133 / 1013 / 253	916 / 781 / 240	1128 / 974 / 199	1046 / 543 / 163	1157 / 740 / 147	1077 / 743 / 229	1123 / 935 / 191	1093 / 886 / 297	1176 / 1088 / 242	989 / 847 / 232	1210 / 1048 / 191	1127 / 683 / 152	1223 / 885 / 131	1134 / 915 / 206	1188 / 1125 / 168	1133 / 1027 / 253	1336 / 1277 / 209	1128 / 988 / 199	1404 / 1239 / 166	1157 / 740 / 147	1261 / 952 / 125	1123 / 952 / 191	1168 / 1148 / 153	1176 / 1103 / 242	1418 / 1358 / 198	1210 / 1063 / 191	1415 / 1251 / 149			
	2	1042 / 1085 / 120	1109 / 1337 / 98	1150 / 1026 / 175	1255 / 1276 / 145	1252 / 1178 / 220	1496 / 1418 / 176	1312 / 1139 / 174	1587 / 1387 / 141	1068 / 1163 / 114	1136 / 1417 / 93	1186 / 1101 / 168	1311 / 1357 / 137	1332 / 1256 / 209	1399 / 1217 / 166	1673 / 1464 / 133																				
	3																																			

Wind Speed [mph]		190								200																										
100	1	1100 / 606 / 163	1185 / 796 / 141	1101 / 802 / 221	1152 / 1002 / 183	1129 / 952 / 286	1233 / 1158 / 231	1021 / 877 / 215	1230 / 1067 / 174	1119 / 651 / 158	1212 / 849 / 136	1124 / 859 / 213	1178 / 1065 / 175	1118 / 975 / 264	1299 / 1223 / 220	1086 / 935 / 207	1296 / 1127 / 166	1185 / 796 / 141	1297 / 1016 / 120	1152 / 1020 / 183	1197 / 1216 / 145	1233 / 1174 / 231	1490 / 1430 / 187	1230 / 1082 / 174	1487 / 1318 / 141	1212 / 849 / 136	1329 / 1076 / 114	1178 / 1084 / 175	1222 / 1278 / 137	1299 / 1240 / 220	1552 / 1492 / 176	1296 / 1143 / 166	1647 / 1461 / 141			
	2	1090 / 1235 / 109	1157 / 1487 / 87	1218 / 1173 / 160	1378 / 1429 / 130	1404 / 1327 / 198		1479 / 1289 / 158		1108 / 1301 / 104		1247 / 1239 / 153	1436 / 1491 / 122	1468 / 1389 / 187		1551 / 1354 / 149																				
	3																																			

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95										100										105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge							
		0	1	540/399/41	649/507/34	554/510/43	657/633/35	662/583/44	809/734/36	656/539/48	804/677/40	563/422/39	673/531/32	576/537/41	678/658/33	703/624/43	830/756/34	697/576/46	851/719/38	584/444/38	693/552/31	596/562/39	695/680/32	724/647/41	873/799/33	718/597/44	868/737/36				
5	1	540/399/41	649/507/34	554/510/50	657/633/41	662/583/52	809/734/43	656/539/53	804/677/44	563/422/39	673/531/32	576/537/48	678/658/39	703/624/51	830/756/41	697/576/52	851/719/43	584/444/38	693/552/31	596/562/46	695/680/36	724/647/48	873/799/40	718/597/49	868/737/40						
	10	1	541/399/49	649/507/40	554/510/64	657/633/52	662/583/67	809/734/55	656/539/64	804/677/53	563/422/47	673/531/39	576/537/62	678/658/50	703/624/65	830/756/52	697/576/62	851/719/51	584/444/45	693/552/37	596/562/59	695/680/47	724/647/62	873/799/50	718/597/59	868/737/48					
0	1	604/464/36	730/585/30	614/584/38	730/718/31	742/667/38	884/813/31	757/632/43	910/775/35	621/482/35	745/601/29	630/603/36	764/755/30	778/702/37	922/850/30	772/648/41	950/811/34	ASCE Group Zone													
	5	1	604/464/36	730/585/30	614/584/44	730/718/35	742/667/46	884/813/37	757/632/48	910/775/39	621/482/35	745/601/29	630/603/42	764/755/34	778/702/45	922/850/36	772/648/45	950/811/38	ASCE Group Zone												
5	1	604/464/36	730/585/30	614/584/44	730/718/35	742/667/46	884/813/37	757/632/48	910/775/39	621/482/35	745/601/29	630/603/42	764/755/34	778/702/45	922/850/36	772/648/45	950/811/38	ASCE Group Zone													
	10	1	604/464/43	730/585/36	614/584/56	730/718/46	742/667/58	884/813/47	757/632/57	910/775/47	621/482/41	745/601/34	630/603/54	764/755/44	778/702/57	922/850/46	772/648/54	950/811/45	ASCE Group Zone												
0	1	651/510/34	779/632/28	659/636/35	771/766/28	813/737/36	957/885/29	807/680/40	988/845/33	621/482/35	745/601/29	630/603/36	764/755/30	778/702/37	922/850/30	772/648/41	950/811/34	ASCE Group Zone													
	5	1	651/510/34	779/632/28	659/636/41	771/766/32	813/737/43	957/885/35	807/680/44	988/845/36	621/482/35	745/601/29	630/603/42	764/755/34	778/702/45	922/850/36	772/648/45	950/811/38	ASCE Group Zone												
0	1	651/510/40	779/632/33	659/636/52	771/766/42	813/737/55	957/885/44	807/680/53	988/845/44	621/482/41	745/601/34	630/603/54	764/755/44	778/702/57	922/850/46	772/648/54	950/811/45	ASCE Group Zone													
	5	1	651/510/40	779/632/33	659/636/52	771/766/42	813/737/55	957/885/44	807/680/53	988/845/44	621/482/41	745/601/34	630/603/54	764/755/44	778/702/57	922/850/46	772/648/54	950/811/45	ASCE Group Zone												

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

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h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																																											
Wind Speed [mph]		140										150										160																											
Panal Angle		0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45														
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge																
	0	1	665/524/32	811/662/27	670/650/33	801/799/27	820/747/34	989/917/28	841/711/38	1023/878/31	721/576/31	872/718/25	723/709/32	854/858/25	879/806/32	1045/973/26	904/768/36	1085/934/29	752/607/29	926/768/24	748/740/29	899/909/24	930/858/30	1137/1063/25	959/819/34	1133/979/27	811/662/27	988/825/22	801/813/27	950/982/22	989/929/28	1189/1131/23	1023/890/31	1243/1093/26	872/718/25	1050/882/21	854/874/25	1041/1083/21	1045/987/26	1298/1238/22	1085/948/29	1295/1142/23	926/768/24	1099/928/19	899/925/24	1079/1126/19	1137/1077/25	1327/1269/19	1133/994/27
2		811/662/27	988/825/22	801/813/27	950/982/22	989/929/28	1189/1131/23	1023/890/31	1243/1093/26	872/718/25	1050/882/21	854/874/25	1041/1083/21	1045/987/26	1298/1238/22	1085/948/29	1295/1142/23	926/768/24	1099/928/19	899/925/24	1079/1126/19	1137/1077/25	1327/1269/19	1133/994/27	1398/1235/22	787/987/20	935/1190/16	917/928/24	1101/1130/19	1160/1085/25	1354/1279/19	1156/1000/22	1426/1243/22	828/1045/18	1017/1300/15	968/985/22	1201/1237/18	1213/1139/23	1466/1387/18	1268/1099/26	1549/1352/21	898/1139/18	1033/1324/14	1053/1076/21	1228/1268/16	1312/1236/22	1568/1487/17	1309/1138/23	1565/1369/19
3		787/987/20	935/1190/16	917/928/24	1101/1130/19	1160/1085/25	1354/1279/19	1156/1000/22	1426/1243/22	828/1045/18	1017/1300/15	968/985/22	1201/1237/18	1213/1139/23	1466/1387/18	1268/1099/26	1549/1352/21	898/1139/18	1033/1324/14	1053/1076/21	1228/1268/16	1312/1236/22	1568/1487/17	1309/1138/23	1565/1369/19	665/524/32	811/662/27	670/650/39	801/799/31	820/747/41	989/917/33	841/711/43	1023/878/35	721/576/31	872/718/25	723/709/36	854/858/29	879/806/38	1045/973/31	904/768/40	1085/934/33	752/607/29	926/768/24	748/740/33	899/909/27	930/858/36	1137/1063/29	959/819/38	1133/979/30
5	1	665/524/32	811/662/27	670/650/39	801/799/31	820/747/41	989/917/33	841/711/43	1023/878/35	721/576/31	872/718/25	723/709/36	854/858/29	879/806/38	1045/973/31	904/768/40	1085/934/33	752/607/29	926/768/24	748/740/33	899/909/27	930/858/36	1137/1063/29	959/819/38	1133/979/30	811/662/27	988/825/22	801/813/31	950/982/25	989/929/33	1189/1131/27	1023/890/35	1243/1093/29	872/718/25	1050/882/21	854/874/29	1041/1083/31	1045/987/26	1298/1238/33	1085/948/26	1295/1142/26	926/768/24	1099/928/19	899/925/27	1079/1126/22	1137/1077/29	1327/1269/23	1133/994/30	1398/1235/25
	2	811/662/27	988/825/22	801/813/31	950/982/25	989/929/33	1189/1131/27	1023/890/35	1243/1093/29	872/718/25	1050/882/21	854/874/29	1041/1083/31	1045/987/26	1298/1238/33	1085/948/26	1295/1142/26	926/768/24	1099/928/19	899/925/27	1079/1126/22	1137/1077/29	1327/1269/23	1133/994/30	1398/1235/25	787/987/20	935/1190/16	917/928/27	1101/1130/22	1160/1085/29	1354/1279/23	1156/1000/25	1426/1243/25	828/1045/18	1017/1300/15	968/985/25	1201/1237/21	1213/1139/27	1466/1387/22	1268/1099/29	1549/1352/24	898/1139/18	1033/1324/19	1053/1076/27	1228/1268/22	1312/1236/29	1568/1487/23	1309/1138/30	1565/1369/25
	3	787/987/20	935/1190/16	917/928/27	1101/1130/22	1160/1085/29	1354/1279/23	1156/1000/25	1426/1243/25	828/1045/18	1017/1300/15	968/985/25	1201/1237/21	1213/1139/27	1466/1387/22	1268/1099/29	1549/1352/24	898/1139/18	1033/1324/19	1053/1076/27	1228/1268/22	1312/1236/29	1568/1487/23	1309/1138/30	1565/1369/25	665/524/39	811/662/32	670/650/50	801/799/40	820/747/52	989/917/42	841/711/51	1023/878/42	721/576/37	872/718/30	723/709/47	854/858/38	879/806/49	1045/973/39	904/768/48	1085/934/39	752/607/34	926/768/28	748/740/43	899/909/35	930/858/46	1137/1063/38	959/819/45	1133/979/36
10	1	665/524/39	811/662/32	670/650/50	801/799/40	820/747/52	989/917/42	841/711/51	1023/878/42	721/576/37	872/718/30	723/709/47	854/858/38	879/806/49	1045/973/39	904/768/48	1085/934/39	752/607/34	926/768/28	748/740/43	899/909/35	930/858/46	1137/1063/38	959/819/45	1133/979/36	811/662/32	988/825/26	801/813/40	950/982/32	989/929/42	1189/1131/34	1023/890/42	1243/1093/34	872/718/30	1050/882/25	854/874/38	1041/1083/31	1045/987/33	1298/1238/39	1085/948/31	1295/1142/31	926/768/28	1099/928/23	899/925/35	1079/1126/28	1137/1077/38	1327/1269/29	1133/994/36	1398/1235/30
	2	811/662/32	988/825/26	801/813/40	950/982/32	989/929/42	1189/1131/34	1023/890/42	1243/1093/34	872/718/30	1050/882/25	854/874/38	1041/1083/31	1045/987/33	1298/1238/39	1085/948/31	1295/1142/31	926/768/28	1099/928/23	899/925/35	1079/1126/28	1137/1077/38	1327/1269/29	1133/994/36	1398/1235/30	787/987/24	935/1190/19	917/928/35	1101/1130/28	1160/1085/38	1354/1279/29	1156/1000/30	1426/1243/30	828/1045/22	1017/1300/18	968/985/32	1201/1237/27	1213/1139/34	1466/1387/28	1268/1099/34	1549/1352/28	898/1139/21	1033/1324/16	1053/1076/31	1228/1268/24	1312/1236/33	1568/1487/26	1309/1138/31	1565/1369/25
	3	787/987/24	935/1190/19	917/928/35	1101/1130/28	1160/1085/38	1354/1279/29	1156/1000/30	1426/1243/30	828/1045/22	1017/1300/18	968/985/32	1201/1237/27	1213/1139/34	1466/1387/28	1268/1099/34	1549/1352/28	898/1139/21	1033/1324/16	1053/1076/31	1228/1268/24	1312/1236/33	1568/1487/26	1309/1138/31	1565/1369/25	798/650/27	972/811/22	814/811/28	973/988/23	972/901/28	1169/1097/23	1006/862/31	1222/1058/26	838/688/25	1009/846/21	850/853/26	1001/1021/21	1046/973/27	1246/1173/22	1084/932/30	1306/1134/25	1009/846/21	1270/1080/18	1001/1039/21	1231/1292/17	1246/1188/22	1489/1430/17	1306/1150/25	1579/1400/20

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
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Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	591 / 392 / 56	650 / 507 / 47	588 / 510 / 79	657 / 633 / 64	662 / 583 / 81	809 / 734 / 67	656 / 539 / 74	804 / 677 / 61	612 / 422 / 55	673 / 531 / 45	598 / 537 / 75	678 / 658 / 61	703 / 624 / 79	830 / 756 / 63	697 / 576 / 72	851 / 719 / 60	620 / 444 / 53	693 / 552 / 43	606 / 562 / 72	695 / 680 / 58	724 / 647 / 75	873 / 799 / 61	718 / 597 / 69	868 / 737 / 56
	2	650 / 507 / 47	776 / 629 / 38	657 / 644 / 64	768 / 777 / 51	786 / 722 / 65	953 / 893 / 53	804 / 687 / 61	984 / 854 / 51	673 / 531 / 45	820 / 670 / 37	678 / 670 / 61	810 / 823 / 49	830 / 767 / 63	1001 / 941 / 51	851 / 730 / 60	1035 / 901 / 49	693 / 552 / 43	838 / 688 / 35	695 / 692 / 58	821 / 838 / 46	873 / 810 / 61	1046 / 986 / 50	868 / 748 / 56	1084 / 946 / 47
	3	634 / 773 / 35	760 / 950 / 29	730 / 720 / 54	884 / 891 / 45	912 / 839 / 57	1122 / 1048 / 48	939 / 800 / 54	1119 / 965 / 43	647 / 794 / 33	796 / 999 / 28	771 / 765 / 53	928 / 939 / 43	961 / 887 / 55	1123 / 1051 / 44	956 / 818 / 51	1170 / 1012 / 42	678 / 837 / 32	830 / 1046 / 27	811 / 808 / 51	969 / 985 / 41	969 / 898 / 51	1165 / 1093 / 42	1002 / 859 / 49	1217 / 1055 / 40
	1	625 / 376 / 61	701 / 507 / 54	642 / 510 / 93	677 / 633 / 76	662 / 583 / 97	809 / 734 / 80	656 / 539 / 84	804 / 677 / 70	644 / 405 / 60	709 / 531 / 51	650 / 537 / 89	683 / 658 / 72	703 / 624 / 95	830 / 756 / 76	697 / 576 / 82	851 / 719 / 68	663 / 434 / 59	714 / 552 / 49	655 / 562 / 85	695 / 680 / 68	724 / 647 / 90	873 / 799 / 73	718 / 597 / 78	868 / 737 / 64
	2	701 / 507 / 54	776 / 629 / 44	677 / 644 / 76	768 / 777 / 60	786 / 722 / 78	953 / 893 / 64	804 / 687 / 70	984 / 854 / 58	709 / 531 / 51	820 / 670 / 43	683 / 670 / 72	810 / 823 / 58	830 / 767 / 76	1001 / 941 / 62	851 / 730 / 68	1035 / 901 / 56	714 / 552 / 49	838 / 688 / 40	695 / 692 / 68	821 / 838 / 55	873 / 810 / 73	1046 / 986 / 59	868 / 748 / 64	1084 / 946 / 54
	3	635 / 773 / 40	760 / 950 / 33	730 / 720 / 64	884 / 891 / 53	912 / 839 / 69	1122 / 1048 / 57	939 / 800 / 62	1119 / 965 / 50	647 / 794 / 38	796 / 999 / 31	771 / 765 / 62	928 / 939 / 51	961 / 887 / 66	1123 / 1051 / 52	956 / 818 / 58	1170 / 1012 / 47	678 / 837 / 36	830 / 1046 / 30	811 / 808 / 60	969 / 985 / 49	969 / 898 / 62	1165 / 1093 / 50	1002 / 859 / 56	1217 / 1055 / 45
	1	625 / 376 / 61	701 / 507 / 54	642 / 510 / 93	677 / 633 / 76	662 / 583 / 116	809 / 734 / 96	656 / 539 / 98	804 / 677 / 81	644 / 405 / 60	709 / 531 / 51	650 / 537 / 89	683 / 658 / 72	703 / 624 / 113	830 / 756 / 91	697 / 576 / 95	851 / 719 / 79	663 / 434 / 59	714 / 552 / 49	655 / 562 / 85	695 / 680 / 68	724 / 647 / 108	873 / 799 / 88	718 / 597 / 90	868 / 737 / 74
	2	701 / 507 / 54	776 / 629 / 44	677 / 644 / 76	768 / 777 / 60	786 / 722 / 94	953 / 893 / 77	804 / 687 / 81	984 / 854 / 67	709 / 531 / 51	820 / 670 / 43	683 / 670 / 72	810 / 823 / 58	830 / 767 / 91	1001 / 941 / 74	851 / 730 / 79	1035 / 901 / 64	714 / 552 / 49	838 / 688 / 40	695 / 692 / 68	821 / 838 / 55	873 / 810 / 88	1046 / 986 / 71	868 / 748 / 74	1084 / 946 / 62
	3	635 / 773 / 40	760 / 950 / 33	730 / 720 / 64	884 / 891 / 53	912 / 839 / 82	1122 / 1048 / 68	939 / 800 / 72	1119 / 965 / 57	647 / 794 / 38	796 / 999 / 31	771 / 765 / 62	928 / 939 / 51	961 / 887 / 79	1123 / 1051 / 63	956 / 818 / 67	1170 / 1012 / 55	678 / 837 / 36	830 / 1046 / 30	811 / 808 / 60	969 / 985 / 49	969 / 898 / 74	1165 / 1093 / 60	1002 / 859 / 64	1217 / 1055 / 53
15	1	627 / 464 / 50	730 / 585 / 42	614 / 584 / 69	730 / 718 / 56	742 / 667 / 71	884 / 813 / 57	757 / 632 / 67	910 / 775 / 54	633 / 482 / 48	745 / 601 / 40	630 / 603 / 66	764 / 755 / 54	778 / 702 / 69	922 / 850 / 55	772 / 648 / 63	950 / 811 / 52	ASCE Group Zone							
	2	730 / 585 / 42	878 / 725 / 34	730 / 731 / 56	857 / 878 / 45	884 / 824 / 57	1088 / 1028 / 48	910 / 786 / 54	1084 / 948 / 43	745 / 601 / 40	917 / 760 / 33	741 / 746 / 53	890 / 916 / 43	922 / 861 / 55	1126 / 1067 / 46	950 / 823 / 52	1171 / 1026 / 43	ASCE Group Zone							
	3	708 / 878 / 31	862 / 1089 / 25	821 / 822 / 48	1008 / 1027 / 40	1009 / 938 / 50	1263 / 1187 / 42	1046 / 899 / 47	1260 / 1093 / 38	737 / 917 / 30	890 / 1127 / 24	855 / 860 / 46	1043 / 1065 / 38	1046 / 975 / 48	1300 / 1224 / 40	1086 / 936 / 45	1297 / 1127 / 36	ASCE Group Zone							
	1	667 / 454 / 56	737 / 585 / 48	659 / 584 / 82	730 / 718 / 66	742 / 667 / 85	884 / 813 / 69	757 / 632 / 76	910 / 775 / 62	685 / 482 / 55	745 / 601 / 45	661 / 603 / 78	764 / 755 / 64	778 / 702 / 83	922 / 850 / 66	772 / 648 / 72	950 / 811 / 60	ASCE Group Zone							
	2	737 / 585 / 48	878 / 725 / 39	730 / 731 / 66	857 / 878 / 53	884 / 824 / 69	1088 / 1028 / 57	910 / 786 / 62	1084 / 948 / 50	745 / 601 / 45	917 / 760 / 38	741 / 746 / 62	890 / 916 / 51	922 / 861 / 66	1126 / 1067 / 55	950 / 823 / 60	1171 / 1026 / 50	ASCE Group Zone							
	3	708 / 878 / 35	862 / 1089 / 29	821 / 822 / 57	1008 / 1027 / 47	1009 / 938 / 59	1263 / 1187 / 50	1046 / 899 / 54	1260 / 1093 / 43	737 / 917 / 34	890 / 1127 / 28	855 / 860 / 55	1043 / 1065 / 45	1046 / 975 / 57	1300 / 1224 / 48	1086 / 936 / 52	1297 / 1127 / 41	ASCE Group Zone							
	1	667 / 454 / 56	737 / 585 / 48	659 / 584 / 82	730 / 718 / 66	742 / 667 / 102	884 / 813 / 82	757 / 632 / 88	910 / 775 / 72	685 / 482 / 55	745 / 601 / 45	661 / 603 / 78	764 / 755 / 64	778 / 702 / 99	922 / 850 / 79	772 / 648 / 83	950 / 811 / 69	ASCE Group Zone							
	2	737 / 585 / 48	878 / 725 / 39	730 / 731 / 66	857 / 878 / 53	884 / 824 / 82	1088 / 1028 / 68	910 / 786 / 72	1084 / 948 / 57	745 / 601 / 45	917 / 760 / 38	741 / 746 / 62	890 / 916 / 51	922 / 861 / 79	1126 / 1067 / 65	950 / 823 / 69	1171 / 1026 / 57	ASCE Group Zone							
	3	708 / 878 / 35	862 / 1089 / 29	821 / 822 / 57	1008 / 1027 / 47	1009 / 938 / 71	1263 / 1187 / 60	1046 / 899 / 62	1260 / 1093 / 50	737 / 917 / 34	890 / 1127 / 28	855 / 860 / 55	1043 / 1065 / 45	1046 / 975 / 68	1300 / 1224 / 57	1086 / 936 / 60	1297 / 1127 / 48	ASCE Group Zone							
15	1	652 / 510 / 47	779 / 632 / 38	659 / 636 / 64	771 / 766 / 51	813 / 737 / 67	957 / 885 / 53	807 / 680 / 61	988 / 845 / 51	633 / 482 / 48	745 / 601 / 40	630 / 603 / 66	764 / 755 / 54	778 / 702 / 69	922 / 850 / 55	772 / 648 / 63	950 / 811 / 52	ASCE Group Zone							
	2	779 / 632 / 38	954 / 794 / 32	771 / 780 / 51	921 / 951 / 41	957 / 897 / 53	1160 / 1101 / 44	988 / 858 / 51	1209 / 1062 / 42	745 / 601 / 40	917 / 760 / 33	741 / 746 / 53	890 / 916 / 43	922 / 861 / 55	1126 / 1067 / 46	950 / 823 / 52	1171 / 1026 / 43	ASCE Group Zone							
	3	763 / 954 / 29	914 / 1161 / 23	887 / 895 / 45	1074 / 1100 / 36	1080 / 1008 / 46	1330 / 1254 / 38	1123 / 969 / 43	1397 / 1216 / 36	737 / 917 / 30	890 / 1127 / 24	855 / 860 / 46	1043 / 1065 / 38	1046 / 975 / 48	1300 / 1224 / 40	1086 / 936 / 45	1297 / 1127 / 36	ASCE Group Zone							
	1	703 / 510 / 54	779 / 632 / 44	679 / 636 / 76	771 / 766 / 60	813 / 737 / 80	957 / 885 / 64	807 / 680 / 70	988 / 845 / 58	685 / 482 / 55	745 / 601 / 45	661 / 603 / 78	764 / 755 / 64	778 / 702 / 83	922 / 850 / 66	772 / 648 / 72	950 / 811 / 60	ASCE Group Zone							
	2	779 / 632 / 44	954 / 794 / 36	771 / 780 / 60	921 / 951 / 49	957 / 897 / 64	1160 / 1101 / 52	988 / 858 / 58	1209 / 1062 / 47	745 / 601 / 45	917 / 760 / 38	741 / 746 / 62	890 / 916 / 51	922 / 861 / 66	1126 / 1067 / 55	950 / 823 / 60	1171 / 1026 / 50	ASCE Group Zone							
	3	763 / 954 / 33	914 / 1161 / 27	887 / 895 / 53	1074 / 1100 / 43	1080 / 1008 / 55	1330 / 1254 / 45	1123 / 969 / 50	1397 / 1216 / 41	737 / 917 / 34	890 / 1127 / 28	855 / 860 / 55	1043 / 1065 / 45	1046 / 975 / 57	1300 / 1224 / 48	1086 / 936 / 52	1297 / 1127 / 41	ASCE Group Zone							
	1	703 / 510 / 54	779 / 632 / 44	679 / 636 / 76	771 / 766 / 60	813 / 737 / 96	957 / 885 / 77	807 / 680 / 81	988 / 845 / 67	685 / 482 / 55	745 / 601 / 45	661 / 603 / 78	764 / 755 / 64	778 / 702 / 99	922 / 850 / 79	772 / 648 / 83	950 / 811 / 69	ASCE Group Zone							
	2	779 / 632 / 44	954 / 794 / 36	771 / 780 / 60	921 / 951 / 49	957 / 897 / 77	1160 / 1101 / 63	988 / 858 / 67	1209 / 1062 / 55	745 / 601 / 45	917 / 760 / 38	741 / 746 / 62	890 / 916 / 51	922 / 861 / 79	1126 / 1067 / 65	950 / 823 / 69	1171 / 1026 / 57	ASCE Group Zone							
	3	763 / 954 / 33	914 / 1161 / 27	887 / 895 / 53	1074 / 1100 / 43	1080 / 1008 / 65	1330 / 1254 / 54	1123 / 969 / 57	1397 / 1216 / 48	737 / 917 / 34	890 / 1127 / 28	855 / 860 / 55	1043 / 1065 / 45	1046 / 975 / 68	1300 / 1224 / 57	1086 / 936 / 60	1297 / 1127 / 48	ASCE Group Zone							
20	1	652 / 510 / 47	779 / 632 / 38	659 / 636 / 64	771 / 766 / 51	813 / 737 / 67	957 / 885 / 53	807 / 680 / 61	988 / 845 / 51	633 / 482 / 48	745 / 601 / 40	630 / 603 / 66	764 / 755 / 54	778 / 702 / 69	922 / 850 / 55	772 / 648 / 63	950 / 811 / 52	ASCE Group Zone							
	2	779 / 632 / 38	954 / 794 / 32	771 / 780 / 51	921 / 951 / 41	957 / 897 / 53	1160 / 1101 / 44	988 / 858 / 51	1209 / 1062 / 42	745 / 601 / 40	917 / 760 / 33	741 / 746 / 53	890 / 916 / 43	922 / 861 / 55	1126 / 1067 / 46	950 / 823 / 52	1171 / 1026 / 43	ASCE Group Zone							
	3	763 / 954 / 29	914 / 1161 / 23	887 / 895 / 45	1074 / 1100 / 36	1080 / 1008 / 46	1330 / 1254 / 38	1123 / 969 / 43	1397 / 1216 / 36	737 / 917 / 30	890 / 1127 / 24	855 / 860 / 46	1043 / 1065 / 38	1046 / 975 / 48	1300 / 1224 / 40	1086 / 936 / 45	1297 / 1127 / 36	ASCE Group Zone							
	1	703 / 510 / 54	779 / 632 / 44	679 / 636 / 76	771 / 766 / 60	813 / 737 / 80	957 / 885 / 64	807 / 680 / 70	988 / 845 / 58	685 / 482 / 55	745 / 601 / 45	661 / 603 / 78	764 / 755 / 64	778 / 702 / 83	922 / 850 / 66	772 / 648 / 72	950 / 811 / 60	ASCE Group Zone							
	2	779 / 632 / 44	954 / 794 / 36	771 / 780 / 60	921 / 951 / 49	957 / 897 / 64	1160 / 1101 / 52	988 / 858 / 58	1209 / 1062 / 47	745 / 601 / 45	917 / 760 / 38	741 / 746 / 62	890 / 916 / 51	922 / 861 / 66	1126 / 1067 / 55	950 / 823 / 60	1171 / 1026 / 50	ASCE Group Zone							
	3	763 / 954 / 33	914 / 1161 / 27	887 / 895 / 53	1074 / 1100 / 43	1080 / 1008 / 55	1330 / 1254 / 45	1123 / 969 / 50	13																

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																																		
Wind Speed [mph]		140																150																160																		
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45						
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge				
		15	1	665/524/45	811/662/37	670/650/61	801/799/49	820/747/63	989/917/51	841/711/60	1023/878/49	721/576/43	872/718/35	723/709/58	854/858/46	879/806/59	1045/973/48	904/768/56	1085/934/45	752/607/40	926/768/33	748/740/53	899/909/43	930/858/55	1137/1063/46	959/819/52	1133/979/42	811/662/37	988/825/31	801/813/49	950/982/40	989/929/51	1189/1131/42	1023/890/49	1243/1093/40	872/718/35	1050/882/29	854/874/46	1041/1083/38	1045/987/48	1298/1238/40	1085/948/45	1295/1142/36	926/768/33	1099/928/27	899/925/43	1079/1126/35	1137/1077/46	1327/1269/36	1133/994/42	1398/1235/35	
15	2	811/662/37	988/825/31	801/813/49	950/982/40	989/929/51	1189/1131/42	1023/890/49	1243/1093/40	872/718/35	1050/882/29	854/874/46	1041/1083/38	1045/987/48	1298/1238/40	1085/948/45	1295/1142/36	926/768/33	1099/928/27	899/925/43	1079/1126/35	1137/1077/46	1327/1269/36	1133/994/42	1398/1235/35	787/987/28	935/1190/22	917/928/43	1101/1130/35	1160/1085/46	1354/1279/36	1156/1000/42	1426/1243/35	828/1045/25	1017/1300/21	968/985/40	1201/1237/33	1213/1139/42	1466/1387/34	1268/1099/40	1549/1352/33	898/1139/24	1033/1324/19	1053/1076/38	1228/1268/30	1312/1236/40	1568/1487/32	1309/1138/36	1565/1369/29			
15	3	787/987/28	935/1190/22	917/928/43	1101/1130/35	1160/1085/46	1354/1279/36	1156/1000/42	1426/1243/35	828/1045/25	1017/1300/21	968/985/40	1201/1237/33	1213/1139/42	1466/1387/34	1268/1099/40	1549/1352/33	898/1139/24	1033/1324/19	1053/1076/38	1228/1268/30	1312/1236/40	1568/1487/32	1309/1138/36	1565/1369/29	703/524/51	811/662/43	677/650/72	801/799/58	820/747/76	989/917/62	841/711/68	1023/878/56	735/576/49	872/718/40	723/709/68	854/858/55	879/806/71	1045/973/57	904/768/64	1085/934/52	752/607/45	926/768/38	748/740/62	899/909/51	930/858/66	1137/1063/55	959/819/60	1133/979/47			
20	1	703/524/51	811/662/43	677/650/72	801/799/58	820/747/76	989/917/62	841/711/68	1023/878/56	735/576/49	872/718/40	723/709/68	854/858/55	879/806/71	1045/973/57	904/768/64	1085/934/52	752/607/45	926/768/38	748/740/62	899/909/51	930/858/66	1137/1063/55	959/819/60	1133/979/47	811/662/43	988/825/35	801/813/58	950/982/47	989/929/62	1189/1131/50	1023/890/56	1243/1093/45	872/718/40	1050/882/33	854/874/55	1041/1083/45	1045/987/57	1298/1238/48	1085/948/52	1295/1142/41	926/768/38	1099/928/30	899/925/51	1079/1126/41	1137/1077/55	1327/1269/43	1133/994/47	1398/1235/39			
20	2	811/662/43	988/825/35	801/813/58	950/982/47	989/929/62	1189/1131/50	1023/890/56	1243/1093/45	872/718/40	1050/882/33	854/874/55	1041/1083/45	1045/987/57	1298/1238/48	1085/948/52	1295/1142/41	926/768/38	1099/928/30	899/925/51	1079/1126/41	1137/1077/55	1327/1269/43	1133/994/47	1398/1235/39	787/987/31	935/1190/25	917/928/51	1101/1130/41	1160/1085/55	1354/1279/43	1156/1000/47	1426/1243/39	828/1045/29	1017/1300/24	968/985/47	1201/1237/39	1213/1139/50	1466/1387/40	1268/1099/45	1549/1352/37	898/1139/28	1033/1324/22	1053/1076/45	1228/1268/35	1312/1236/48	1568/1487/38	1309/1138/41	1565/1369/33			
20	3	787/987/31	935/1190/25	917/928/51	1101/1130/41	1160/1085/55	1354/1279/43	1156/1000/47	1426/1243/39	828/1045/29	1017/1300/24	968/985/47	1201/1237/39	1213/1139/50	1466/1387/40	1268/1099/45	1549/1352/37	898/1139/28	1033/1324/22	1053/1076/45	1228/1268/35	1312/1236/48	1568/1487/38	1309/1138/41	1565/1369/33	703/524/51	811/662/43	677/650/72	801/799/58	820/747/76	989/917/62	841/711/68	1023/878/56	735/576/49	872/718/40	723/709/68	854/858/55	879/806/71	1045/973/57	904/768/64	1085/934/52	752/607/45	926/768/38	748/740/62	899/909/51	930/858/66	1137/1063/55	959/819/60	1133/979/47			
25	1	703/524/51	811/662/43	677/650/72	801/799/58	820/747/76	989/917/62	841/711/68	1023/878/56	735/576/49	872/718/40	723/709/68	854/858/55	879/806/71	1045/973/57	904/768/64	1085/934/52	752/607/45	926/768/38	748/740/62	899/909/51	930/858/66	1137/1063/55	959/819/60	1133/979/47	811/662/43	988/825/35	801/813/58	950/982/47	989/929/62	1189/1131/50	1023/890/56	1243/1093/45	872/718/40	1050/882/33	854/874/55	1041/1083/45	1045/987/57	1298/1238/48	1085/948/52	1295/1142/41	926/768/38	1099/928/30	899/925/51	1079/1126/41	1137/1077/55	1327/1269/43	1133/994/47	1398/1235/39			
25	2	811/662/43	988/825/35	801/813/58	950/982/47	989/929/62	1189/1131/50	1023/890/56	1243/1093/45	872/718/40	1050/882/33	854/874/55	1041/1083/45	1045/987/57	1298/1238/48	1085/948/52	1295/1142/41	926/768/38	1099/928/30	899/925/51	1079/1126/41	1137/1077/55	1327/1269/43	1133/994/47	1398/1235/39	787/987/31	935/1190/25	917/928/51	1101/1130/41	1160/1085/55	1354/1279/43	1156/1000/47	1426/1243/39	828/1045/29	1017/1300/24	968/985/47	1201/1237/39	1213/1139/50	1466/1387/40	1268/1099/45	1549/1352/37	898/1139/28	1033/1324/22	1053/1076/45	1228/1268/35	1312/1236/48	1568/1487/38	1309/1138/41	1565/1369/33			
25	3	787/987/31	935/1190/25	917/928/51	1101/1130/41	1160/1085/55	1354/1279/43	1156/1000/47	1426/1243/39	828/1045/29	1017/1300/24	968/985/47	1201/1237/39	1213/1139/50	1466/1387/40	1268/1099/45	1549/1352/37	898/1139/28	1033/1324/22	1053/1076/45	1228/1268/35	1312/1236/48	1568/1487/38	1309/1138/41	1565/1369/33	798/650/37	972/811/31	814/811/51	973/988/41	972/901/51	1169/1097/42	1006/862/49	1222/1058/40	838/688/35	1009/846/29	850/853/48	1001/1021/38	1046/973/50	1246/1173/40	1084/932/47	1306/1134/38	1009/846/29	1270/1080/24	1001/1039/38	1231/1292/31	1246/1188/40	1489/1430/32	1306/1150/38	1579/1400/31			
15	1	798/650/37	972/811/31	814/811/51	973/988/41	972/901/51	1169/1097/42	1006/862/49	1222/1058/40	838/688/35	1009/846/29	850/853/48	1001/1021/38	1046/973/50	1246/1173/40	1084/932/47	1306/1134/38	1009/846/29	1270/1080/24	1001/1039/38	1231/1292/31	1246/1188/40	1489/1430/32	1306/1150/38	1579/1400/31	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33
15	2	972/811/31	1186/1006/25	973/1006/41	1158/1212/33	1169/1112/42	1413/1354/34	1222/1074/40	1493/1322/33	1009/846/29	1270/1080/24	1001/1039/38	1231/1292/31	1246/1188/40	1489/1430/32	1306/1150/38	1579/1400/31	1009/846/29	1270/1080/24	1001/1039/38	1231/1292/31	1246/1188/40	1489/1430/32	1306/1150/38	1579/1400/31	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33
15	3	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33	919/1170/22	1095/1408/18	1083/1111/35	1307/1353/28	1331/1257/36	1402/1221/35	977/1247/21	1154/1187/33	1377/1429/27	1408/1332/34	1488/1298/33							
20	1	798/650/43	972/811/35	814/811/60	973/988/49	972/901/62	1169/1097/50	1006/862/56	1222/1058/45	838/688/40	1009/846/33	850/853/57	1001/1021/45	1046/973/59	1246/1173/48	1084/932/54	1306/1134/43	838/688/40	1009/846/33	850/853/57	1001/1021/45	1046/973/59	1246/1173/48	1084/932/54	1306/1134/43	798/650/43	972/811/35	814/811/60	973/988/49	972/901/62	1169/1097/50	1006/862/56	1222/1058/45	838/688/40	1009/846/33	850/853/57	1001/1021/45	1046/973/59	1246/1173/48	1084/932/54	1306/1134/43	1009/846/33	1270/1080/28	1001/1039/45	1231/1292/37	1246/1188/48	1489/1430/38	1306/1150/43	1579/1400/35			
20	2	972/811/35	1186/1006/29	973/1006/49	1158/1212/39	1169/1112/50	1413/1354/40	1222/1074/45	1493/1322/37	1009/846/33	1270/1080/28	1001/1039/45	1231/1292/37	1246/1188/48	1489/1430/38	1306/1150/43	1579/1400/35	1009/846/33	1270/1080/28	1001/1039/45	1231/1292/37	1246/1188/48	1489/1430/38	1306/1150/43	1579/1400/35	919/1170/25	1095/1408/20	1083/1111/41	1307/1353/33	1331/1257/43	1402/1221/39	977/1247/24	1154/1187/39	1377/1429/31	1408/1332/																	

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
30	1	627 / 376 / 61	702 / 507 / 54	644 / 510 / 94	678 / 633 / 76	662 / 583 / 135	809 / 734 / 111	656 / 539 / 92	804 / 677 / 92	646 / 405 / 60	710 / 531 / 52	651 / 537 / 90	685 / 658 / 72	703 / 624 / 132	830 / 756 / 106	697 / 576 / 109	851 / 719 / 90	665 / 434 / 59	716 / 552 / 49	657 / 562 / 86	695 / 680 / 68	724 / 647 / 125	873 / 799 / 102	718 / 597 / 103	868 / 737 / 84
	2	702 / 507 / 54	776 / 629 / 44	678 / 644 / 76	768 / 777 / 61	786 / 722 / 109	953 / 893 / 89	804 / 687 / 92	984 / 854 / 76	710 / 531 / 52	820 / 670 / 43	685 / 670 / 72	810 / 823 / 59	830 / 767 / 106	1001 / 941 / 86	851 / 730 / 90	1035 / 901 / 74	716 / 552 / 49	838 / 688 / 40	695 / 692 / 68	821 / 838 / 55	873 / 810 / 102	1046 / 986 / 83	868 / 748 / 84	1084 / 946 / 71
	3	636 / 773 / 40	760 / 950 / 33	730 / 720 / 65	884 / 891 / 53	912 / 839 / 96	1122 / 1048 / 79	939 / 800 / 82	1119 / 965 / 65	647 / 794 / 38	796 / 999 / 32	771 / 765 / 63	928 / 939 / 51	961 / 887 / 92	1123 / 1051 / 73	956 / 818 / 76	1170 / 1012 / 63	678 / 837 / 37	830 / 1046 / 30	811 / 808 / 61	969 / 985 / 49	969 / 898 / 86	1165 / 1093 / 69	1002 / 859 / 74	1217 / 1055 / 60
35	1	653 / 369 / 65	719 / 496 / 57	666 / 500 / 101	708 / 633 / 84	679 / 583 / 154	809 / 734 / 128	656 / 539 / 125	804 / 677 / 104	670 / 397 / 64	743 / 531 / 56	686 / 537 / 99	713 / 658 / 80	706 / 624 / 151	830 / 756 / 121	697 / 576 / 122	851 / 719 / 101	687 / 425 / 63	747 / 552 / 53	690 / 562 / 95	715 / 680 / 76	724 / 647 / 143	873 / 799 / 117	718 / 597 / 116	868 / 737 / 95
	2	719 / 496 / 57	785 / 629 / 48	708 / 644 / 84	768 / 777 / 67	786 / 722 / 124	953 / 893 / 102	804 / 687 / 104	984 / 854 / 86	743 / 531 / 56	820 / 670 / 46	713 / 670 / 80	810 / 823 / 65	830 / 767 / 121	1001 / 941 / 98	851 / 730 / 101	1035 / 901 / 83	747 / 552 / 53	838 / 688 / 44	715 / 692 / 76	821 / 838 / 61	873 / 810 / 117	1046 / 986 / 94	868 / 748 / 95	1084 / 946 / 80
	3	661 / 773 / 44	760 / 950 / 36	730 / 720 / 71	884 / 891 / 58	912 / 839 / 109	1122 / 1048 / 91	939 / 800 / 92	1119 / 965 / 74	659 / 794 / 41	796 / 999 / 34	771 / 765 / 69	928 / 939 / 56	961 / 887 / 106	1123 / 1051 / 83	956 / 818 / 86	1170 / 1012 / 70	678 / 837 / 40	830 / 1046 / 33	811 / 808 / 67	969 / 985 / 54	969 / 898 / 98	1165 / 1093 / 79	1002 / 859 / 83	1217 / 1055 / 67
40	1	676 / 361 / 69	735 / 484 / 60	687 / 489 / 111	737 / 633 / 94	704 / 583 / 174	809 / 734 / 144	656 / 539 / 139	804 / 677 / 115	692 / 388 / 67	756 / 518 / 59	705 / 525 / 109	740 / 658 / 90	730 / 624 / 169	830 / 756 / 136	697 / 576 / 136	851 / 719 / 112	708 / 416 / 66	778 / 552 / 57	707 / 549 / 104	741 / 680 / 85	736 / 647 / 161	873 / 799 / 131	718 / 597 / 129	868 / 737 / 105
	2	735 / 484 / 60	813 / 629 / 51	737 / 644 / 94	771 / 777 / 75	786 / 722 / 140	953 / 893 / 114	804 / 687 / 115	984 / 854 / 95	756 / 518 / 59	840 / 670 / 50	740 / 670 / 90	810 / 823 / 73	830 / 767 / 136	1001 / 941 / 110	851 / 730 / 112	1035 / 901 / 92	778 / 552 / 57	840 / 688 / 47	741 / 692 / 85	821 / 838 / 68	873 / 810 / 131	1046 / 986 / 106	868 / 748 / 105	1084 / 946 / 88
	3	687 / 773 / 47	760 / 950 / 38	755 / 720 / 80	884 / 891 / 66	912 / 839 / 123	1122 / 1048 / 102	939 / 800 / 102	1119 / 965 / 82	683 / 794 / 44	796 / 999 / 37	779 / 765 / 78	928 / 939 / 63	961 / 887 / 119	1123 / 1051 / 93	956 / 818 / 95	1170 / 1012 / 78	700 / 837 / 43	830 / 1046 / 35	811 / 808 / 75	969 / 985 / 61	969 / 898 / 110	1165 / 1093 / 89	1002 / 859 / 92	1217 / 1055 / 75
Wind Speed [mph]		110								115															
30	1	669 / 454 / 57	738 / 585 / 48	661 / 584 / 82	730 / 718 / 66	742 / 667 / 119	884 / 813 / 96	757 / 632 / 101	910 / 775 / 82	687 / 482 / 55	745 / 601 / 45	663 / 603 / 78	764 / 755 / 65	778 / 702 / 115	922 / 850 / 92	772 / 648 / 95	950 / 811 / 79	ASCE Group Zone							
	2	738 / 585 / 48	878 / 725 / 39	730 / 731 / 66	857 / 878 / 53	884 / 824 / 96	1088 / 1028 / 79	910 / 786 / 82	1084 / 948 / 65	745 / 601 / 45	917 / 760 / 38	741 / 746 / 63	890 / 916 / 51	922 / 861 / 92	1126 / 1067 / 76	950 / 823 / 79	1171 / 1026 / 65	Panal Angle							
	3	708 / 878 / 35	862 / 1089 / 29	821 / 822 / 57	1008 / 1027 / 47	1009 / 938 / 83	1263 / 1187 / 69	1046 / 899 / 71	1260 / 1093 / 57	737 / 917 / 34	890 / 1127 / 28	855 / 860 / 55	1043 / 1065 / 45	1046 / 975 / 79	1300 / 1224 / 66	1086 / 936 / 68	1297 / 1127 / 55	Mono Slope							
35	1	689 / 443 / 60	768 / 585 / 52	693 / 584 / 91	735 / 718 / 73	742 / 667 / 136	884 / 813 / 109	757 / 632 / 113	910 / 775 / 92	705 / 471 / 59	768 / 601 / 49	693 / 603 / 86	764 / 755 / 71	778 / 702 / 132	922 / 850 / 106	772 / 648 / 107	950 / 811 / 89	0 - 7.5							
	2	768 / 585 / 52	878 / 725 / 42	735 / 731 / 73	857 / 878 / 58	884 / 824 / 109	1088 / 1028 / 91	910 / 786 / 92	1084 / 948 / 74	768 / 601 / 49	917 / 760 / 41	741 / 746 / 69	890 / 916 / 56	922 / 861 / 106	1126 / 1067 / 87	950 / 823 / 89	1171 / 1026 / 74	7.5 - 15							
	3	708 / 878 / 38	862 / 1089 / 32	821 / 822 / 63	1008 / 1027 / 52	1009 / 938 / 94	1263 / 1187 / 79	1046 / 899 / 80	1260 / 1093 / 64	737 / 917 / 37	890 / 1127 / 30	855 / 860 / 61	1043 / 1065 / 50	1046 / 975 / 91	1300 / 1224 / 76	1086 / 936 / 77	1297 / 1127 / 61	15 - 30							
40	1	724 / 443 / 64	799 / 585 / 56	724 / 584 / 102	761 / 718 / 82	742 / 667 / 152	884 / 813 / 123	757 / 632 / 126	910 / 775 / 102	722 / 460 / 62	797 / 601 / 53	723 / 603 / 97	780 / 755 / 80	778 / 702 / 148	922 / 850 / 119	772 / 648 / 119	950 / 811 / 98	30 - 45							
	2	799 / 585 / 56	878 / 725 / 46	761 / 731 / 82	857 / 878 / 66	884 / 824 / 123	1088 / 1028 / 102	910 / 786 / 102	1084 / 948 / 82	797 / 601 / 53	917 / 760 / 44	756 / 746 / 78	890 / 916 / 63	922 / 861 / 119	1126 / 1067 / 98	950 / 823 / 98	1171 / 1026 / 82	1 = 1							
	3	716 / 878 / 41	862 / 1089 / 34	821 / 822 / 70	1008 / 1027 / 58	1009 / 938 / 106	1263 / 1187 / 89	1046 / 899 / 88	1260 / 1093 / 71	737 / 917 / 40	890 / 1127 / 32	855 / 860 / 68	1043 / 1065 / 56	1046 / 975 / 102	1300 / 1224 / 85	1086 / 936 / 85	1297 / 1127 / 68	2 = 2							
Wind Speed [mph]		120								130															
30	1	704 / 510 / 54	779 / 632 / 44	680 / 636 / 76	771 / 766 / 61	813 / 737 / 112	957 / 885 / 89	807 / 680 / 92	988 / 845 / 76	687 / 482 / 55	745 / 601 / 45	663 / 603 / 78	764 / 755 / 65	778 / 702 / 115	922 / 850 / 92	772 / 648 / 95	950 / 811 / 79	2 = 2							
	2	779 / 632 / 44	954 / 794 / 37	771 / 780 / 61	921 / 951 / 49	957 / 897 / 89	1160 / 1101 / 73	988 / 858 / 76	1209 / 1062 / 63	745 / 601 / 45	917 / 760 / 38	741 / 746 / 63	890 / 916 / 51	922 / 861 / 92	1126 / 1067 / 76	950 / 823 / 79	1171 / 1026 / 65	3 = 3							
	3	763 / 954 / 33	914 / 1161 / 27	887 / 895 / 53	1074 / 1100 / 43	1080 / 1008 / 76	1330 / 1254 / 63	1123 / 969 / 65	1397 / 1216 / 55	737 / 917 / 34	890 / 1127 / 28	855 / 860 / 55	1043 / 1065 / 45	1046 / 975 / 79	1300 / 1224 / 66	1086 / 936 / 68	1297 / 1127 / 55	1 = 1							
35	1	721 / 498 / 57	787 / 632 / 48	710 / 636 / 84	771 / 766 / 67	813 / 737 / 128	957 / 885 / 102	807 / 680 / 104	988 / 845 / 86	705 / 471 / 59	768 / 601 / 49	693 / 603 / 86	764 / 755 / 71	778 / 702 / 132	922 / 850 / 106	772 / 648 / 107	950 / 811 / 89	2 = 2							
	2	787 / 632 / 48	954 / 794 / 40	771 / 780 / 67	921 / 951 / 54	957 / 897 / 102	1160 / 1101 / 83	988 / 858 / 86	1209 / 1062 / 70	768 / 601 / 49	917 / 760 / 41	741 / 746 / 69	890 / 916 / 56	922 / 861 / 106	1126 / 1067 / 87	950 / 823 / 89	1171 / 1026 / 74	3 = 3							
	3	763 / 954 / 36	914 / 1161 / 29	887 / 895 / 58	1074 / 1100 / 48	1080 / 1008 / 87	1330 / 1254 / 72	1123 / 969 / 74	1397 / 1216 / 61	737 / 917 / 37	890 / 1127 / 30	855 / 860 / 61	1043 / 1065 / 50	1046 / 975 / 91	1300 / 1224 / 76	1086 / 936 / 77	1297 / 1127 / 61	1 = 1							
40	1	737 / 486 / 60	815 / 632 / 51	739 / 636 / 94	773 / 766 / 75	813 / 737 / 144	957 / 885 / 114	807 / 680 / 115	988 / 845 / 95	722 / 460 / 62	797 / 601 / 53	723 / 603 / 97	780 / 755 / 80	778 / 702 / 148	922 / 850 / 119	772 / 648 / 119	950 / 811 / 98	2 = 2							
	2	815 / 632 / 51	954 / 794 / 43	773 / 780 / 75	921 / 951 / 61	957 / 897 / 114	1160 / 1101 / 93	988 / 858 / 95	1209 / 1062 / 78	797 / 601 / 53	917 / 760 / 44	756 / 746 / 78	890 / 916 / 63	922 / 861 / 119	1126 / 1067 / 98	950 / 823 / 98	1171 / 1026 / 82	3 = 3							
	3	763 / 954 / 38	914 / 1161 / 31	887 / 895 / 66	1074 / 1100 / 53	1080 / 1008 / 98	1330 / 1254 / 81	1123 / 969 / 82	1397 / 1216 / 68	737 / 917 / 40	890 / 1127 / 32	855 / 860 / 68	1043 / 1065 / 56	1046 / 975 / 102	1300 / 1224 / 85	1086 / 936 / 85	1297 / 1127 / 68	1 = 1							

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																															
Wind Speed [mph]		140																150																160															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		30	1	704 / 524 / 52	811 / 662 / 43	679 / 650 / 72	801 / 799 / 59	820 / 747 / 106	989 / 917 / 86	841 / 711 / 90	1023 / 878 / 74	736 / 576 / 49	872 / 718 / 40	723 / 709 / 68	854 / 858 / 55	879 / 806 / 99	1045 / 973 / 79	904 / 768 / 84	1085 / 934 / 68	752 / 607 / 45	926 / 768 / 38	748 / 740 / 63	899 / 909 / 51	930 / 858 / 92	1137 / 1063 / 76	959 / 819 / 79	1133 / 979 / 63	828 / 1045 / 40	1017 / 1300 / 33	968 / 985 / 55	1201 / 1237 / 45	1213 / 1139 / 79	1466 / 1387 / 66	1268 / 1099 / 68	1549 / 1352 / 55	898 / 1139 / 38	1033 / 1324 / 30	1053 / 1076 / 51	1228 / 1268 / 41	1312 / 1236 / 76	1568 / 1487 / 60	1309 / 1138 / 63	1565 / 1369 / 52						
30	2	811 / 662 / 43	988 / 825 / 35	801 / 813 / 59	950 / 982 / 47	989 / 929 / 86	1189 / 1131 / 69	1023 / 890 / 74	1243 / 1093 / 60	872 / 718 / 40	1050 / 882 / 33	854 / 874 / 55	1041 / 1083 / 45	1045 / 987 / 79	1298 / 1238 / 66	1085 / 948 / 68	1295 / 1142 / 55	926 / 768 / 38	1099 / 928 / 30	899 / 925 / 51	1079 / 1126 / 41	1137 / 1077 / 76	1327 / 1269 / 60	1133 / 994 / 63	1398 / 1235 / 52	828 / 1045 / 40	1017 / 1300 / 33	968 / 985 / 55	1201 / 1237 / 45	1213 / 1139 / 79	1466 / 1387 / 66	1268 / 1099 / 68	1549 / 1352 / 55	898 / 1139 / 38	1033 / 1324 / 30	1053 / 1076 / 51	1228 / 1268 / 41	1312 / 1236 / 76	1568 / 1487 / 60	1309 / 1138 / 63	1565 / 1369 / 52								
30	3	787 / 987 / 32	935 / 1190 / 25	917 / 928 / 51	1101 / 1130 / 41	1160 / 1085 / 76	1354 / 1279 / 60	1156 / 1000 / 63	1426 / 1243 / 52	828 / 1045 / 29	1017 / 1300 / 24	968 / 985 / 47	1201 / 1237 / 39	1213 / 1139 / 69	1466 / 1387 / 56	1268 / 1099 / 60	1549 / 1352 / 49	898 / 1139 / 28	1033 / 1324 / 22	1053 / 1076 / 45	1228 / 1268 / 35	1312 / 1236 / 66	1568 / 1487 / 53	1309 / 1138 / 55	1565 / 1369 / 44	767 / 576 / 29	872 / 718 / 24	735 / 709 / 47	854 / 858 / 39	879 / 806 / 69	1045 / 973 / 56	904 / 768 / 60	1085 / 934 / 49	773 / 607 / 28	926 / 768 / 22	748 / 740 / 45	899 / 909 / 35	930 / 858 / 66	1137 / 1063 / 53	959 / 819 / 55	1133 / 979 / 44								
35	1	737 / 524 / 56	811 / 662 / 46	707 / 650 / 80	801 / 799 / 65	820 / 747 / 121	989 / 917 / 98	841 / 711 / 101	1023 / 878 / 83	767 / 576 / 53	872 / 718 / 44	735 / 709 / 76	854 / 858 / 61	879 / 806 / 113	1045 / 973 / 91	904 / 768 / 95	1085 / 934 / 77	773 / 607 / 49	926 / 768 / 41	748 / 740 / 69	899 / 909 / 56	930 / 858 / 106	1137 / 1063 / 87	959 / 819 / 89	1133 / 979 / 70	872 / 718 / 44	1050 / 882 / 36	854 / 874 / 61	1041 / 1083 / 50	1045 / 987 / 76	1298 / 1238 / 77	1085 / 948 / 61	1295 / 1142 / 61	926 / 768 / 41	1099 / 928 / 33	899 / 925 / 56	1079 / 1126 / 46	1137 / 1077 / 87	1327 / 1269 / 68	1133 / 994 / 70	1398 / 1235 / 58								
35	2	811 / 662 / 46	988 / 825 / 38	801 / 813 / 65	950 / 982 / 52	989 / 929 / 98	1189 / 1131 / 79	1023 / 890 / 83	1243 / 1093 / 67	872 / 718 / 44	1050 / 882 / 36	854 / 874 / 61	1041 / 1083 / 50	1045 / 987 / 76	1298 / 1238 / 77	1085 / 948 / 61	1295 / 1142 / 61	926 / 768 / 41	1099 / 928 / 33	899 / 925 / 56	1079 / 1126 / 46	1137 / 1077 / 87	1327 / 1269 / 68	1133 / 994 / 70	1398 / 1235 / 58	828 / 1045 / 44	1017 / 1300 / 36	968 / 985 / 61	1201 / 1237 / 50	1213 / 1139 / 91	1466 / 1387 / 76	1268 / 1099 / 77	1549 / 1352 / 61	898 / 1139 / 41	1033 / 1324 / 33	1053 / 1076 / 56	1228 / 1268 / 46	1312 / 1236 / 87	1568 / 1487 / 70	1309 / 1138 / 70	1565 / 1369 / 58								
35	3	787 / 987 / 34	935 / 1190 / 27	917 / 928 / 56	1101 / 1130 / 46	1160 / 1085 / 87	1354 / 1279 / 68	1156 / 1000 / 70	1426 / 1243 / 58	828 / 1045 / 32	1017 / 1300 / 26	968 / 985 / 52	1201 / 1237 / 43	1213 / 1139 / 79	1466 / 1387 / 64	1268 / 1099 / 67	1549 / 1352 / 55	898 / 1139 / 30	1033 / 1324 / 23	1053 / 1076 / 50	1228 / 1268 / 39	1312 / 1236 / 76	1568 / 1487 / 61	1309 / 1138 / 61	1565 / 1369 / 49	787 / 987 / 34	935 / 1190 / 27	917 / 928 / 56	1101 / 1130 / 46	1160 / 1085 / 87	1354 / 1279 / 68	1156 / 1000 / 70	1426 / 1243 / 58	828 / 1045 / 32	1017 / 1300 / 26	968 / 985 / 52	1201 / 1237 / 43	1213 / 1139 / 79	1466 / 1387 / 64	1268 / 1099 / 67	1549 / 1352 / 55	898 / 1139 / 30	1033 / 1324 / 23	1053 / 1076 / 50	1228 / 1268 / 39	1312 / 1236 / 76	1568 / 1487 / 61	1309 / 1138 / 61	1565 / 1369 / 49
40	1	751 / 511 / 59	833 / 662 / 50	735 / 650 / 90	801 / 799 / 73	820 / 747 / 136	989 / 917 / 110	841 / 711 / 112	1023 / 878 / 92	778 / 561 / 56	872 / 718 / 47	762 / 709 / 85	854 / 858 / 68	879 / 806 / 127	1045 / 973 / 102	904 / 768 / 105	1085 / 934 / 85	802 / 607 / 53	926 / 768 / 44	762 / 740 / 78	899 / 909 / 63	930 / 858 / 119	1137 / 1063 / 98	959 / 819 / 98	1133 / 979 / 78	872 / 718 / 56	1050 / 882 / 47	854 / 874 / 85	1041 / 1083 / 68	1045 / 987 / 127	1298 / 1238 / 102	1085 / 948 / 105	1295 / 1142 / 85	926 / 768 / 53	1099 / 928 / 44	899 / 925 / 78	1079 / 1126 / 63	1137 / 1077 / 119	1327 / 1269 / 98	1133 / 994 / 98	1398 / 1235 / 78								
40	2	833 / 662 / 50	988 / 825 / 41	801 / 813 / 73	950 / 982 / 58	989 / 929 / 110	1189 / 1131 / 89	1023 / 890 / 92	1243 / 1093 / 75	872 / 718 / 47	1050 / 882 / 38	854 / 874 / 68	1041 / 1083 / 56	1045 / 987 / 102	1298 / 1238 / 85	1085 / 948 / 85	1295 / 1142 / 68	926 / 768 / 44	1099 / 928 / 35	899 / 925 / 63	1079 / 1126 / 51	1137 / 1077 / 98	1327 / 1269 / 76	1133 / 994 / 78	1398 / 1235 / 65	828 / 1045 / 47	1017 / 1300 / 38	968 / 985 / 68	1201 / 1237 / 56	1213 / 1139 / 102	1466 / 1387 / 85	1268 / 1099 / 85	1549 / 1352 / 68	898 / 1139 / 44	1033 / 1324 / 35	1053 / 1076 / 63	1228 / 1268 / 51	1312 / 1236 / 98	1568 / 1487 / 76	1309 / 1138 / 78	1565 / 1369 / 65								
40	3	787 / 987 / 37	935 / 1190 / 30	917 / 928 / 63	1101 / 1130 / 51	1160 / 1085 / 98	1354 / 1279 / 76	1156 / 1000 / 78	1426 / 1243 / 65	828 / 1045 / 34	1017 / 1300 / 28	968 / 985 / 58	1201 / 1237 / 49	1213 / 1139 / 89	1466 / 1387 / 72	1268 / 1099 / 75	1549 / 1352 / 61	898 / 1139 / 32	1033 / 1324 / 25	1053 / 1076 / 56	1228 / 1268 / 44	1312 / 1236 / 85	1568 / 1487 / 68	1309 / 1138 / 68	1565 / 1369 / 55	751 / 511 / 59	833 / 662 / 50	735 / 650 / 90	801 / 799 / 73	820 / 747 / 136	989 / 917 / 110	841 / 711 / 112	1023 / 878 / 92	778 / 561 / 56	872 / 718 / 47	762 / 709 / 85	854 / 858 / 68	879 / 806 / 127	1045 / 973 / 102	904 / 768 / 105	1085 / 934 / 85	802 / 607 / 53	926 / 768 / 44	762 / 740 / 78	899 / 909 / 63	930 / 858 / 119	1137 / 1063 / 98	959 / 819 / 98	1133 / 979 / 78
Wind Speed [mph]		170																180																															
30	1	798 / 650 / 43	972 / 811 / 35	814 / 811 / 61	973 / 988 / 49	972 / 901 / 86	1169 / 1097 / 69	1006 / 862 / 74	1222 / 1058 / 60	838 / 688 / 40	1009 / 846 / 33	850 / 853 / 57	1001 / 1021 / 45	1046 / 973 / 83	1246 / 1173 / 66	1084 / 932 / 71	1306 / 1134 / 57	1009 / 846 / 33	1270 / 1080 / 28	1001 / 1039 / 45	1231 / 1292 / 37	1246 / 1188 / 66	1489 / 1430 / 53	1306 / 1150 / 57	1579 / 1400 / 46	977 / 1247 / 24	1154 / 1187 / 39	1377 / 1429 / 32	1408 / 1332 / 56	1488 / 1298 / 49	838 / 688 / 40	1009 / 846 / 33	850 / 853 / 57	1001 / 1021 / 45	1046 / 973 / 83	1246 / 1173 / 66	1084 / 932 / 71	1306 / 1134 / 57											
30	2	972 / 811 / 35	1186 / 1006 / 29	973 / 1006 / 49	1158 / 1212 / 39	1169 / 1112 / 69	1413 / 1354 / 56	1222 / 1074 / 60	1493 / 1322 / 49	1009 / 846 / 33	1270 / 1080 / 28	1001 / 1039 / 45	1231 / 1292 / 37	1246 / 1188 / 66	1489 / 1430 / 53	1306 / 1150 / 57	1579 / 1400 / 46	1009 / 846 / 33	1270 / 1080 / 28	1001 / 1039 / 45	1231 / 1292 / 37	1246 / 1188 / 66	1489 / 1430 / 53	1306 / 1150 / 57	1579 / 1400 / 46	977 / 1247 / 24	1154 / 1187 / 39	1377 / 1429 / 32	1408 / 1332 / 56	1488 / 1298 / 49	1009 / 846 / 33	1270 / 1080 / 28	1001 / 1039 / 45	1231 / 1292 / 37	1246 / 1188 / 66	1489 / 1430 / 53	1306 / 1150 / 57	1579 / 1400 / 46											
30	3	919 / 1170 / 25	1095 / 1408 / 20	1083 / 1111 / 41	1307 / 1353 / 33	1331 / 1257 / 60	1402 / 1221 / 52	977 / 1247 / 24	1154 / 1187 / 39	1377 / 1429 / 32	1408 / 1332 / 56	1488 / 1298 / 49	919 / 1170 / 25	1095 / 1408 / 20	1083 / 1111 / 41	1307 / 1353 / 33	1331 / 1257 / 60	1402 / 1221 / 52	977 / 1247 / 24	1154 / 1187 / 39	1377 / 1429 / 32	1408 / 1332 / 56	1488 / 1298 / 49	919 / 1170 / 25	1095 / 1408 / 20	1083 / 1111 / 41	1307 / 1353 / 33	1331 / 1257 / 60	1402 / 1221 / 52	977 / 1247 / 24	1154 / 1187 / 39	1377 / 1429 / 32	1408 / 1332 / 56	1488 / 1298 / 49	919 / 1170 / 25	1095 / 1408 / 20	1083 / 1111 / 41	1307 / 1353 / 33	1331 / 1257 / 60	1402 / 1221 / 52	977 / 1247 / 24	1154 / 1187 / 39	1377 / 1429 / 32	1408 / 1332 / 56	1488 / 1298 / 49				
35	1	798 / 650 / 46	972 / 811 / 38	814 / 811 / 67	973 / 988 / 54	972 / 901 / 98	1169 / 1097 / 79	1006 / 862 / 83	1222 / 1058 / 67	838 / 688 / 44	1009 / 846 / 36	850 / 853 / 63	1001 / 1021 / 50	1046 / 973 / 94	1246 / 1173 / 76	1084 / 932 / 80	1306 / 1134 / 64	1009 / 846 / 36	1270 / 1080 / 30	1001 / 1039 / 50	1231 / 1292 / 41	1246 / 1188 / 76	1489 / 1430 / 61	1306 / 1150 / 64	1579 / 1400 / 52	977 / 1247 / 26	1154 / 1187 / 43	1377 / 1429 / 35	1408 / 1332 / 64	1488 / 1298 / 55	838 / 688 / 44	1009 / 846 / 36	850 / 853 / 63	1001 / 1021 / 50	1046 / 973 / 94	1246 / 1173 / 76	1084 / 932 / 80	1306 / 1134 / 64											
35	2	972 / 811 / 38	1186 / 1006 / 32	973 / 1006 / 54	1158 / 1212 / 43	1169 / 1112 / 79	1413 / 1354 / 64	1222 / 1074 / 67	1493 / 1322 / 55	1009 / 846 / 36	1270 / 1080 / 30	1001 / 1039 / 50	1231 / 1292 / 41	1246 / 1188 / 76	1489 / 1430 / 61	1306 / 1150 / 64	1579 / 1400 / 52	1009 / 846 / 36	1270 / 1080 / 30	1001 / 1039 / 50	1231 / 1292 / 41	1246 / 1188 / 76	1489 / 1430 / 61	1306 / 1150 / 64	1579 / 1400 / 52	977 / 1247 / 26	1154 / 1187 / 43	1377 / 1429 / 35	1408 / 1332 / 64	1488 / 1298 / 55	1009 / 846 / 36	1270 / 1080 / 30	1001 / 1039 / 50	1231 / 1292 / 41	1246 / 1188 / 76	1489 / 1430 / 61	1306 / 1150 / 64	1579 / 1400 / 52											
35	3	919 / 1170 / 27	1095 / 1408 / 22	1083 / 1111 / 46	1307 / 1353 / 37	1331 / 1257 / 68	1402 / 1221 / 58	977 / 1247 / 26	1154 / 1187 / 43	1377 / 1429 / 35	1408 / 1332 / 64	1488 / 1298 / 55	919 / 1170 / 27	1095 / 1408 / 22	1083 / 1111 / 46	1307 / 1353 / 37	1331 / 1257 / 68	14																															

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																									
Wind Speed [mph]		95										100										105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45							
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge							
		1	699 / 353 / 117	768 / 484 / 105	706 / 479 / 157	767 / 633 / 136	729 / 583 / 198	809 / 734 / 164	656 / 539 / 153	804 / 677 / 127	713 / 380 / 115	788 / 518 / 102	723 / 514 / 154	768 / 658 / 129	754 / 624 / 193	830 / 756 / 154	697 / 576 / 149	851 / 719 / 123	727 / 407 / 112	788 / 538 / 97	739 / 549 / 150	767 / 680 / 122	759 / 647 / 183	873 / 799 / 150	718 / 597 / 142	868 / 737 / 116					
45	2	768 / 484 / 105	841 / 629 / 89	767 / 644 / 136	794 / 777 / 108	786 / 722 / 159	953 / 893 / 130	804 / 687 / 127	984 / 854 / 105	788 / 518 / 102	867 / 670 / 87	768 / 670 / 129	819 / 823 / 105	830 / 767 / 154	1001 / 941 / 126	851 / 730 / 123	1035 / 901 / 101	788 / 538 / 97	865 / 688 / 82	767 / 692 / 122	821 / 838 / 98	873 / 810 / 150	1046 / 986 / 121	868 / 748 / 116	1084 / 946 / 97						
	3	712 / 773 / 82	762 / 950 / 67	780 / 720 / 115	884 / 891 / 94	912 / 839 / 140	1122 / 1048 / 116	939 / 800 / 112	1119 / 965 / 90	707 / 794 / 77	796 / 999 / 64	804 / 765 / 112	928 / 939 / 91	961 / 887 / 135	1123 / 1051 / 106	956 / 818 / 105	1170 / 1012 / 86	723 / 837 / 74	830 / 1046 / 61	826 / 808 / 108	969 / 985 / 87	969 / 898 / 126	1165 / 1093 / 102	1002 / 859 / 101	1217 / 1055 / 82						
	1	719 / 346 / 124	781 / 472 / 111	723 / 468 / 167	796 / 633 / 148	754 / 583 / 216	821 / 734 / 179	656 / 539 / 167	804 / 677 / 138	732 / 372 / 122	800 / 505 / 108	739 / 502 / 163	796 / 658 / 141	759 / 608 / 205	830 / 756 / 168	697 / 576 / 163	851 / 719 / 134	745 / 398 / 119	818 / 538 / 105	754 / 536 / 159	794 / 680 / 133	782 / 647 / 200	873 / 799 / 163	718 / 597 / 155	868 / 737 / 126						
50	2	781 / 472 / 111	869 / 629 / 97	796 / 644 / 148	818 / 777 / 118	796 / 722 / 174	953 / 893 / 142	804 / 687 / 138	984 / 854 / 114	800 / 505 / 108	894 / 670 / 94	796 / 670 / 141	841 / 823 / 114	830 / 767 / 168	1001 / 941 / 137	851 / 730 / 134	1035 / 901 / 110	818 / 538 / 105	891 / 688 / 89	794 / 692 / 133	834 / 838 / 106	873 / 810 / 163	1046 / 986 / 132	868 / 748 / 126	1084 / 946 / 106						
	3	738 / 773 / 89	783 / 950 / 72	805 / 720 / 125	884 / 891 / 103	912 / 839 / 153	1122 / 1048 / 126	939 / 800 / 122	1119 / 965 / 98	731 / 794 / 83	802 / 999 / 69	828 / 765 / 122	928 / 939 / 99	961 / 887 / 147	1123 / 1051 / 116	956 / 818 / 114	1170 / 1012 / 94	746 / 837 / 80	830 / 1046 / 67	850 / 808 / 118	969 / 985 / 95	969 / 898 / 137	1165 / 1093 / 111	1002 / 859 / 110	1217 / 1055 / 90						
	1	756 / 330 / 137	823 / 460 / 125	772 / 457 / 190	833 / 617 / 168	784 / 569 / 245	862 / 734 / 208	656 / 539 / 194	804 / 677 / 161	766 / 355 / 134	840 / 492 / 121	785 / 490 / 185	852 / 658 / 163	806 / 608 / 239	862 / 756 / 196	697 / 576 / 190	851 / 719 / 157	776 / 379 / 131	856 / 524 / 118	798 / 523 / 181	847 / 680 / 154	806 / 630 / 227	887 / 799 / 190	718 / 597 / 180	868 / 737 / 147						
60	2	823 / 460 / 125	898 / 611 / 109	833 / 628 / 168	864 / 777 / 137	837 / 722 / 202	953 / 893 / 166	804 / 687 / 161	984 / 854 / 133	840 / 492 / 121	920 / 650 / 105	852 / 670 / 163	886 / 823 / 132	862 / 767 / 196	1001 / 941 / 159	851 / 730 / 157	1035 / 901 / 128	856 / 524 / 118	942 / 688 / 102	847 / 692 / 154	876 / 838 / 124	887 / 810 / 190	1046 / 986 / 153	868 / 748 / 147	1084 / 946 / 123						
	3	789 / 773 / 102	824 / 950 / 83	855 / 720 / 146	914 / 891 / 119	912 / 839 / 178	1122 / 1048 / 147	939 / 800 / 142	1119 / 965 / 114	779 / 794 / 96	842 / 999 / 80	876 / 765 / 141	938 / 939 / 115	961 / 887 / 172	1123 / 1051 / 135	956 / 818 / 133	1170 / 1012 / 109	793 / 837 / 93	858 / 1046 / 77	897 / 808 / 137	969 / 985 / 110	969 / 898 / 159	1165 / 1093 / 129	1002 / 859 / 128	1217 / 1055 / 105						
Wind Speed [mph]		110										115																			
45	1	742 / 433 / 110	807 / 570 / 94	756 / 584 / 147	787 / 718 / 119	761 / 667 / 174	884 / 813 / 140	757 / 632 / 138	910 / 775 / 112	756 / 460 / 107	825 / 601 / 92	753 / 603 / 140	805 / 755 / 115	782 / 702 / 169	922 / 850 / 135	772 / 648 / 131	950 / 811 / 108														
	2	807 / 570 / 94	888 / 725 / 79	787 / 731 / 119	857 / 878 / 94	884 / 824 / 140	1088 / 1028 / 116	910 / 786 / 112	1084 / 948 / 90	825 / 601 / 92	917 / 760 / 77	780 / 746 / 112	890 / 916 / 91	922 / 861 / 135	1126 / 1067 / 111	950 / 823 / 108	1171 / 1026 / 90														
	3	738 / 778 / 72	862 / 1089 / 59	821 / 822 / 101	1008 / 1027 / 84	1009 / 938 / 121	1263 / 1187 / 102	1046 / 899 / 97	1260 / 1093 / 79	752 / 917 / 69	890 / 1127 / 56	855 / 860 / 98	1043 / 1065 / 81	1046 / 975 / 116	1300 / 1224 / 97	1086 / 936 / 93	1297 / 1127 / 75														
50	1	758 / 423 / 116	836 / 570 / 102	769 / 570 / 156	812 / 718 / 129	783 / 667 / 189	884 / 813 / 153	757 / 632 / 150	910 / 775 / 122	770 / 449 / 113	854 / 601 / 100	784 / 603 / 152	830 / 755 / 125	803 / 702 / 184	922 / 850 / 147	772 / 648 / 142	950 / 811 / 118														
	2	836 / 570 / 102	913 / 725 / 86	812 / 731 / 129	857 / 878 / 103	884 / 824 / 153	1088 / 1028 / 126	910 / 786 / 122	1084 / 948 / 98	854 / 601 / 100	934 / 760 / 83	805 / 746 / 122	890 / 916 / 99	922 / 861 / 147	1126 / 1067 / 121	950 / 823 / 118	1171 / 1026 / 98														
	3	761 / 878 / 78	862 / 1089 / 64	842 / 822 / 110	1008 / 1027 / 91	1009 / 938 / 132	1263 / 1187 / 111	1046 / 899 / 106	1260 / 1093 / 86	774 / 917 / 75	890 / 1127 / 61	859 / 860 / 106	1043 / 1065 / 88	1046 / 975 / 126	1300 / 1224 / 105	1086 / 936 / 102	1297 / 1127 / 82														
60	1	805 / 413 / 131	871 / 554 / 115	811 / 556 / 176	864 / 718 / 150	826 / 667 / 221	884 / 813 / 178	757 / 632 / 142	910 / 775 / 142	815 / 438 / 128	886 / 585 / 112	823 / 588 / 172	880 / 755 / 146	846 / 702 / 214	922 / 850 / 172	772 / 648 / 166	950 / 811 / 138														
	2	871 / 554 / 115	962 / 725 / 99	864 / 731 / 150	894 / 878 / 119	884 / 824 / 178	1088 / 1028 / 147	910 / 786 / 142	1084 / 948 / 114	886 / 585 / 112	981 / 760 / 96	853 / 746 / 141	910 / 916 / 115	922 / 861 / 172	1126 / 1067 / 141	950 / 823 / 138	1171 / 1026 / 114														
	3	805 / 878 / 90	871 / 1089 / 74	885 / 822 / 128	1008 / 1027 / 106	1009 / 938 / 153	1263 / 1187 / 129	1046 / 899 / 123	1260 / 1093 / 100	817 / 917 / 86	890 / 1127 / 70	902 / 860 / 124	1043 / 1065 / 102	1046 / 975 / 147	1300 / 1224 / 123	1086 / 936 / 119	1297 / 1127 / 95														
Wind Speed [mph]		120										130																			
45	1	769 / 486 / 105	843 / 632 / 89	769 / 636 / 136	797 / 766 / 108	813 / 737 / 164	957 / 885 / 130	807 / 680 / 127	988 / 845 / 105	756 / 460 / 107	825 / 601 / 92	753 / 603 / 140	805 / 755 / 115	782 / 702 / 169	922 / 850 / 135	772 / 648 / 131	950 / 811 / 108														
	2	843 / 632 / 89	954 / 794 / 74	797 / 780 / 108	921 / 951 / 87	957 / 897 / 130	1160 / 1101 / 106	988 / 858 / 105	1209 / 1062 / 86	825 / 601 / 92	917 / 760 / 77	780 / 746 / 112	890 / 916 / 91	922 / 861 / 135	1126 / 1067 / 111	950 / 823 / 108	1171 / 1026 / 90														
	3	765 / 954 / 67	914 / 1161 / 54	887 / 895 / 94	1074 / 1100 / 77	1080 / 1008 / 111	1330 / 1254 / 92	1123 / 969 / 90	1397 / 1216 / 75	752 / 917 / 69	890 / 1127 / 56	855 / 860 / 98	1043 / 1065 / 81	1046 / 975 / 116	1300 / 1224 / 97	1086 / 936 / 93	1297 / 1127 / 75														
50	1	782 / 474 / 111	871 / 632 / 97	798 / 636 / 148	820 / 766 / 118	823 / 737 / 179	957 / 885 / 142	807 / 680 / 138	988 / 845 / 114	770 / 449 / 113	854 / 601 / 100	784 / 603 / 152	830 / 755 / 125	803 / 702 / 184	922 / 850 / 147	772 / 648 / 142	950 / 811 / 118														
	2	871 / 632 / 97	954 / 794 / 80	820 / 780 / 118	921 / 951 / 95	957 / 897 / 142	1160 / 1101 / 116	988 / 858 / 114	1209 / 1062 / 94	854 / 601 / 100	934 / 760 / 83	805 / 746 / 122	890 / 916 / 99	922 / 861 / 147	1126 / 1067 / 121	950 / 823 / 118	1171 / 1026 / 98														
	3	785 / 954 / 72	914 / 1161 / 58	887 / 895 / 103	1074 / 1100 / 84	1080 / 1008 / 121	1330 / 1254 / 100	1123 / 969 / 98	1397 / 1216 / 82	774 / 917 / 75	890 / 1127 / 61	859 / 860 / 106	1043 / 1065 / 88	1046 / 975 / 126	1300 / 1224 / 105	1086 / 936 / 102	1297 / 1127 / 82														
60	1	825 / 462 / 125	900 / 614 / 109	835 / 619 / 168	867 / 766 / 137	864 / 737 / 208	957 / 885 / 166	807 / 680 / 161	988 / 845 / 133	815 / 438 / 128	886 / 585 / 112	823 / 588 / 172	880 / 755 / 146	846 / 702 / 214	922 / 850 / 172	772 / 648 / 166	950 / 811 / 138														
	2	900 / 614 / 109	999 / 794 / 93	867 / 780 / 137	924 / 951 / 110	957 / 897 / 166	1160 / 1101 / 135	988 / 858 / 133	1209 / 1062 / 109	886 / 585 / 112	981 / 760 / 96	853 / 746 / 141	910 / 916 / 115	922 / 861 / 172	1126 / 1067 / 141	950 / 823 / 138	1171 / 1026 / 114														
	3	827 / 954 / 83	914 / 1161 / 67	917 / 895 / 119	1074 / 1100 / 97	1080 / 1008 / 141	1330 / 1254 / 117	1123 / 969 / 114	1397 / 1216 / 95	817 / 917 / 86	890 / 1127 / 70	902 / 860 / 124	1043 / 1065 / 102	1046 / 975 / 147	1300 / 1224 / 123	1086 / 936 / 119	1297 / 1127 / 95														

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
45	1	783 / 511 / 102	860 / 662 / 87	763 / 650 / 129	812 / 799 / 105	820 / 747 / 154	989 / 917 / 126	841 / 711 / 123	1023 / 878 / 101	808 / 561 / 97	891 / 718 / 82	788 / 709 / 122	854 / 858 / 98	879 / 806 / 145	1045 / 973 / 116	904 / 768 / 116	1085 / 934 / 93	831 / 607 / 92	926 / 768 / 77	786 / 740 / 112	899 / 909 / 91	930 / 858 / 135	1137 / 1063 / 111	959 / 819 / 108	1133 / 979 / 86	
	2	860 / 662 / 87	988 / 825 / 72	812 / 813 / 105	950 / 982 / 84	989 / 929 / 126	1189 / 1131 / 102	1023 / 890 / 101	1243 / 1093 / 82	891 / 718 / 82	1050 / 882 / 67	854 / 874 / 98	1041 / 1083 / 81	1045 / 987 / 116	1298 / 1238 / 97	1085 / 948 / 93	1295 / 1142 / 75	926 / 768 / 77	1099 / 928 / 61	899 / 925 / 91	1079 / 1126 / 74	1137 / 1077 / 111	1327 / 1269 / 87	1133 / 994 / 86	1398 / 1235 / 71	
	3	787 / 987 / 64	935 / 1190 / 51	917 / 928 / 91	1101 / 1130 / 74	1160 / 1085 / 111	1354 / 1279 / 87	1156 / 1000 / 86	1426 / 1243 / 71	828 / 1045 / 59	1017 / 1300 / 49	968 / 985 / 84	1201 / 1237 / 70	1213 / 1139 / 102	1466 / 1387 / 82	1268 / 1099 / 82	1549 / 1352 / 67	898 / 1139 / 56	1033 / 1324 / 44	1053 / 1076 / 81	1228 / 1268 / 63	1312 / 1236 / 97	1568 / 1487 / 77	1309 / 1138 / 75	1565 / 1369 / 60	
	50	1	794 / 499 / 108	887 / 662 / 94	791 / 650 / 141	834 / 799 / 114	820 / 747 / 168	989 / 917 / 137	841 / 711 / 134	1023 / 878 / 110	816 / 546 / 102	916 / 718 / 89	815 / 709 / 133	859 / 858 / 106	879 / 806 / 158	1045 / 973 / 126	904 / 768 / 126	1085 / 934 / 102	859 / 607 / 100	940 / 768 / 83	810 / 740 / 122	899 / 909 / 99	930 / 858 / 147	1137 / 1063 / 121	959 / 819 / 118	1133 / 979 / 94
		2	887 / 662 / 94	988 / 825 / 78	834 / 813 / 114	950 / 982 / 91	989 / 929 / 137	1189 / 1131 / 111	1023 / 890 / 110	1243 / 1093 / 90	916 / 718 / 89	1050 / 882 / 72	859 / 874 / 106	1041 / 1083 / 88	1045 / 987 / 126	1298 / 1238 / 105	1085 / 948 / 102	1295 / 1142 / 82	940 / 768 / 83	1099 / 928 / 67	899 / 925 / 99	1079 / 1126 / 80	1137 / 1077 / 121	1327 / 1269 / 95	1133 / 994 / 94	1398 / 1235 / 78
		3	795 / 987 / 69	935 / 1190 / 56	917 / 928 / 99	1101 / 1130 / 80	1160 / 1085 / 121	1354 / 1279 / 95	1156 / 1000 / 94	1426 / 1243 / 78	828 / 1045 / 64	1017 / 1300 / 53	968 / 985 / 91	1201 / 1237 / 76	1213 / 1139 / 111	1466 / 1387 / 90	1268 / 1099 / 90	1549 / 1352 / 73	898 / 1139 / 61	1033 / 1324 / 47	1053 / 1076 / 88	1228 / 1268 / 69	1312 / 1236 / 105	1568 / 1487 / 84	1309 / 1138 / 82	1565 / 1369 / 65
	60	1	834 / 486 / 121	913 / 642 / 105	846 / 650 / 163	879 / 799 / 132	855 / 747 / 196	989 / 917 / 159	841 / 711 / 157	1023 / 878 / 128	851 / 531 / 115	967 / 718 / 102	867 / 709 / 154	901 / 858 / 124	884 / 806 / 184	1045 / 973 / 147	904 / 768 / 147	1085 / 934 / 119	891 / 591 / 112	988 / 768 / 96	858 / 740 / 141	916 / 909 / 115	930 / 858 / 172	1137 / 1063 / 141	959 / 819 / 138	1133 / 979 / 109
		2	913 / 642 / 105	1015 / 825 / 90	879 / 813 / 132	950 / 982 / 106	989 / 929 / 159	1189 / 1131 / 129	1023 / 890 / 128	1243 / 1093 / 105	967 / 718 / 102	1050 / 882 / 83	901 / 874 / 124	1041 / 1083 / 102	1045 / 987 / 147	1298 / 1238 / 123	1085 / 948 / 119	1295 / 1142 / 95	988 / 768 / 96	1099 / 928 / 77	916 / 925 / 115	1079 / 1126 / 93	1137 / 1077 / 141	1327 / 1269 / 111	1133 / 994 / 109	1398 / 1235 / 90
		3	835 / 987 / 80	935 / 1190 / 64	930 / 928 / 115	1101 / 1130 / 93	1160 / 1085 / 141	1354 / 1279 / 111	1156 / 1000 / 109	1426 / 1243 / 90	846 / 1045 / 74	1017 / 1300 / 61	968 / 985 / 106	1201 / 1237 / 88	1213 / 1139 / 129	1466 / 1387 / 104	1268 / 1099 / 105	1549 / 1352 / 86	898 / 1139 / 70	1033 / 1324 / 55	1053 / 1076 / 102	1228 / 1268 / 80	1312 / 1236 / 123	1568 / 1487 / 98	1309 / 1138 / 95	1565 / 1369 / 76
45	1	850 / 650 / 87	972 / 811 / 72	828 / 811 / 108	973 / 988 / 87	972 / 901 / 126	1169 / 1097 / 102	1006 / 862 / 101	1222 / 1058 / 82	865 / 688 / 82	1009 / 846 / 67	850 / 853 / 101	1001 / 1021 / 81	1046 / 973 / 121	1246 / 1173 / 97	1084 / 932 / 97	1306 / 1134 / 79	1009 / 846 / 67	1270 / 1080 / 56	1001 / 1039 / 81	1231 / 1292 / 67	1246 / 1188 / 97	1489 / 1430 / 77	1306 / 1150 / 79	1579 / 1400 / 64	
	2	972 / 811 / 72	1186 / 1006 / 59	973 / 1006 / 87	1158 / 1212 / 70	1169 / 1112 / 102	1413 / 1354 / 82	1222 / 1074 / 82	1493 / 1322 / 67	1009 / 846 / 67	1270 / 1080 / 56	1001 / 1039 / 81	1231 / 1292 / 67	1246 / 1188 / 97	1489 / 1430 / 77	1306 / 1150 / 79	1579 / 1400 / 64	1009 / 846 / 67	1270 / 1080 / 56	1001 / 1039 / 81	1231 / 1292 / 67	1246 / 1188 / 97	1489 / 1430 / 77	1306 / 1150 / 79	1579 / 1400 / 64	
	3	919 / 1170 / 51	1095 / 1408 / 41	1083 / 1111 / 74	1307 / 1353 / 60	1331 / 1257 / 87	1402 / 1221 / 71			977 / 1247 / 49		1154 / 1187 / 70	1377 / 1429 / 56	1408 / 1332 / 82		1488 / 1298 / 67		977 / 1247 / 49		1154 / 1187 / 70	1377 / 1429 / 56	1408 / 1332 / 82		1488 / 1298 / 67		
	50	1	877 / 650 / 94	972 / 811 / 78	852 / 811 / 118	973 / 988 / 95	972 / 901 / 137	1169 / 1097 / 111	1006 / 862 / 110	1222 / 1058 / 90	891 / 688 / 89	1009 / 846 / 72	863 / 853 / 110	1001 / 1021 / 88	1046 / 973 / 132	1246 / 1173 / 105	1084 / 932 / 106	1306 / 1134 / 86	1009 / 846 / 72	1270 / 1080 / 61	1001 / 1039 / 88	1231 / 1292 / 72	1246 / 1188 / 105	1489 / 1430 / 84	1306 / 1150 / 86	1579 / 1400 / 69
		2	972 / 811 / 78	1186 / 1006 / 64	973 / 1006 / 95	1158 / 1212 / 76	1169 / 1112 / 111	1413 / 1354 / 90	1222 / 1074 / 90	1493 / 1322 / 73	1009 / 846 / 72	1270 / 1080 / 61	1001 / 1039 / 88	1231 / 1292 / 72	1246 / 1188 / 105	1489 / 1430 / 84	1306 / 1150 / 86	1579 / 1400 / 69	1009 / 846 / 72	1270 / 1080 / 61	1001 / 1039 / 88	1231 / 1292 / 72	1246 / 1188 / 105	1489 / 1430 / 84	1306 / 1150 / 86	1579 / 1400 / 69
		3	919 / 1170 / 56	1095 / 1408 / 45	1083 / 1111 / 80	1307 / 1353 / 65	1331 / 1257 / 95	1402 / 1221 / 78			977 / 1247 / 53		1154 / 1187 / 76	1377 / 1429 / 61	1408 / 1332 / 90		1488 / 1298 / 73		977 / 1247 / 53		1154 / 1187 / 76	1377 / 1429 / 61	1408 / 1332 / 90		1488 / 1298 / 73	
	60	1	904 / 631 / 105	1003 / 811 / 90	899 / 811 / 137	973 / 988 / 110	972 / 901 / 159	1169 / 1097 / 129	1006 / 862 / 128	1222 / 1058 / 105	942 / 688 / 102	1011 / 846 / 83	907 / 853 / 128	1001 / 1021 / 102	1046 / 973 / 123	1246 / 1173 / 123	1084 / 932 / 100	1306 / 1134 / 100	1011 / 846 / 83	1270 / 1080 / 70	1001 / 1039 / 102	1231 / 1292 / 84	1246 / 1188 / 98	1489 / 1430 / 100	1306 / 1150 / 81	1579 / 1400 / 81
		2	1003 / 811 / 90	1186 / 1006 / 74	973 / 1006 / 110	1158 / 1212 / 88	1169 / 1112 / 129	1413 / 1354 / 104	1222 / 1074 / 105	1493 / 1322 / 86	1011 / 846 / 83	1270 / 1080 / 70	1001 / 1039 / 102	1231 / 1292 / 84	1246 / 1188 / 123	1489 / 1430 / 98	1306 / 1150 / 100	1579 / 1400 / 81	1011 / 846 / 83	1270 / 1080 / 70	1001 / 1039 / 102	1231 / 1292 / 84	1246 / 1188 / 98	1489 / 1430 / 100	1306 / 1150 / 81	1579 / 1400 / 81
		3	919 / 1170 / 64	1095 / 1408 / 51	1083 / 1111 / 93	1307 / 1353 / 75	1331 / 1257 / 111	1402 / 1221 / 90			977 / 1247 / 61		1154 / 1187 / 88	1377 / 1429 / 71	1408 / 1332 / 104		1488 / 1298 / 86		977 / 1247 / 61		1154 / 1187 / 88	1377 / 1429 / 71	1408 / 1332 / 104		1488 / 1298 / 86	
45	1	905 / 745 / 79	1078 / 908 / 64	879 / 886 / 94	1064 / 1089 / 77	1116 / 1042 / 116	1318 / 1242 / 92	1113 / 960 / 90	1384 / 1204 / 75	931 / 774 / 74	1144 / 967 / 61	935 / 947 / 91	1123 / 1153 / 74	1132 / 1060 / 106	1381 / 1305 / 87	1180 / 1020 / 86	1455 / 1268 / 71	1144 / 967 / 61	1350 / 1154 / 49	1123 / 1174 / 74	1356 / 1430 / 60	1381 / 1322 / 87		1455 / 1287 / 71		
	2	1078 / 908 / 64	1284 / 1095 / 51	1064 / 1109 / 77	1297 / 1365 / 63	1318 / 1259 / 92		1384 / 1222 / 75	1655 / 1469 / 60	1144 / 967 / 61	1350 / 1154 / 49	1123 / 1174 / 74	1356 / 1430 / 60	1381 / 1322 / 87		1455 / 1287 / 71		1144 / 967 / 61	1350 / 1154 / 49	1123 / 1174 / 74	1356 / 1430 / 60	1381 / 1322 / 87		1455 / 1287 / 71		
	3	1029 / 1318 / 46		1219 / 1258 / 67		1475 / 1397 / 77		1564 / 1367 / 64		1075 / 1380 / 44		1278 / 1321 / 63		1633 / 1549 / 77		1630 / 1426 / 60		1075 / 1380 / 44		1278 / 1321 / 63		1633 / 1549 / 77		1630 / 1426 / 60		
	50	1	930 / 745 / 86	1078 / 908 / 69	879 / 886 / 103	1064 / 1089 / 84	1116 / 1042 / 126	1318 / 1242 / 100	1113 / 960 / 98	1384 / 1204 / 82	936 / 774 / 80	1144 / 967 / 67	935 / 947 / 99	1123 / 1153 / 80	1132 / 1060 / 116	1381 / 1305 / 95	1180 / 1020 / 94	1455 / 1268 / 78	936 / 774 / 80	1144 / 967 / 67	935 / 947 / 99	1123 / 1153 / 80	1132 / 1060 / 116	1381 / 1305 / 95	1180 / 1020 / 94	1455 / 1268 / 78
		2	1078 / 908 / 69	1284 / 1095 / 56	1064 / 1109 / 84	1297 / 1365 / 69	1318 / 1259 / 100		1384 / 1222 / 82	1655 / 1469 / 65	1144 / 967 / 67	1350 / 1154 / 53	1123 / 1174 / 80	1356 / 1430 / 65	1381 / 1322 / 95		1455 / 1287 / 78		1144 / 967 / 67	1350 / 1154 / 53	1123 / 1174 / 80	1356 / 1430 / 65	1381 / 1322 / 95		1455 / 1287 / 78	
		3	1029 / 1318 / 50		1219 / 1258 / 72		1475 / 1397 / 84		1564 / 1367 / 69		1075 / 1380 / 47		1278 / 1321 / 69		1633 / 1549 / 84		1630 / 1426 / 65		1075 / 1380 / 47		1278 / 1321 / 69		1633 / 1549 / 84		1630 / 1426 / 65	
	60	1	979 / 745 / 99	1078 / 908 / 80	910 / 886 / 119	1064 / 1089 / 97	1116 / 1042 / 147	1318 / 1242 / 117	1113 / 960 / 114	1384 / 1204 / 95	982 / 774 / 93	1144 / 967 / 77	943 / 947 / 115	1123 / 1153 / 93	1132 / 1060 / 135	1381 / 1305 / 111	1180 / 1020 / 109	1455 / 1268 / 90	982 / 774 / 93	1144 / 967 / 77	943 / 947 / 115	1123 / 1153 / 93	1132 / 1060 / 135	1381 / 1305 / 111	1180 / 1020 / 109	1455 / 1268 / 90
		2	1078 / 908 / 80	1284 / 1095 / 64	1064 / 1109 / 97	1297 / 1365 / 80	1318 / 1259 / 117		1384 / 1222 / 95	1655 / 1469 / 76	1144 / 967 / 77	1350 / 1154 / 61	1123 / 1174 / 93	1356 / 1430 / 75	1381 / 1322 / 111		1455 / 1287 / 90		1144 / 967 / 77	1350 / 1154 / 61	1123 / 1174 / 93					

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs								
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
	70	1	805 / 323 / 152	863 / 448 / 138	798 / 436 / 206	867 / 600 / 186	812 / 555 / 274	903 / 734 / 239	656 / 539 / 222	804 / 677 / 184	813 / 346 / 148	876 / 479 / 134	808 / 467 / 201	884 / 640 / 181	832 / 593 / 267	901 / 756 / 225	697 / 576 / 217	851 / 719 / 179	820 / 370 / 145	890 / 509 / 130	818 / 498 / 196	900 / 680 / 176	851 / 630 / 260	925 / 799 / 218	718 / 597 / 206	868 / 737 / 168
70	2	863 / 448 / 138	924 / 593 / 120	867 / 611 / 186	911 / 777 / 156	877 / 722 / 232	953 / 893 / 190	804 / 687 / 184	984 / 854 / 152	876 / 479 / 134	943 / 631 / 116	884 / 652 / 181	932 / 823 / 151	901 / 767 / 225	1001 / 941 / 183	851 / 730 / 179	1035 / 901 / 146	890 / 509 / 130	962 / 667 / 112	900 / 692 / 176	918 / 838 / 141	925 / 810 / 218	1046 / 986 / 176	868 / 748 / 168	1084 / 946 / 141	
70	3	840 / 773 / 116	866 / 950 / 94	905 / 720 / 166	955 / 891 / 136	937 / 839 / 204	1122 / 1048 / 169	939 / 800 / 163	1119 / 965 / 130	826 / 794 / 109	882 / 999 / 91	924 / 765 / 161	977 / 939 / 131	964 / 887 / 197	1123 / 1051 / 155	956 / 818 / 152	1170 / 1012 / 125	839 / 837 / 105	896 / 1046 / 87	943 / 808 / 156	997 / 985 / 126	969 / 898 / 183	1165 / 1093 / 148	1002 / 859 / 146	1217 / 1055 / 119	
80	1	830 / 307 / 162	899 / 437 / 150	839 / 425 / 225	898 / 584 / 203	837 / 541 / 303	917 / 712 / 263	665 / 539 / 250	804 / 677 / 207	857 / 338 / 162	910 / 466 / 146	847 / 455 / 220	912 / 623 / 197	855 / 577 / 295	940 / 756 / 255	697 / 576 / 244	851 / 719 / 201	862 / 361 / 158	921 / 495 / 142	854 / 485 / 214	925 / 660 / 192	872 / 613 / 287	963 / 799 / 247	718 / 597 / 231	868 / 737 / 189	
80	2	899 / 437 / 150	977 / 593 / 134	898 / 595 / 203	958 / 777 / 175	917 / 722 / 263	983 / 893 / 215	804 / 687 / 207	984 / 854 / 171	910 / 466 / 146	994 / 631 / 130	912 / 634 / 197	977 / 823 / 169	940 / 767 / 255	1009 / 941 / 207	851 / 730 / 201	1035 / 901 / 165	921 / 495 / 142	1011 / 667 / 126	925 / 672 / 192	961 / 838 / 158	963 / 810 / 247	1046 / 986 / 199	868 / 748 / 189	1084 / 946 / 159	
80	3	890 / 773 / 130	907 / 950 / 105	954 / 720 / 186	995 / 891 / 152	972 / 839 / 231	1122 / 1048 / 192	939 / 800 / 183	1119 / 965 / 146	874 / 794 / 122	922 / 999 / 101	973 / 765 / 180	1016 / 939 / 147	998 / 887 / 223	1123 / 1051 / 176	956 / 818 / 171	1170 / 1012 / 140	885 / 837 / 117	934 / 1046 / 97	990 / 808 / 175	1035 / 985 / 141	985 / 898 / 207	1165 / 1093 / 168	1002 / 859 / 165	1217 / 1055 / 134	
90	1	872 / 300 / 175	932 / 425 / 161	877 / 415 / 243	926 / 568 / 219	860 / 526 / 330	957 / 712 / 294	686 / 539 / 277	804 / 677 / 230	874 / 321 / 170	940 / 453 / 157	882 / 444 / 237	937 / 605 / 212	875 / 561 / 321	979 / 756 / 285	712 / 576 / 271	851 / 719 / 223	900 / 351 / 170	949 / 481 / 152	888 / 472 / 231	948 / 641 / 206	890 / 596 / 312	1000 / 799 / 276	718 / 597 / 257	868 / 737 / 210	
90	2	932 / 425 / 161	998 / 575 / 143	926 / 578 / 219	1005 / 777 / 194	957 / 722 / 294	1015 / 893 / 241	804 / 687 / 230	984 / 854 / 190	940 / 453 / 157	1012 / 611 / 139	937 / 616 / 212	1022 / 823 / 187	979 / 767 / 285	1040 / 941 / 232	851 / 730 / 223	1035 / 901 / 183	949 / 481 / 152	1026 / 645 / 134	948 / 652 / 206	1003 / 838 / 175	1000 / 810 / 276	1063 / 986 / 223	868 / 748 / 210	1084 / 946 / 176	
90	3	941 / 773 / 143	949 / 950 / 117	974 / 698 / 200	1036 / 891 / 169	1007 / 839 / 258	1122 / 1048 / 214	939 / 800 / 203	1119 / 965 / 163	922 / 794 / 134	961 / 999 / 112	989 / 741 / 194	1056 / 939 / 162	1032 / 887 / 250	1123 / 1051 / 196	956 / 818 / 190	1170 / 1012 / 156	931 / 837 / 130	972 / 1046 / 108	1004 / 782 / 187	1073 / 985 / 156	1017 / 898 / 232	1165 / 1093 / 187	1002 / 859 / 183	1217 / 1055 / 149	
Wind Speed [mph]		110								115																
70	1	828 / 393 / 141	903 / 539 / 127	828 / 528 / 191	915 / 718 / 171	870 / 667 / 253	916 / 813 / 204	757 / 632 / 200	910 / 775 / 163	835 / 416 / 138	915 / 568 / 123	859 / 573 / 191	929 / 755 / 166	888 / 702 / 246	935 / 850 / 197	772 / 648 / 190	950 / 811 / 157	ASCE Group Zone								
70	2	903 / 539 / 127	1012 / 725 / 112	915 / 731 / 171	934 / 878 / 136	916 / 824 / 204	1088 / 1028 / 169	910 / 786 / 163	1084 / 948 / 130	915 / 568 / 123	1029 / 760 / 109	901 / 746 / 161	949 / 916 / 131	935 / 861 / 197	1126 / 1067 / 162	950 / 823 / 157	1171 / 1026 / 130	0 - 7.5	Panal Angle		Mono Slope					
70	3	850 / 878 / 101	908 / 1089 / 83	929 / 822 / 146	1015 / 1027 / 121	1009 / 938 / 176	1263 / 1187 / 148	1046 / 899 / 141	1260 / 1093 / 114	860 / 917 / 98	918 / 1127 / 80	944 / 860 / 141	1043 / 1065 / 116	1046 / 975 / 169	1300 / 1224 / 141	1086 / 936 / 136	1297 / 1127 / 109		1 = 1							
80	1	867 / 383 / 154	931 / 524 / 138	862 / 514 / 208	938 / 697 / 186	888 / 648 / 279	951 / 813 / 231	757 / 632 / 225	910 / 775 / 183	872 / 405 / 150	940 / 551 / 134	893 / 558 / 208	950 / 732 / 180	904 / 682 / 271	969 / 850 / 223	772 / 648 / 213	950 / 811 / 177		7.5 - 15							
80	2	931 / 524 / 138	1027 / 702 / 122	938 / 709 / 186	975 / 878 / 152	951 / 824 / 231	1088 / 1028 / 192	910 / 786 / 183	1084 / 948 / 146	940 / 551 / 134	1041 / 735 / 117	950 / 746 / 180	988 / 916 / 147	969 / 861 / 223	1126 / 1067 / 184	950 / 823 / 177	1171 / 1026 / 146	2 = 2								
80	3	894 / 878 / 113	945 / 1089 / 93	973 / 822 / 163	1052 / 1027 / 135	1009 / 938 / 199	1263 / 1187 / 168	1046 / 899 / 159	1260 / 1093 / 128	903 / 917 / 109	953 / 1127 / 89	986 / 860 / 158	1066 / 1065 / 130	1046 / 975 / 192	1300 / 1224 / 160	1086 / 936 / 152	1297 / 1127 / 122	1 = 1								
90	1	903 / 373 / 166	956 / 508 / 148	893 / 500 / 225	988 / 697 / 206	904 / 630 / 303	986 / 813 / 258	757 / 632 / 250	910 / 775 / 203	906 / 394 / 161	993 / 551 / 148	923 / 543 / 225	998 / 732 / 200	918 / 662 / 294	1003 / 850 / 250	772 / 648 / 237	950 / 811 / 196	15 - 30								
90	2	956 / 508 / 148	1039 / 678 / 130	988 / 709 / 206	1016 / 878 / 169	986 / 824 / 258	1088 / 1028 / 214	910 / 786 / 203	1084 / 948 / 163	993 / 551 / 148	1087 / 735 / 130	998 / 746 / 200	1027 / 916 / 162	1003 / 861 / 250	1126 / 1067 / 205	950 / 823 / 196	1171 / 1026 / 163		2 = 2							
90	3	939 / 878 / 125	981 / 1089 / 103	1017 / 822 / 181	1088 / 1027 / 150	1036 / 938 / 223	1263 / 1187 / 187	1046 / 899 / 176	1260 / 1093 / 142	946 / 917 / 121	988 / 1127 / 99	1029 / 860 / 175	1100 / 1065 / 144	1052 / 975 / 214	1300 / 1224 / 178	1086 / 936 / 169	1297 / 1127 / 136		1 = 1							
Wind Speed [mph]		120								130																
70	1	864 / 450 / 138	926 / 596 / 120	869 / 603 / 186	914 / 766 / 156	906 / 737 / 239	957 / 885 / 190	807 / 680 / 184	988 / 845 / 152	835 / 416 / 138	915 / 568 / 123	859 / 573 / 191	929 / 755 / 166	888 / 702 / 246	935 / 850 / 197	772 / 648 / 190	950 / 811 / 157	30 - 45								
70	2	926 / 596 / 120	1045 / 794 / 105	914 / 780 / 156	961 / 951 / 126	957 / 897 / 190	1160 / 1101 / 155	988 / 858 / 152	1209 / 1062 / 125	915 / 568 / 123	1029 / 760 / 109	901 / 746 / 161	949 / 916 / 131	935 / 861 / 197	1126 / 1067 / 162	950 / 823 / 157	1171 / 1026 / 130		2 = 2							
70	3	868 / 954 / 94	925 / 1161 / 76	957 / 895 / 136	1074 / 1100 / 111	1080 / 1008 / 162	1330 / 1254 / 134	1123 / 969 / 130	1397 / 1216 / 109	860 / 917 / 98	918 / 1127 / 80	944 / 860 / 141	1043 / 1065 / 116	1046 / 975 / 169	1300 / 1224 / 141	1086 / 936 / 136	1297 / 1127 / 109		1 = 1							
80	1	900 / 439 / 150	979 / 596 / 134	900 / 587 / 203	960 / 766 / 175	919 / 715 / 263	985 / 885 / 215	807 / 680 / 207	988 / 845 / 171	872 / 405 / 150	940 / 551 / 134	893 / 558 / 208	950 / 732 / 180	904 / 682 / 271	969 / 850 / 223	772 / 648 / 213	950 / 811 / 177	30 - 45								
80	2	979 / 596 / 134	1054 / 766 / 113	960 / 780 / 175	999 / 951 / 141	985 / 897 / 215	1160 / 1101 / 176	988 / 858 / 171	1209 / 1062 / 140	940 / 551 / 134	1041 / 735 / 117	950 / 746 / 180	988 / 916 / 147	969 / 861 / 223	1126 / 1067 / 184	950 / 823 / 177	1171 / 1026 / 146		2 = 2							
80	3	909 / 954 / 105	958 / 1161 / 85	998 / 895 / 152	1077 / 1100 / 124	1080 / 1008 / 184	1330 / 1254 / 152	1123 / 969 / 146	1397 / 1216 / 122	903 / 917 / 109	953 / 1127 / 89	986 / 860 / 158	1066 / 1065 / 130	1046 / 975 / 192	1300 / 1224 / 160	1086 / 936 / 152	1297 / 1127 / 122		3 = 3							
90	1	933 / 427 / 161	1000 / 578 / 143	928 / 570 / 219	1007 / 766 / 194	959 / 715 / 294	1018 / 885 / 241	807 / 680 / 230	988 / 845 / 190	906 / 394 / 161	993 / 551 / 148	923 / 543 / 225	998 / 732 / 200	918 / 662 / 294	1003 / 850 / 250	772 / 648 / 237	950 / 811 / 196	30 - 45								
90	2	1000 / 578 / 143	1098 / 766 / 125	1007 / 780 / 194	1037 / 951 / 156	1018 / 897 / 241	1160 / 1101 / 196	988 / 858 / 190	1209 / 1062 / 156	993 / 551 / 148	1087 / 735 / 130	998 / 746 / 200	1027 / 916 / 162	1003 / 861 / 250	1126 / 1067 / 205	950 / 823 / 196	1171 / 1026 / 163		1 = 1							
90	3	951 / 954 / 117	991 / 1161 / 94	1039 / 895 / 169	1110 / 1100 / 138	1080 / 1008 / 205	1330 / 1254 / 169	1123 / 969 / 163	1397 / 1216 / 136	946 / 917 / 121	988 / 1127 / 99	1029 / 860 / 175	1100 / 1065 / 144	1052 / 975 / 214	1300 / 1224 / 178	1086 / 936 / 169	1297 / 1127 / 136		2 = 2							

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft								92.5in x 45.9in								Load: Up / Down / Side , lbs							
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		70	1	871 / 473 / 134	937 / 623 / 116	878 / 633 / 181	925 / 799 / 151	894 / 747 / 225	989 / 917 / 183	841 / 711 / 179	1023 / 878 / 146	883 / 517 / 127	986 / 695 / 112	894 / 689 / 171	943 / 858 / 141	921 / 806 / 211	1045 / 973 / 169	904 / 768 / 168	1085 / 934 / 136	920 / 574 / 123	1036 / 768 / 109	907 / 740 / 161	955 / 909 / 131	942 / 858 / 197	1137 / 1063 / 162

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		0-30ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																													
Wind Speed [mph]		95								100								105																	
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45											
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
100	1	910 / 292 / 186	962 / 413 / 172	912 / 404 / 260	951 / 552 / 233	881 / 512 / 354	967 / 691 / 315	706 / 539 / 305	804 / 677 / 253	910 / 313 / 181	968 / 440 / 167	915 / 432 / 254	960 / 587 / 226	894 / 546 / 344	986 / 733 / 305	732 / 576 / 298	851 / 719 / 246	936 / 342 / 181	973 / 467 / 162	918 / 460 / 247	998 / 641 / 226	933 / 596 / 344	1004 / 773 / 295	738 / 597 / 283	868 / 737 / 231										
	2	962 / 413 / 172	1016 / 557 / 152	951 / 562 / 233	1018 / 752 / 206	967 / 700 / 315	1048 / 893 / 266	804 / 687 / 253	984 / 854 / 208	968 / 440 / 167	1028 / 591 / 147	960 / 598 / 226	1068 / 823 / 206	986 / 743 / 305	1072 / 941 / 256	851 / 730 / 246	1035 / 901 / 201	973 / 467 / 162	1074 / 645 / 147	998 / 652 / 226	1045 / 838 / 192	1004 / 784 / 295	1093 / 986 / 246	868 / 748 / 231	1084 / 946 / 194										
	3	992 / 773 / 157	990 / 950 / 128	1022 / 698 / 219	1077 / 891 / 185	1042 / 839 / 286	1138 / 1048 / 236	939 / 800 / 223	1119 / 965 / 179	970 / 794 / 147	1001 / 999 / 123	1036 / 741 / 213	1095 / 939 / 178	1066 / 887 / 276	1123 / 1051 / 217	956 / 818 / 208	1170 / 1012 / 171	977 / 837 / 142	1011 / 1046 / 118	1049 / 782 / 206	1111 / 985 / 172	1048 / 898 / 256	1165 / 1093 / 207	1002 / 859 / 201	1217 / 1055 / 164										
Wind Speed [mph]		110								115																									
100	1	936 / 363 / 177	1009 / 508 / 162	921 / 486 / 240	1006 / 676 / 219	946 / 630 / 335	1021 / 813 / 286	761 / 632 / 275	910 / 775 / 223	936 / 383 / 172	1014 / 535 / 157	950 / 528 / 240	1014 / 709 / 213	958 / 662 / 325	1037 / 850 / 276	772 / 648 / 260	950 / 811 / 216	1009 / 508 / 162	1085 / 678 / 142	1006 / 688 / 219	1057 / 878 / 185	1021 / 824 / 286	1112 / 1028 / 236	910 / 786 / 223	1084 / 948 / 179	1014 / 535 / 157	1094 / 710 / 137	1014 / 722 / 213	1067 / 916 / 178	1037 / 861 / 276	1128 / 1067 / 227	950 / 823 / 216	1171 / 1026 / 179		
	2	1009 / 508 / 162	1085 / 678 / 142	1006 / 688 / 219	1057 / 878 / 185	1021 / 824 / 286	1112 / 1028 / 236	910 / 786 / 223	1084 / 948 / 179	1014 / 535 / 157	1094 / 710 / 137	1014 / 722 / 213	1067 / 916 / 178	1037 / 861 / 276	1128 / 1067 / 227	950 / 823 / 216	1171 / 1026 / 179	984 / 878 / 137	1018 / 1089 / 113	1061 / 822 / 199	1124 / 1027 / 165	1066 / 938 / 246	1263 / 1187 / 207	1046 / 899 / 194	1260 / 1093 / 156	989 / 917 / 133	1023 / 1127 / 108	1071 / 860 / 192	1135 / 1065 / 158	1081 / 975 / 236	1300 / 1224 / 197	1086 / 936 / 186	1297 / 1127 / 149		
	3	984 / 878 / 137	1018 / 1089 / 113	1061 / 822 / 199	1124 / 1027 / 165	1066 / 938 / 246	1263 / 1187 / 207	1046 / 899 / 194	1260 / 1093 / 156	989 / 917 / 133	1023 / 1127 / 108	1071 / 860 / 192	1135 / 1065 / 158	1081 / 975 / 236	1300 / 1224 / 197	1086 / 936 / 186	1297 / 1127 / 149	963 / 415 / 172	1018 / 560 / 152	953 / 554 / 233	1020 / 742 / 206	969 / 694 / 315	1051 / 885 / 266	807 / 680 / 253	988 / 845 / 208	936 / 383 / 172	1014 / 535 / 157	950 / 528 / 240	1014 / 709 / 213	958 / 662 / 325	1037 / 850 / 276	772 / 648 / 260	950 / 811 / 216		
Wind Speed [mph]		120								130																									
100	1	963 / 415 / 172	1018 / 560 / 152	953 / 554 / 233	1020 / 742 / 206	969 / 694 / 315	1051 / 885 / 266	807 / 680 / 253	988 / 845 / 208	936 / 383 / 172	1014 / 535 / 157	950 / 528 / 240	1014 / 709 / 213	958 / 662 / 325	1037 / 850 / 276	772 / 648 / 260	950 / 811 / 216	1018 / 560 / 152	1102 / 739 / 133	1020 / 755 / 206	1075 / 951 / 172	1051 / 897 / 266	1160 / 1101 / 217	988 / 858 / 208	1209 / 1062 / 171	1014 / 535 / 157	1094 / 710 / 137	1014 / 722 / 213	1067 / 916 / 178	1037 / 861 / 276	1128 / 1067 / 227	950 / 823 / 216	1171 / 1026 / 179		
	2	1018 / 560 / 152	1102 / 739 / 133	1020 / 755 / 206	1075 / 951 / 172	1051 / 897 / 266	1160 / 1101 / 217	988 / 858 / 208	1209 / 1062 / 171	1014 / 535 / 157	1094 / 710 / 137	1014 / 722 / 213	1067 / 916 / 178	1037 / 861 / 276	1128 / 1067 / 227	950 / 823 / 216	1171 / 1026 / 179	992 / 954 / 128	1025 / 1161 / 103	1080 / 895 / 185	1143 / 1100 / 151	1094 / 1008 / 227	1330 / 1254 / 187	1123 / 969 / 179	1397 / 1216 / 149	989 / 917 / 133	1023 / 1127 / 108	1071 / 860 / 192	1135 / 1065 / 158	1081 / 975 / 236	1300 / 1224 / 197	1086 / 936 / 186	1297 / 1127 / 149		
	3	992 / 954 / 128	1025 / 1161 / 103	1080 / 895 / 185	1143 / 1100 / 151	1094 / 1008 / 227	1330 / 1254 / 187	1123 / 969 / 179	1397 / 1216 / 149	989 / 917 / 133	1023 / 1127 / 108	1071 / 860 / 192	1135 / 1065 / 158	1081 / 975 / 236	1300 / 1224 / 197	1086 / 936 / 186	1297 / 1127 / 149																		

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof 0-30ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	963 / 435 / 167	1055 / 603 / 152	983 / 597 / 233	1061 / 799 / 206	979 / 724 / 305	1063 / 917 / 256	841 / 711 / 246	1023 / 878 / 201	991 / 487 / 162	1061 / 650 / 142	986 / 648 / 219	1070 / 858 / 192	1030 / 806 / 295	1080 / 973 / 236	904 / 768 / 231	1085 / 934 / 186	1018 / 540 / 157	1100 / 717 / 137	1019 / 717 / 213	1073 / 909 / 178	1044 / 858 / 276	1137 / 1063 / 227	959 / 819 / 216	1133 / 979 / 171
	2	1055 / 603 / 152	1151 / 796 / 133	1061 / 813 / 206	1080 / 982 / 165	1063 / 929 / 256	1189 / 1131 / 207	1023 / 890 / 201	1243 / 1093 / 164	1061 / 650 / 142	1207 / 882 / 128	1070 / 874 / 192	1134 / 1083 / 158	1080 / 987 / 236	1298 / 1238 / 197	1085 / 948 / 186	1295 / 1142 / 149	1100 / 717 / 137	1212 / 928 / 118	1073 / 925 / 178	1132 / 1126 / 144	1137 / 1077 / 227	1327 / 1269 / 177	1133 / 994 / 171	1398 / 1235 / 142
	3	994 / 987 / 123	1024 / 1190 / 98	1087 / 928 / 178	1148 / 1130 / 144	1160 / 1085 / 227	1354 / 1279 / 177	1156 / 1000 / 171	1426 / 1243 / 142		993 / 1045 / 113	1070 / 1300 / 93	1095 / 985 / 165	1208 / 1237 / 137	1213 / 1139 / 207	1466 / 1387 / 168	1268 / 1099 / 164	1549 / 1352 / 134	1029 / 1139 / 108	1049 / 1324 / 84	1143 / 1076 / 158	1228 / 1268 / 124	1312 / 1236 / 197	1568 / 1487 / 158	1309 / 1138 / 149

Wind Speed [mph]		170								180																	
100	1	1046 / 593 / 152	1139 / 782 / 133	1051 / 785 / 206	1113 / 988 / 172	1051 / 901 / 256	1169 / 1097 / 207	1006 / 862 / 201	1222 / 1058 / 164	1074 / 645 / 147	1177 / 846 / 128	1082 / 853 / 199	1103 / 1021 / 158	1093 / 973 / 246	1246 / 1173 / 197	1084 / 932 / 194	1306 / 1134 / 156										
	2	1139 / 782 / 133	1261 / 1006 / 113	1113 / 1006 / 172	1175 / 1212 / 137	1169 / 1112 / 207	1413 / 1354 / 168	1222 / 1074 / 164	1493 / 1322 / 134	1177 / 846 / 128	1308 / 1080 / 108	1103 / 1039 / 158	1231 / 1292 / 130	1246 / 1188 / 197	1489 / 1430 / 158	1306 / 1150 / 156	1579 / 1400 / 127										
	3	1013 / 1170 / 98	1095 / 1408 / 79	1134 / 1111 / 144	1307 / 1353 / 117	1331 / 1257 / 177		1402 / 1221 / 142		1040 / 1247 / 93		1172 / 1187 / 137	1377 / 1429 / 110	1408 / 1332 / 168		1488 / 1298 / 134											

Wind Speed [mph]		190								200																	
100	1	1101 / 697 / 142	1212 / 908 / 123	1073 / 886 / 185	1136 / 1089 / 151	1134 / 1042 / 236	1318 / 1242 / 187	1113 / 960 / 179	1384 / 1204 / 149	1127 / 747 / 137	1246 / 967 / 118	1100 / 947 / 178	1165 / 1153 / 144	1132 / 1060 / 217	1381 / 1305 / 177	1180 / 1020 / 171	1455 / 1268 / 142										
	2	1212 / 908 / 123	1286 / 1095 / 98	1136 / 1109 / 151	1297 / 1365 / 124	1318 / 1259 / 187		1384 / 1222 / 149	1655 / 1469 / 119	1246 / 967 / 118	1350 / 1154 / 93	1165 / 1174 / 144	1356 / 1430 / 117	1381 / 1322 / 177		1455 / 1287 / 142											
	3	1063 / 1318 / 89		1219 / 1258 / 130		1475 / 1397 / 158		1564 / 1367 / 127		1081 / 1380 / 84		1278 / 1321 / 124		1633 / 1549 / 158		1630 / 1426 / 119											

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge			
		0	1	464 / 323 / 46	554 / 416 / 38	487 / 428 / 50	579 / 540 / 41	579 / 494 / 51	689 / 612 / 41	571 / 457 / 55	701 / 579 / 46	485 / 344 / 45	577 / 439 / 37	509 / 454 / 48	601 / 567 / 39	603 / 520 / 49	731 / 653 / 40	596 / 480 / 53	725 / 603 / 44	505 / 364 / 43	611 / 470 / 36	529 / 479 / 46	622 / 591 / 37	624 / 543 / 47	751 / 675 / 38	618 / 502 / 51	746 / 623 / 42
Wind Speed [mph]		110								115																	
0	1	523 / 383 / 42	631 / 490 / 35	548 / 502 / 45	639 / 613 / 36	644 / 564 / 45	790 / 714 / 37	652 / 534 / 50	785 / 659 / 41	541 / 401 / 40	648 / 508 / 33	566 / 523 / 43	654 / 632 / 34	677 / 597 / 43	803 / 729 / 35	671 / 552 / 47	822 / 693 / 39										
Wind Speed [mph]		120								130																	
0	1	557 / 418 / 38	679 / 536 / 32	581 / 543 / 41	684 / 665 / 33	692 / 614 / 41	838 / 764 / 34	703 / 582 / 46	833 / 705 / 37	541 / 401 / 40	648 / 508 / 33	566 / 523 / 43	654 / 632 / 34	677 / 597 / 43	803 / 729 / 35	671 / 552 / 47	822 / 693 / 39										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	583 / 442 / 38	692 / 550 / 31	595 / 560 / 39	713 / 697 / 32	722 / 645 / 40	871 / 797 / 33	717 / 596 / 44	866 / 735 / 36	621 / 480 / 35	748 / 602 / 29	631 / 602 / 37	746 / 736 / 30	760 / 685 / 37	932 / 858 / 31	776 / 650 / 42	927 / 791 / 34	654 / 513 / 33	800 / 651 / 28	660 / 638 / 34	793 / 789 / 28	811 / 737 / 35	984 / 911 / 29	806 / 680 / 38	980 / 839 / 31
	2	692 / 550 / 31	836 / 686 / 25	693 / 690 / 31	848 / 866 / 26	871 / 808 / 33	1043 / 984 / 27	866 / 746 / 36	1081 / 943 / 30	748 / 602 / 29	895 / 741 / 24	746 / 750 / 30	903 / 927 / 24	900 / 840 / 30	1099 / 1040 / 25	927 / 803 / 34	1143 / 1001 / 28	800 / 651 / 28	947 / 789 / 22	793 / 803 / 28	948 / 979 / 23	984 / 923 / 29	1193 / 1134 / 24	980 / 852 / 31	1190 / 1045 / 26
	3	677 / 835 / 23	828 / 1043 / 19	809 / 806 / 28	967 / 982 / 23	1004 / 930 / 29	1218 / 1142 / 24	1000 / 857 / 31	1214 / 1052 / 26	719 / 894 / 21	868 / 1099 / 18	835 / 838 / 25	1018 / 1039 / 21	1064 / 990 / 27	1268 / 1193 / 21	1060 / 913 / 29	1328 / 1154 / 25	754 / 944 / 20	940 / 1196 / 17	913 / 922 / 24	1105 / 1132 / 20	1111 / 1038 / 25	1369 / 1291 / 20	1156 / 998 / 28	1366 / 1189 / 22
5	1	583 / 442 / 38	692 / 550 / 31	595 / 560 / 46	713 / 697 / 37	722 / 645 / 50	871 / 797 / 41	717 / 596 / 50	866 / 735 / 41	621 / 480 / 35	748 / 602 / 29	631 / 602 / 42	746 / 736 / 34	760 / 685 / 46	932 / 858 / 38	776 / 650 / 48	927 / 791 / 39	654 / 513 / 33	800 / 651 / 28	660 / 638 / 39	793 / 789 / 32	811 / 737 / 43	984 / 911 / 36	806 / 680 / 44	980 / 839 / 36
	2	692 / 550 / 31	836 / 686 / 25	693 / 690 / 36	848 / 866 / 30	871 / 808 / 41	1043 / 984 / 33	866 / 746 / 41	1081 / 943 / 35	748 / 602 / 29	895 / 741 / 24	746 / 750 / 34	903 / 927 / 28	900 / 840 / 37	1099 / 1040 / 30	927 / 803 / 39	1143 / 1001 / 32	800 / 651 / 28	947 / 789 / 22	793 / 803 / 32	948 / 979 / 26	984 / 923 / 36	1193 / 1134 / 29	980 / 852 / 36	1190 / 1045 / 29
	3	677 / 835 / 23	828 / 1043 / 19	809 / 806 / 32	967 / 982 / 26	1004 / 930 / 36	1218 / 1142 / 29	1000 / 857 / 36	1214 / 1052 / 29	719 / 894 / 21	868 / 1099 / 18	835 / 838 / 29	1018 / 1039 / 24	1064 / 990 / 33	1268 / 1193 / 27	1060 / 913 / 33	1328 / 1154 / 28	754 / 944 / 20	940 / 1196 / 17	913 / 922 / 28	1105 / 1132 / 23	1111 / 1038 / 30	1369 / 1291 / 25	1156 / 998 / 32	1366 / 1189 / 25
10	1	583 / 442 / 45	692 / 550 / 37	595 / 560 / 59	713 / 697 / 48	722 / 645 / 65	871 / 797 / 53	717 / 596 / 61	866 / 735 / 50	621 / 480 / 42	748 / 602 / 35	631 / 602 / 55	746 / 736 / 44	760 / 685 / 60	932 / 858 / 50	776 / 650 / 58	927 / 791 / 47	654 / 513 / 39	800 / 651 / 33	660 / 638 / 51	793 / 789 / 42	811 / 737 / 56	984 / 911 / 46	806 / 680 / 53	980 / 839 / 44
	2	692 / 550 / 37	836 / 686 / 30	693 / 690 / 47	848 / 866 / 39	871 / 808 / 53	1043 / 984 / 43	866 / 746 / 50	1081 / 943 / 42	748 / 602 / 35	895 / 741 / 28	746 / 750 / 44	903 / 927 / 36	900 / 840 / 48	1099 / 1040 / 39	927 / 803 / 47	1143 / 1001 / 39	800 / 651 / 33	947 / 789 / 26	793 / 803 / 42	948 / 979 / 34	984 / 923 / 46	1193 / 1134 / 38	980 / 852 / 44	1190 / 1045 / 36
	3	677 / 835 / 27	828 / 1043 / 23	809 / 806 / 42	967 / 982 / 34	1004 / 930 / 46	1218 / 1142 / 38	1000 / 857 / 44	1214 / 1052 / 36	719 / 894 / 25	868 / 1099 / 21	835 / 838 / 38	1018 / 1039 / 31	1064 / 990 / 43	1268 / 1193 / 34	1060 / 913 / 40	1328 / 1154 / 34	754 / 944 / 24	940 / 1196 / 20	913 / 922 / 36	1105 / 1132 / 30	1111 / 1038 / 39	1369 / 1291 / 33	1156 / 998 / 39	1366 / 1189 / 31
Wind Speed [mph]		170								180															
0	1	698 / 554 / 31	848 / 695 / 26	702 / 685 / 32	834 / 836 / 26	857 / 783 / 33	1026 / 954 / 27	879 / 746 / 37	1063 / 914 / 30	739 / 593 / 30	889 / 735 / 24	739 / 728 / 30	868 / 874 / 24	895 / 823 / 31	1101 / 1028 / 26	922 / 785 / 35	1098 / 947 / 28	ASCE Group Zone							
	2	848 / 695 / 26	1028 / 861 / 21	834 / 851 / 26	981 / 1018 / 21	1026 / 967 / 27	1222 / 1165 / 21	1063 / 927 / 30	1280 / 1128 / 25	889 / 735 / 24	1064 / 896 / 20	868 / 890 / 24	1050 / 1093 / 20	1101 / 1042 / 26	1300 / 1242 / 20	1098 / 961 / 28	1365 / 1205 / 23	Panal Angle							
	3	815 / 1025 / 19	958 / 1223 / 15	951 / 965 / 23	1132 / 1164 / 18	1197 / 1123 / 24	1462 / 1382 / 19	1194 / 1034 / 26	1459 / 1273 / 21	835 / 1055 / 18	1015 / 1300 / 14	1021 / 1040 / 22	1203 / 1241 / 17	1218 / 1145 / 21	1546 / 1464 / 18	1276 / 1107 / 25	1543 / 1348 / 20	Mono Slope							
5	1	698 / 554 / 31	848 / 695 / 26	702 / 685 / 37	834 / 836 / 30	857 / 783 / 41	1026 / 954 / 33	879 / 746 / 42	1063 / 914 / 35	739 / 593 / 30	889 / 735 / 24	739 / 728 / 35	868 / 874 / 28	895 / 823 / 38	1101 / 1028 / 32	922 / 785 / 40	1098 / 947 / 32	0 - 7.5							
	2	848 / 695 / 26	1028 / 861 / 21	834 / 851 / 30	981 / 1018 / 24	1026 / 967 / 33	1222 / 1165 / 27	1063 / 927 / 35	1280 / 1128 / 28	889 / 735 / 24	1064 / 896 / 20	868 / 890 / 28	1050 / 1093 / 23	1101 / 1042 / 32	1300 / 1242 / 25	1098 / 961 / 32	1365 / 1205 / 27	2 = 2							
	3	815 / 1025 / 19	958 / 1223 / 15	951 / 965 / 26	1132 / 1164 / 21	1197 / 1123 / 29	1462 / 1382 / 24	1194 / 1034 / 29	1459 / 1273 / 24	835 / 1055 / 18	1015 / 1300 / 14	1021 / 1040 / 25	1203 / 1241 / 20	1218 / 1145 / 27	1546 / 1464 / 23	1276 / 1107 / 28	1543 / 1348 / 23	3 = 3							
10	1	698 / 554 / 37	848 / 695 / 31	702 / 685 / 48	834 / 836 / 39	857 / 783 / 53	1026 / 954 / 43	879 / 746 / 52	1063 / 914 / 42	739 / 593 / 36	889 / 735 / 29	739 / 728 / 46	868 / 874 / 36	895 / 823 / 50	1101 / 1028 / 41	922 / 785 / 48	1098 / 947 / 39	7.5 - 15							
	2	848 / 695 / 31	1028 / 861 / 25	834 / 851 / 39	981 / 1018 / 31	1026 / 967 / 43	1222 / 1165 / 34	1063 / 927 / 42	1280 / 1128 / 34	889 / 735 / 29	1064 / 896 / 24	868 / 890 / 36	1050 / 1093 / 30	1101 / 1042 / 41	1300 / 1242 / 33	1098 / 961 / 39	1365 / 1205 / 32	2 = 2							
	3	815 / 1025 / 23	958 / 1223 / 18	951 / 965 / 34	1132 / 1164 / 27	1197 / 1123 / 38	1462 / 1382 / 31	1194 / 1034 / 36	1459 / 1273 / 29	835 / 1055 / 21	1015 / 1300 / 17	1021 / 1040 / 32	1203 / 1241 / 26	1218 / 1145 / 34	1546 / 1464 / 29	1276 / 1107 / 34	1543 / 1348 / 28	3 = 3							
Wind Speed [mph]		190								200															
0	1	776 / 628 / 28	924 / 767 / 23	771 / 765 / 29	928 / 939 / 23	961 / 887 / 30	1123 / 1051 / 24	956 / 818 / 33	1170 / 1012 / 27	809 / 660 / 27	985 / 823 / 22	798 / 796 / 27	986 / 1002 / 23	986 / 914 / 28	1186 / 1113 / 23	1020 / 875 / 31	1239 / 1074 / 26	ASCE Group Zone							
	2	924 / 767 / 23	1135 / 960 / 19	928 / 956 / 23	1114 / 1164 / 19	1123 / 1065 / 24	1370 / 1312 / 19	1170 / 1027 / 27	1444 / 1276 / 22	985 / 823 / 22	1203 / 1020 / 18	947 / 979 / 22	1174 / 1230 / 18	1186 / 1128 / 23	1433 / 1374 / 18	1239 / 1089 / 26	1514 / 1340 / 21	Panal Angle							
	3	885 / 1123 / 17	1067 / 1369 / 14	1040 / 1064 / 20	1268 / 1311 / 16	1288 / 1213 / 20	1620 / 1537 / 17	1352 / 1176 / 23	1617 / 1415 / 19	932 / 1187 / 16	1111 / 1428 / 13	1098 / 1127 / 19	1325 / 1373 / 15	1350 / 1275 / 19	1422 / 1239 / 22			Mono Slope							
5	1	776 / 628 / 28	924 / 767 / 23	771 / 765 / 33	928 / 939 / 27	961 / 887 / 37	1123 / 1051 / 29	956 / 818 / 37	1170 / 1012 / 31	809 / 660 / 27	985 / 823 / 22	798 / 796 / 31	986 / 1002 / 26	986 / 914 / 34	1186 / 1113 / 28	1020 / 875 / 36	1239 / 1074 / 29	0 - 7.5							
	2	924 / 767 / 23	1135 / 960 / 19	928 / 956 / 27	1114 / 1164 / 22	1123 / 1065 / 29	1370 / 1312 / 24	1170 / 1027 / 31	1444 / 1276 / 25	985 / 823 / 22	1203 / 1020 / 18	947 / 979 / 25	1174 / 1230 / 21	1186 / 1128 / 28	1433 / 1374 / 23	1239 / 1089 / 29	1514 / 1340 / 24	2 = 2							
	3	885 / 1123 / 17	1067 / 1369 / 14	1040 / 1064 / 23	1268 / 1311 / 19	1288 / 1213 / 25	1620 / 1537 / 21	1352 / 1176 / 27	1617 / 1415 / 21	932 / 1187 / 16	1111 / 1428 / 13	1098 / 1127 / 22	1325 / 1373 / 18	1350 / 1275 / 24	1422 / 1239 / 25			3 = 3							
10	1	776 / 628 / 34	924 / 767 / 27	771 / 765 / 43	928 / 939 / 35	961 / 887 / 48	1123 / 1051 / 38	956 / 818 / 45	1170 / 1012 / 37	809 / 660 / 32	985 / 823 / 26	798 / 796 / 40	986 / 1002 / 34	986 / 914 / 45	1186 / 1113 / 36	1020 / 875 / 44	1239 / 1074 / 36	7.5 - 15							
	2	924 / 767 / 27	1135 / 960 / 23	928 / 956 / 35	1114 / 1164 / 28	1123 / 1065 / 38	1370 / 1312 / 31	1170 / 1027 / 37	1444 / 1276 / 31	985 / 823 / 26	1203 / 1020 / 22	947 / 979 / 32	1174 / 1230 / 27	1186 / 1128 / 36	1433 / 1374 / 29	1239 / 1089 / 36	1514 / 1340 / 29	2 = 2							
	3	885 / 1123 / 20	1067 / 1369 / 16	1040 / 1064 / 30	1268 / 1311 / 24	1288 / 1213 / 33	1620 / 1537 / 28	1352 / 1176 / 32	1617 / 1415 / 26	932 / 1187 / 19	1111 / 1428 / 15	1098 / 1127 / 28	1325 / 1373 / 23	1350 / 1275 / 31	1422 / 1239 / 31			3 = 3							

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

$x \geq 72''$	64" to 71"	48" to 63"	$x \leq 47''$
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof			30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]			95								100								105							
Panal Angle			0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	
																										15
25	1	587 / 296 / 67	646 / 408 / 60	597 / 405 / 103	652 / 540 / 89	579 / 494 / 125	689 / 612 / 101	571 / 457 / 106	701 / 579 / 88	602 / 320 / 66	667 / 439 / 59	602 / 429 / 99	659 / 567 / 85	603 / 520 / 119	731 / 653 / 99	596 / 480 / 102	725 / 603 / 84	605 / 338 / 63	672 / 460 / 56	618 / 460 / 97	665 / 591 / 81	624 / 543 / 114	751 / 675 / 94	618 / 502 / 97	746 / 623 / 80	
	15	1	582 / 376 / 57	640 / 490 / 48	592 / 502 / 82	639 / 613 / 66	644 / 564 / 88	790 / 714 / 74	652 / 534 / 81	785 / 659 / 66	599 / 401 / 56	648 / 508 / 46	597 / 523 / 79	654 / 632 / 62	677 / 597 / 86	803 / 729 / 69	671 / 552 / 78	822 / 693 / 64	ASCE Group Zone	Panal Angle	Mono Slope					
		2	640 / 490 / 48	757 / 611 / 39	639 / 624 / 66	752 / 758 / 53	767 / 703 / 72	936 / 875 / 59	785 / 668 / 66	965 / 837 / 55	648 / 508 / 46	793 / 645 / 38	654 / 643 / 62	786 / 795 / 51	803 / 739 / 69	974 / 914 / 57	822 / 703 / 64	1006 / 875 / 53			1 = 1					
		3	620 / 753 / 36	720 / 898 / 29	714 / 701 / 56	869 / 874 / 46	894 / 821 / 63	1063 / 991 / 51	890 / 757 / 57	1104 / 951 / 48	628 / 767 / 34	747 / 935 / 27	747 / 737 / 54	904 / 912 / 44	933 / 859 / 61	1100 / 1028 / 49	929 / 792 / 55	1144 / 988 / 46			2 = 2					
	20	1	619 / 362 / 62	692 / 490 / 55	635 / 492 / 95	669 / 613 / 78	644 / 564 / 109	790 / 714 / 91	652 / 534 / 95	785 / 659 / 77	634 / 386 / 61	695 / 508 / 52	651 / 523 / 93	670 / 632 / 74	677 / 597 / 106	803 / 729 / 86	671 / 552 / 91	822 / 693 / 75	3 = 3							
		2	692 / 490 / 55	757 / 611 / 45	669 / 624 / 78	752 / 758 / 62	767 / 703 / 88	936 / 875 / 73	785 / 668 / 77	965 / 837 / 64	695 / 508 / 52	793 / 645 / 44	670 / 643 / 74	786 / 795 / 60	803 / 739 / 86	974 / 914 / 70	822 / 703 / 75	1006 / 875 / 62	1 = 1							
		3	629 / 753 / 41	720 / 898 / 33	714 / 701 / 66	869 / 874 / 54	894 / 821 / 78	1063 / 991 / 63	890 / 757 / 66	1104 / 951 / 55	628 / 767 / 39	747 / 935 / 31	747 / 737 / 64	904 / 912 / 53	933 / 859 / 75	1100 / 1028 / 60	929 / 792 / 64	1144 / 988 / 53	2 = 2							
	25	1	619 / 362 / 62	692 / 490 / 55	635 / 492 / 95	669 / 613 / 78	644 / 564 / 131	790 / 714 / 109	652 / 534 / 111	785 / 659 / 91	634 / 386 / 61	695 / 508 / 52	651 / 523 / 93	670 / 632 / 74	677 / 597 / 128	803 / 729 / 103	671 / 552 / 106	822 / 693 / 88	3 = 3							
		2	692 / 490 / 55	757 / 611 / 45	669 / 624 / 78	752 / 758 / 62	767 / 703 / 106	936 / 875 / 88	785 / 668 / 91	965 / 837 / 75	695 / 508 / 52	793 / 645 / 44	670 / 643 / 74	786 / 795 / 60	803 / 739 / 103	974 / 914 / 84	822 / 703 / 88	1006 / 875 / 73	1 = 1							
3		629 / 753 / 41	720 / 898 / 33	714 / 701 / 66	869 / 874 / 54	894 / 821 / 94	1063 / 991 / 75	890 / 757 / 78	1104 / 951 / 65	628 / 767 / 39	747 / 935 / 31	747 / 737 / 64	904 / 912 / 53	933 / 859 / 91	1100 / 1028 / 72	929 / 792 / 75	1144 / 988 / 62	2 = 2								
15	1	603 / 418 / 53	679 / 536 / 45	602 / 543 / 75	684 / 665 / 61	692 / 614 / 82	838 / 764 / 67	703 / 582 / 76	833 / 705 / 61	599 / 401 / 56	648 / 508 / 46	597 / 523 / 79	654 / 632 / 62	677 / 597 / 86	803 / 729 / 69	671 / 552 / 78	822 / 693 / 64	ASCE Group Zone	Panal Angle	Mono Slope						
	2	679 / 536 / 45	828 / 677 / 37	684 / 677 / 61	818 / 831 / 49	838 / 774 / 67	1010 / 950 / 55	833 / 715 / 61	1006 / 877 / 49	648 / 508 / 46	793 / 645 / 38	654 / 643 / 62	786 / 795 / 51	803 / 739 / 69	974 / 914 / 57	822 / 703 / 64	1006 / 875 / 53			3 = 3						
	3	653 / 802 / 33	772 / 969 / 26	779 / 773 / 53	937 / 949 / 43	970 / 896 / 59	1134 / 1061 / 46	965 / 826 / 53	1182 / 1022 / 44	628 / 767 / 34	747 / 935 / 27	747 / 737 / 54	904 / 912 / 44	933 / 859 / 61	1100 / 1028 / 49	929 / 792 / 55	1144 / 988 / 46			2 = 2						
20	1	648 / 410 / 60	713 / 536 / 51	653 / 543 / 89	688 / 665 / 72	692 / 614 / 101	838 / 764 / 83	703 / 582 / 88	833 / 705 / 71	634 / 386 / 61	695 / 508 / 52	651 / 523 / 93	670 / 632 / 74	677 / 597 / 106	803 / 729 / 86	671 / 552 / 91	822 / 693 / 75	3 = 3								
	2	713 / 536 / 51	828 / 677 / 42	688 / 677 / 72	818 / 831 / 58	838 / 774 / 83	1010 / 950 / 68	833 / 715 / 71	1006 / 877 / 58	695 / 508 / 52	793 / 645 / 44	670 / 643 / 74	786 / 795 / 60	803 / 739 / 86	974 / 914 / 70	822 / 703 / 75	1006 / 875 / 62	1 = 1								
	3	653 / 802 / 38	772 / 969 / 30	779 / 773 / 62	937 / 949 / 51	970 / 896 / 73	1134 / 1061 / 57	965 / 826 / 62	1182 / 1022 / 51	628 / 767 / 39	747 / 935 / 31	747 / 737 / 64	904 / 912 / 53	933 / 859 / 75	1100 / 1028 / 60	929 / 792 / 64	1144 / 988 / 53	2 = 2								
25	1	648 / 410 / 60	713 / 536 / 51	653 / 543 / 89	688 / 665 / 72	692 / 614 / 122	838 / 764 / 100	703 / 582 / 104	833 / 705 / 83	634 / 386 / 61	695 / 508 / 52	651 / 523 / 93	670 / 632 / 74	677 / 597 / 128	803 / 729 / 103	671 / 552 / 106	822 / 693 / 88	3 = 3								
	2	713 / 536 / 51	828 / 677 / 42	688 / 677 / 72	818 / 831 / 58	838 / 774 / 100	1010 / 950 / 81	833 / 715 / 83	1006 / 877 / 68	695 / 508 / 52	793 / 645 / 44	670 / 643 / 74	786 / 795 / 60	803 / 739 / 103	974 / 914 / 84	822 / 703 / 88	1006 / 875 / 73	1 = 1								
	3	653 / 802 / 38	772 / 969 / 30	779 / 773 / 62	937 / 949 / 51	970 / 896 / 88	1134 / 1061 / 69	965 / 826 / 73	1182 / 1022 / 60	628 / 767 / 39	747 / 935 / 31	747 / 737 / 64	904 / 912 / 53	933 / 859 / 91	1100 / 1028 / 72	929 / 792 / 75	1144 / 988 / 62	2 = 2								

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, inft(m).
h=Mean roof height, inft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	619 / 442 / 52	692 / 550 / 43	605 / 560 / 72	713 / 697 / 59	722 / 645 / 80	871 / 797 / 65	717 / 596 / 72	866 / 735 / 59	636 / 480 / 49	748 / 602 / 40	631 / 602 / 67	746 / 736 / 54	760 / 685 / 74	932 / 858 / 61	776 / 650 / 68	927 / 791 / 55	654 / 513 / 46	800 / 651 / 38	660 / 638 / 62	793 / 789 / 51	811 / 737 / 69	984 / 911 / 57	806 / 680 / 63	980 / 839 / 51
	2	692 / 550 / 43	836 / 686 / 35	693 / 690 / 57	848 / 866 / 48	871 / 808 / 65	1043 / 984 / 53	866 / 746 / 59	1081 / 943 / 49	748 / 602 / 40	895 / 741 / 33	746 / 750 / 54	903 / 927 / 44	900 / 840 / 59	1099 / 1040 / 49	927 / 803 / 55	1143 / 1001 / 46	800 / 651 / 38	947 / 789 / 31	793 / 803 / 51	948 / 979 / 41	984 / 923 / 57	1193 / 1134 / 46	980 / 852 / 51	1190 / 1045 / 42
	3	677 / 835 / 32	828 / 1043 / 26	809 / 806 / 51	967 / 982 / 41	1004 / 930 / 57	1218 / 1142 / 46	1000 / 857 / 51	1214 / 1052 / 42	719 / 894 / 30	868 / 1099 / 24	835 / 838 / 46	1018 / 1039 / 38	1064 / 990 / 53	1268 / 1193 / 42	1060 / 913 / 48	1328 / 1154 / 40	754 / 944 / 27	940 / 1196 / 23	913 / 922 / 44	1105 / 1132 / 36	1111 / 1038 / 49	1369 / 1291 / 40	1156 / 998 / 46	1366 / 1189 / 36
20	1	662 / 433 / 59	713 / 550 / 49	654 / 560 / 85	713 / 697 / 70	722 / 645 / 99	871 / 797 / 81	717 / 596 / 84	866 / 735 / 69	690 / 480 / 56	748 / 602 / 46	667 / 602 / 80	746 / 736 / 64	760 / 685 / 91	932 / 858 / 75	776 / 650 / 80	927 / 791 / 64	699 / 513 / 52	800 / 651 / 44	675 / 638 / 74	793 / 789 / 60	811 / 737 / 86	984 / 911 / 70	806 / 680 / 73	980 / 839 / 60
	2	713 / 550 / 49	836 / 686 / 40	693 / 690 / 68	848 / 866 / 56	871 / 808 / 81	1043 / 984 / 65	866 / 746 / 69	1081 / 943 / 58	748 / 602 / 46	895 / 741 / 38	746 / 750 / 64	903 / 927 / 53	900 / 840 / 73	1099 / 1040 / 60	927 / 803 / 64	1143 / 1001 / 53	800 / 651 / 44	947 / 789 / 35	793 / 803 / 60	948 / 979 / 49	984 / 923 / 70	1193 / 1134 / 57	980 / 852 / 60	1190 / 1045 / 49
	3	677 / 835 / 36	828 / 1043 / 30	809 / 806 / 60	967 / 982 / 49	1004 / 930 / 70	1218 / 1142 / 57	1000 / 857 / 60	1214 / 1052 / 49	719 / 894 / 34	868 / 1099 / 28	835 / 838 / 54	1018 / 1039 / 45	1064 / 990 / 65	1268 / 1193 / 52	1060 / 913 / 55	1328 / 1154 / 47	754 / 944 / 31	940 / 1196 / 26	913 / 922 / 53	1105 / 1132 / 43	1111 / 1038 / 60	1369 / 1291 / 50	1156 / 998 / 53	1366 / 1189 / 42
25	1	662 / 433 / 59	713 / 550 / 49	654 / 560 / 85	713 / 697 / 70	722 / 645 / 119	871 / 797 / 97	717 / 596 / 98	866 / 735 / 80	690 / 480 / 56	748 / 602 / 46	667 / 602 / 80	746 / 736 / 64	760 / 685 / 109	932 / 858 / 91	776 / 650 / 93	927 / 791 / 75	699 / 513 / 52	800 / 651 / 44	675 / 638 / 74	793 / 789 / 60	811 / 737 / 103	984 / 911 / 84	806 / 680 / 86	980 / 839 / 70
	2	713 / 550 / 49	836 / 686 / 40	693 / 690 / 68	848 / 866 / 56	871 / 808 / 97	1043 / 984 / 78	866 / 746 / 80	1081 / 943 / 68	748 / 602 / 46	895 / 741 / 38	746 / 750 / 64	903 / 927 / 53	900 / 840 / 88	1099 / 1040 / 72	927 / 803 / 75	1143 / 1001 / 62	800 / 651 / 44	947 / 789 / 35	793 / 803 / 60	948 / 979 / 49	984 / 923 / 84	1193 / 1134 / 69	980 / 852 / 70	1190 / 1045 / 57
	3	677 / 835 / 36	828 / 1043 / 30	809 / 806 / 60	967 / 982 / 49	1004 / 930 / 84	1218 / 1142 / 69	1000 / 857 / 70	1214 / 1052 / 57	719 / 894 / 34	868 / 1099 / 28	835 / 838 / 54	1018 / 1039 / 45	1064 / 990 / 78	1268 / 1193 / 63	1060 / 913 / 65	1328 / 1154 / 55	754 / 944 / 31	940 / 1196 / 26	913 / 922 / 53	1105 / 1132 / 43	1111 / 1038 / 72	1369 / 1291 / 60	1156 / 998 / 62	1366 / 1189 / 49
Wind Speed [mph]		170								180															
15	1	698 / 554 / 44	848 / 695 / 36	702 / 685 / 59	834 / 836 / 48	857 / 783 / 65	1026 / 954 / 53	879 / 746 / 61	1063 / 914 / 49	739 / 593 / 42	889 / 735 / 34	739 / 728 / 56	868 / 874 / 44	895 / 823 / 61	1101 / 1028 / 51	922 / 785 / 57	1098 / 947 / 46								
	2	848 / 695 / 36	1028 / 861 / 30	834 / 851 / 48	981 / 1018 / 38	1026 / 967 / 53	1222 / 1165 / 42	1063 / 927 / 49	1280 / 1128 / 40	889 / 735 / 34	1064 / 896 / 27	868 / 890 / 44	1050 / 1093 / 36	1101 / 1042 / 51	1300 / 1242 / 40	1098 / 961 / 46	1365 / 1205 / 38								
	3	815 / 1025 / 26	958 / 1223 / 21	951 / 965 / 41	1132 / 1164 / 33	1197 / 1123 / 46	1462 / 1382 / 38	1194 / 1034 / 42	1459 / 1273 / 34	835 / 1055 / 24	1015 / 1300 / 20	1021 / 1040 / 40	1203 / 1241 / 31	1218 / 1145 / 42	1546 / 1464 / 36	1276 / 1107 / 40	1543 / 1348 / 32								
20	1	723 / 554 / 50	848 / 695 / 41	702 / 685 / 70	834 / 836 / 56	857 / 783 / 81	1026 / 954 / 65	879 / 746 / 71	1063 / 914 / 58	743 / 593 / 47	889 / 735 / 39	739 / 728 / 66	868 / 874 / 53	895 / 823 / 75	1101 / 1028 / 63	922 / 785 / 66	1098 / 947 / 53								
	2	848 / 695 / 41	1028 / 861 / 34	834 / 851 / 56	981 / 1018 / 45	1026 / 967 / 65	1222 / 1165 / 52	1063 / 927 / 58	1280 / 1128 / 47	889 / 735 / 39	1064 / 896 / 31	868 / 890 / 53	1050 / 1093 / 43	1101 / 1042 / 63	1300 / 1242 / 50	1098 / 961 / 53	1365 / 1205 / 44								
	3	815 / 1025 / 30	958 / 1223 / 24	951 / 965 / 49	1132 / 1164 / 39	1197 / 1123 / 57	1462 / 1382 / 47	1194 / 1034 / 49	1459 / 1273 / 40	835 / 1055 / 28	1015 / 1300 / 23	1021 / 1040 / 47	1203 / 1241 / 37	1218 / 1145 / 52	1546 / 1464 / 44	1276 / 1107 / 47	1543 / 1348 / 38								
25	1	723 / 554 / 50	848 / 695 / 41	702 / 685 / 70	834 / 836 / 56	857 / 783 / 97	1026 / 954 / 78	879 / 746 / 83	1063 / 914 / 68	743 / 593 / 47	889 / 735 / 39	739 / 728 / 66	868 / 874 / 53	895 / 823 / 91	1101 / 1028 / 75	922 / 785 / 78	1098 / 947 / 62								
	2	848 / 695 / 41	1028 / 861 / 34	834 / 851 / 56	981 / 1018 / 45	1026 / 967 / 78	1222 / 1165 / 63	1063 / 927 / 68	1280 / 1128 / 55	889 / 735 / 39	1064 / 896 / 31	868 / 890 / 53	1050 / 1093 / 43	1101 / 1042 / 75	1300 / 1242 / 60	1098 / 961 / 62	1365 / 1205 / 52								
	3	815 / 1025 / 30	958 / 1223 / 24	951 / 965 / 49	1132 / 1164 / 39	1197 / 1123 / 69	1462 / 1382 / 56	1194 / 1034 / 57	1459 / 1273 / 47	835 / 1055 / 28	1015 / 1300 / 23	1021 / 1040 / 47	1203 / 1241 / 37	1218 / 1145 / 63	1546 / 1464 / 53	1276 / 1107 / 55	1543 / 1348 / 44								
Wind Speed [mph]		190								200															
15	1	776 / 628 / 39	924 / 767 / 32	771 / 765 / 53	928 / 939 / 43	961 / 887 / 59	1123 / 1051 / 46	956 / 818 / 53	1170 / 1012 / 44	809 / 660 / 37	985 / 823 / 31	798 / 796 / 49	986 / 1002 / 41	986 / 914 / 55	1186 / 1113 / 44	1020 / 875 / 51	1239 / 1074 / 42								
	2	924 / 767 / 32	1135 / 960 / 26	928 / 956 / 43	1114 / 1164 / 35	1123 / 1065 / 46	1370 / 1312 / 38	1170 / 1027 / 44	1444 / 1276 / 36	985 / 823 / 31	1203 / 1020 / 25	947 / 979 / 40	1174 / 1230 / 33	1186 / 1128 / 44	1433 / 1374 / 36	1239 / 1089 / 42	1514 / 1340 / 34								
	3	885 / 1123 / 23	1067 / 1369 / 19	1040 / 1064 / 36	1268 / 1311 / 30	1288 / 1213 / 40	1620 / 1537 / 34	1352 / 1176 / 38	1617 / 1415 / 31	932 / 1187 / 22	1111 / 1428 / 18	1098 / 1127 / 35	1325 / 1373 / 28	1350 / 1275 / 38	1422 / 1239 / 36										
20	1	776 / 628 / 45	924 / 767 / 36	771 / 765 / 62	928 / 939 / 51	961 / 887 / 73	1123 / 1051 / 57	956 / 818 / 62	1170 / 1012 / 51	809 / 660 / 42	985 / 823 / 35	798 / 796 / 58	986 / 1002 / 49	986 / 914 / 68	1186 / 1113 / 55	1020 / 875 / 60	1239 / 1074 / 49								
	2	924 / 767 / 36	1135 / 960 / 30	928 / 956 / 51	1114 / 1164 / 41	1123 / 1065 / 57	1370 / 1312 / 47	1170 / 1027 / 51	1444 / 1276 / 42	985 / 823 / 35	1203 / 1020 / 29	947 / 979 / 47	1174 / 1230 / 39	1186 / 1128 / 55	1433 / 1374 / 44	1239 / 1089 / 49	1514 / 1340 / 40								
	3	885 / 1123 / 26	1067 / 1369 / 21	1040 / 1064 / 43	1268 / 1311 / 35	1288 / 1213 / 50	1620 / 1537 / 44	1352 / 1176 / 44	1617 / 1415 / 36	932 / 1187 / 25	1111 / 1428 / 20	1098 / 1127 / 41	1325 / 1373 / 33	1350 / 1275 / 47	1422 / 1239 / 42										
25	1	776 / 628 / 45	924 / 767 / 36	771 / 765 / 62	928 / 939 / 51	961 / 887 / 88	1123 / 1051 / 69	956 / 818 / 73	1170 / 1012 / 60	809 / 660 / 42	985 / 823 / 35	798 / 796 / 58	986 / 1002 / 49	986 / 914 / 81	1186 / 1113 / 66	1020 / 875 / 70	1239 / 1074 / 57								
	2	924 / 767 / 36	1135 / 960 / 30	928 / 956 / 51	1114 / 1164 / 41	1123 / 1065 / 69	1370 / 1312 / 56	1170 / 1027 / 60	1444 / 1276 / 49	985 / 823 / 35	1203 / 1020 / 29	947 / 979 / 47	1174 / 1230 / 39	1186 / 1128 / 66	1433 / 1374 / 53	1239 / 1089 / 57	1514 / 1340 / 47								
	3	885 / 1123 / 26	1067 / 1369 / 21	1040 / 1064 / 43	1268 / 1311 / 35	1288 / 1213 / 69	1620 / 1537 / 56	1352 / 1176 / 60	1617 / 1415 / 42	932 / 1187 / 25	1111 / 1428 / 20	1098 / 1127 / 41	1325 / 1373 / 33	1350 / 1275 / 56	1422 / 1239 / 49										

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)

a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
	30	1	610 / 290 / 70	663 / 399 / 62	617 / 398 / 109	680 / 540 / 97	641 / 494 / 175	689 / 612 / 142	571 / 457 / 142	701 / 579 / 119	624 / 314 / 69	682 / 429 / 61	620 / 420 / 105	686 / 567 / 92	650 / 520 / 168	731 / 653 / 139	596 / 480 / 137	725 / 603 / 113	625 / 331 / 66	685 / 450 / 59	635 / 451 / 103	690 / 591 / 88	658 / 543 / 160	751 / 675 / 131	618 / 502 / 131
	2	663 / 399 / 62	737 / 534 / 55	665 / 538 / 94	708 / 674 / 78	689 / 620 / 142	835 / 771 / 117	701 / 588 / 119	830 / 712 / 95	682 / 429 / 61	744 / 557 / 52	670 / 564 / 90	713 / 699 / 74	712 / 645 / 135	853 / 792 / 110	725 / 612 / 113	876 / 755 / 92	685 / 450 / 59	767 / 593 / 51	674 / 588 / 86	717 / 719 / 69	751 / 685 / 131	895 / 834 / 106	746 / 632 / 107	922 / 797 / 89
	3	618 / 650 / 49	656 / 798 / 40	690 / 618 / 82	776 / 769 / 67	791 / 717 / 124	966 / 892 / 102	786 / 661 / 101	962 / 822 / 83	635 / 693 / 48	684 / 845 / 39	713 / 660 / 80	792 / 790 / 63	837 / 762 / 120	978 / 907 / 95	832 / 703 / 98	1012 / 868 / 80	634 / 714 / 45	717 / 890 / 37	716 / 683 / 76	831 / 833 / 61	854 / 781 / 113	1022 / 950 / 91	876 / 743 / 95	1059 / 911 / 77
	1	633 / 279 / 74	690 / 391 / 67	635 / 382 / 119	703 / 528 / 107	660 / 484 / 196	711 / 612 / 163	571 / 457 / 161	701 / 579 / 134	644 / 302 / 72	707 / 420 / 65	649 / 412 / 117	707 / 554 / 103	667 / 508 / 188	738 / 653 / 159	596 / 480 / 154	725 / 603 / 127	656 / 325 / 71	708 / 439 / 62	663 / 442 / 114	726 / 591 / 100	688 / 543 / 184	751 / 675 / 150	618 / 502 / 147	746 / 623 / 121
	2	690 / 391 / 67	755 / 521 / 58	703 / 538 / 107	740 / 674 / 88	711 / 620 / 163	835 / 771 / 134	701 / 588 / 134	830 / 712 / 107	707 / 420 / 65	778 / 557 / 57	707 / 564 / 103	742 / 699 / 84	718 / 645 / 154	853 / 792 / 125	725 / 612 / 127	876 / 755 / 104	708 / 439 / 62	801 / 593 / 55	709 / 588 / 98	742 / 719 / 79	751 / 685 / 150	895 / 834 / 121	746 / 632 / 121	922 / 797 / 101
	3	651 / 650 / 54	683 / 798 / 44	723 / 382 / 93	780 / 769 / 76	791 / 717 / 142	966 / 892 / 117	786 / 661 / 114	962 / 822 / 94	668 / 693 / 52	702 / 845 / 42	745 / 660 / 91	792 / 790 / 72	837 / 762 / 138	978 / 907 / 109	832 / 703 / 111	1012 / 868 / 91	665 / 714 / 49	720 / 890 / 41	747 / 683 / 86	831 / 833 / 69	854 / 781 / 130	1022 / 950 / 105	876 / 743 / 107	1059 / 911 / 87
	1	665 / 274 / 127	715 / 382 / 114	664 / 375 / 170	725 / 517 / 153	677 / 473 / 221	738 / 612 / 188	571 / 457 / 179	701 / 579 / 149	675 / 296 / 124	731 / 411 / 112	677 / 404 / 167	743 / 554 / 150	698 / 508 / 217	764 / 653 / 183	596 / 480 / 171	725 / 603 / 142	686 / 318 / 122	747 / 439 / 109	689 / 433 / 163	743 / 577 / 143	702 / 531 / 207	768 / 675 / 173	618 / 502 / 164	746 / 623 / 134
	2	715 / 382 / 114	771 / 508 / 99	725 / 526 / 153	771 / 674 / 129	738 / 620 / 188	835 / 771 / 154	701 / 588 / 149	830 / 712 / 119	731 / 411 / 112	793 / 543 / 96	743 / 564 / 150	772 / 699 / 122	744 / 645 / 178	853 / 792 / 145	725 / 612 / 142	876 / 755 / 116	747 / 439 / 109	814 / 578 / 94	743 / 588 / 143	770 / 719 / 115	768 / 685 / 173	895 / 834 / 140	746 / 632 / 134	922 / 797 / 112
	3	684 / 650 / 94	710 / 798 / 76	756 / 618 / 136	807 / 769 / 111	791 / 717 / 164	966 / 892 / 135	786 / 661 / 127	962 / 822 / 105	700 / 693 / 91	728 / 845 / 74	778 / 660 / 132	805 / 790 / 104	837 / 762 / 159	978 / 907 / 125	832 / 703 / 123	1012 / 868 / 101	695 / 714 / 86	745 / 890 / 71	778 / 683 / 125	831 / 833 / 101	854 / 781 / 149	1022 / 950 / 121	876 / 743 / 119	1059 / 911 / 97
Wind Speed [mph]		110								115															
	1	638 / 354 / 65	704 / 479 / 57	651 / 482 / 101	693 / 613 / 84	664 / 564 / 153	790 / 714 / 128	652 / 534 / 128	785 / 659 / 104	651 / 378 / 64	722 / 508 / 56	666 / 512 / 99	693 / 632 / 80	684 / 597 / 150	803 / 729 / 120	671 / 552 / 122	822 / 693 / 101								
	2	704 / 479 / 57	770 / 611 / 48	693 / 624 / 84	752 / 758 / 67	767 / 703 / 124	936 / 875 / 102	785 / 668 / 104	965 / 837 / 86	722 / 508 / 56	793 / 645 / 47	693 / 643 / 80	786 / 795 / 65	803 / 739 / 120	974 / 914 / 99	822 / 703 / 101	1006 / 875 / 83								
	3	650 / 753 / 44	720 / 898 / 35	717 / 701 / 72	869 / 874 / 59	894 / 821 / 110	1063 / 991 / 88	890 / 757 / 89	1104 / 951 / 74	645 / 767 / 41	747 / 935 / 33	747 / 737 / 69	904 / 912 / 57	933 / 859 / 106	1100 / 1028 / 84	929 / 792 / 86	1144 / 988 / 71								
	1	668 / 347 / 69	725 / 468 / 61	677 / 472 / 112	727 / 613 / 95	692 / 564 / 175	790 / 714 / 146	652 / 534 / 144	785 / 659 / 117	680 / 370 / 68	741 / 496 / 59	691 / 501 / 110	725 / 632 / 91	712 / 597 / 171	803 / 729 / 138	671 / 552 / 137	822 / 693 / 114								
	2	725 / 468 / 61	802 / 611 / 52	727 / 624 / 95	762 / 758 / 76	767 / 703 / 142	936 / 875 / 117	785 / 668 / 117	965 / 837 / 97	741 / 496 / 59	822 / 645 / 51	725 / 643 / 91	786 / 795 / 74	803 / 739 / 138	974 / 914 / 113	822 / 703 / 114	1006 / 875 / 94								
	3	680 / 753 / 48	720 / 898 / 38	746 / 701 / 81	869 / 874 / 67	894 / 821 / 125	1063 / 991 / 100	890 / 757 / 101	1104 / 951 / 84	673 / 767 / 45	747 / 935 / 36	764 / 737 / 79	904 / 912 / 65	933 / 859 / 121	1100 / 1028 / 96	929 / 792 / 97	1144 / 988 / 81								
	1	696 / 340 / 119	744 / 457 / 104	702 / 462 / 160	761 / 613 / 139	721 / 564 / 202	791 / 714 / 169	652 / 534 / 160	785 / 659 / 131	706 / 362 / 117	759 / 484 / 102	714 / 490 / 156	758 / 632 / 132	740 / 597 / 197	803 / 729 / 159	671 / 552 / 153	822 / 693 / 127								
	2	744 / 457 / 104	834 / 611 / 91	761 / 624 / 139	789 / 758 / 111	768 / 703 / 164	936 / 875 / 135	785 / 668 / 131	965 / 837 / 108	759 / 484 / 102	854 / 645 / 89	758 / 643 / 132	807 / 795 / 108	803 / 739 / 159	974 / 914 / 130	822 / 703 / 127	1006 / 875 / 105								
	3	709 / 753 / 84	733 / 898 / 66	774 / 701 / 118	869 / 874 / 98	894 / 821 / 145	1063 / 991 / 116	890 / 757 / 112	1104 / 951 / 93	700 / 767 / 79	747 / 935 / 64	792 / 737 / 115	904 / 912 / 94	933 / 859 / 111	1100 / 1028 / 111	929 / 792 / 108	1144 / 988 / 90								
Wind Speed [mph]		120								130															
	1	664 / 401 / 62	739 / 536 / 55	681 / 543 / 97	710 / 665 / 78	692 / 614 / 142	838 / 764 / 117	703 / 582 / 119	833 / 705 / 95	651 / 378 / 64	722 / 508 / 56	666 / 512 / 99	693 / 632 / 80	684 / 597 / 150	803 / 729 / 120	671 / 552 / 122	822 / 693 / 101								
	2	739 / 536 / 55	828 / 677 / 45	710 / 677 / 78	818 / 831 / 63	838 / 774 / 117	1010 / 950 / 95	833 / 715 / 95	1006 / 877 / 77	722 / 508 / 56	793 / 645 / 47	693 / 643 / 80	786 / 795 / 65	803 / 739 / 120	974 / 914 / 99	822 / 703 / 101	1006 / 875 / 83								
	3	658 / 802 / 40	772 / 969 / 32	779 / 773 / 67	937 / 949 / 55	970 / 896 / 102	1134 / 1061 / 80	965 / 826 / 83	1182 / 1022 / 69	645 / 767 / 41	747 / 935 / 33	747 / 737 / 69	904 / 912 / 57	933 / 859 / 106	1100 / 1028 / 84	929 / 792 / 86	1144 / 988 / 71								
	1	691 / 392 / 67	757 / 523 / 58	705 / 531 / 107	742 / 665 / 88	713 / 614 / 163	838 / 764 / 134	703 / 582 / 134	833 / 705 / 107	680 / 370 / 68	741 / 496 / 59	691 / 501 / 110	725 / 632 / 91	712 / 597 / 171	803 / 729 / 138	671 / 552 / 137	822 / 693 / 114								
	2	757 / 523 / 58	842 / 677 / 49	742 / 677 / 88	818 / 831 / 72	838 / 774 / 134	1010 / 950 / 109	833 / 715 / 107	1006 / 877 / 87	741 / 496 / 59	822 / 645 / 51	725 / 643 / 91	786 / 795 / 74	803 / 739 / 138	974 / 914 / 113	822 / 703 / 114	1006 / 875 / 94								
	3	685 / 802 / 44	772 / 969 / 35	782 / 773 / 76	937 / 949 / 62	970 / 896 / 117	1134 / 1061 / 92	965 / 826 / 94	1182 / 1022 / 77	673 / 767 / 45	747 / 935 / 36	764 / 737 / 79	904 / 912 / 65	933 / 859 / 121	1100 / 1028 / 96	929 / 792 / 97	1144 / 988 / 81								
	1	716 / 384 / 114	773 / 510 / 99	726 / 519 / 153	773 / 665 / 129	740 / 614 / 188	838 / 764 / 154	703 / 582 / 149	833 / 705 / 119	706 / 362 / 117	759 / 484 / 102	714 / 490 / 156	758 / 632 / 132	740 / 597 / 197	803 / 729 / 159	671 / 552 / 153	822 / 693 / 127								
	2	773 / 510 / 99	873 / 677 / 86	773 / 677 / 129	824 / 831 / 104	838 / 774 / 154	1010 / 950 / 125	833 / 715 / 119	1006 / 877 / 97	759 / 484 / 102	854 / 645 / 89	758 / 643 / 132	807 / 795 / 108	803 / 739 / 159	974 / 914 / 130	822 / 703 / 127	1006 / 875 / 105								
	3	712 / 802 / 76	772 / 969 / 61	809 / 773 / 111	937 / 949 / 91	970 / 896 / 135	1134 / 1061 / 106	965 / 826 / 105	1182 / 1022 / 86	700 / 767 / 79	747 / 935 / 64	792 / 737 / 115	904 / 912 / 94	933 / 859 / 140	1100 / 1028 / 111	929 / 792 / 108	1144 / 988 / 90								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																																										
Wind Speed [mph]		140										150										160																										
Panal Angle		0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45			0 - 7.5			7.5 - 15			15 - 30			30 - 45													
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge												
		30	1	677 / 424 / 61	738 / 550 / 52	681 / 560 / 92	727 / 697 / 76	722 / 645 / 139	871 / 797 / 113	717 / 596 / 113	866 / 735 / 92	702 / 469 / 59	769 / 602 / 49	692 / 602 / 86	746 / 736 / 69	760 / 685 / 128	932 / 858 / 106	776 / 650 / 107	927 / 791 / 86	726 / 513 / 56	800 / 651 / 47	698 / 638 / 80	793 / 789 / 65	811 / 737 / 120	984 / 911 / 99	806 / 680 / 98	980 / 839 / 80	738 / 550 / 52	681 / 560 / 92	727 / 697 / 76	722 / 645 / 139	871 / 797 / 113	717 / 596 / 113	866 / 735 / 92	702 / 469 / 59	769 / 602 / 49	692 / 602 / 86	746 / 736 / 69	760 / 685 / 128	932 / 858 / 106	776 / 650 / 107	927 / 791 / 86	726 / 513 / 56	800 / 651 / 47	698 / 638 / 80	793 / 789 / 65	811 / 737 / 120	984 / 911 / 99

Exposure Category : B

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		45	1	681 / 263 / 133	739 / 374 / 122	692 / 367 / 183	745 / 505 / 164	693 / 463 / 238	765 / 612 / 207	571 / 457 / 197	701 / 579 / 164	690 / 284 / 130	753 / 402 / 119	703 / 395 / 180	762 / 541 / 160	712 / 497 / 233	790 / 653 / 201	596 / 480 / 189	725 / 603 / 156	713 / 311 / 130	767 / 429 / 117	714 / 423 / 176	778 / 577 / 157	731 / 531 / 228	792 / 675 / 191
Wind Speed [mph]		110								115															
45	1	722 / 333 / 128	781 / 457 / 114	725 / 452 / 172	795 / 613 / 153	732 / 511 / 217	815 / 714 / 186	652 / 534 / 177	785 / 659 / 144	731 / 354 / 125	795 / 484 / 111	736 / 480 / 168	790 / 632 / 145	750 / 583 / 212	812 / 729 / 175	671 / 552 / 168	822 / 693 / 140	ASCE Group Zone							
45	2	781 / 457 / 114	866 / 611 / 100	795 / 624 / 153	816 / 758 / 122	792 / 703 / 180	936 / 875 / 149	785 / 668 / 144	965 / 837 / 119	795 / 484 / 111	885 / 645 / 97	790 / 643 / 145	834 / 795 / 119	812 / 739 / 175	974 / 914 / 143	822 / 703 / 140	1006 / 875 / 115	Panal Angle		Mono Slope					
	3	739 / 753 / 92	756 / 898 / 72	803 / 701 / 130	872 / 874 / 107	894 / 821 / 127	1063 / 991 / 123	890 / 757 / 103	1104 / 951 / 103	728 / 767 / 86	768 / 935 / 159	820 / 737 / 126	904 / 912 / 103	933 / 859 / 154	1100 / 1028 / 122	929 / 792 / 119	1144 / 988 / 99	0 - 7.5		1 = 1					
50	1	747 / 326 / 136	798 / 445 / 121	746 / 442 / 183	808 / 598 / 162	760 / 551 / 237	839 / 714 / 203	652 / 534 / 193	785 / 659 / 157	754 / 346 / 133	810 / 471 / 118	756 / 469 / 179	822 / 632 / 158	777 / 583 / 232	835 / 729 / 191	671 / 552 / 184	822 / 693 / 153	7.5 - 15		2 = 2					
	2	798 / 445 / 121	873 / 594 / 106	808 / 609 / 162	843 / 758 / 133	815 / 703 / 197	936 / 875 / 162	785 / 668 / 157	965 / 837 / 130	810 / 471 / 118	890 / 626 / 102	822 / 643 / 158	860 / 795 / 129	835 / 739 / 191	974 / 914 / 156	822 / 703 / 153	1006 / 875 / 126	15 - 30		2 = 2					
60	3	768 / 753 / 100	779 / 898 / 79	832 / 701 / 142	896 / 874 / 117	894 / 821 / 174	1063 / 991 / 139	890 / 757 / 135	1104 / 951 / 112	756 / 767 / 94	790 / 935 / 76	848 / 737 / 137	914 / 912 / 113	933 / 859 / 168	1100 / 1028 / 133	929 / 792 / 130	1144 / 988 / 108	30 - 45		1 = 1					
	1	791 / 311 / 150	848 / 434 / 136	784 / 421 / 204	852 / 582 / 184	796 / 537 / 272	887 / 714 / 238	652 / 534 / 204	785 / 659 / 184	795 / 331 / 147	857 / 459 / 133	790 / 447 / 199	863 / 615 / 179	811 / 568 / 225	880 / 729 / 215	671 / 552 / 215	822 / 693 / 178	0 - 7.5		2 = 2					
60	2	848 / 434 / 136	909 / 577 / 119	852 / 593 / 184	898 / 758 / 155	861 / 703 / 231	938 / 875 / 191	785 / 668 / 184	965 / 837 / 152	857 / 459 / 133	923 / 608 / 115	863 / 626 / 179	913 / 795 / 150	880 / 739 / 225	974 / 914 / 184	822 / 703 / 178	1006 / 875 / 147	7.5 - 15		3 = 3					
	3	828 / 753 / 115	826 / 898 / 91	890 / 701 / 165	944 / 874 / 136	923 / 821 / 204	1063 / 991 / 163	890 / 757 / 158	1104 / 951 / 131	811 / 767 / 108	835 / 935 / 88	904 / 737 / 160	960 / 912 / 131	944 / 859 / 197	1100 / 1028 / 157	929 / 792 / 152	1144 / 988 / 126	15 - 30		1 = 1					
Wind Speed [mph]		120								130															
45	1	740 / 375 / 122	808 / 510 / 108	746 / 507 / 164	805 / 665 / 141	767 / 614 / 207	838 / 764 / 170	703 / 582 / 164	833 / 705 / 132	731 / 354 / 125	795 / 484 / 111	736 / 480 / 168	790 / 632 / 145	750 / 583 / 212	812 / 729 / 175	671 / 552 / 168	822 / 693 / 140	30 - 45		3 = 3					
	2	808 / 510 / 108	903 / 677 / 95	805 / 677 / 141	850 / 831 / 115	838 / 774 / 170	1010 / 950 / 138	833 / 715 / 132	1006 / 877 / 107	795 / 484 / 111	885 / 645 / 97	790 / 643 / 145	834 / 795 / 119	812 / 739 / 175	974 / 914 / 143	822 / 703 / 140	1006 / 875 / 115	0 - 7.5		1 = 1					
50	3	739 / 802 / 83	778 / 969 / 67	836 / 773 / 122	937 / 949 / 100	970 / 896 / 149	1134 / 1061 / 117	965 / 826 / 115	1182 / 1022 / 95	728 / 767 / 86	768 / 935 / 70	820 / 737 / 126	904 / 912 / 103	933 / 859 / 154	1100 / 1028 / 122	929 / 792 / 119	1144 / 988 / 99	7.5 - 15		2 = 2					
	1	762 / 367 / 130	821 / 497 / 115	765 / 495 / 175	836 / 665 / 154	793 / 614 / 226	854 / 764 / 185	703 / 582 / 180	833 / 705 / 144	754 / 346 / 133	810 / 471 / 118	756 / 469 / 179	822 / 632 / 158	777 / 583 / 232	835 / 729 / 191	671 / 552 / 184	822 / 693 / 153	15 - 30		3 = 3					
60	2	821 / 497 / 115	906 / 657 / 100	836 / 677 / 154	875 / 831 / 125	854 / 774 / 185	1010 / 950 / 151	833 / 715 / 144	1006 / 877 / 117	810 / 471 / 118	890 / 626 / 103	822 / 643 / 158	860 / 795 / 129	835 / 739 / 191	974 / 914 / 156	822 / 703 / 153	1006 / 875 / 126	30 - 45		1 = 1					
	3	765 / 802 / 91	799 / 969 / 73	863 / 773 / 133	937 / 949 / 108	970 / 896 / 162	1134 / 1061 / 128	965 / 826 / 126	1182 / 1022 / 103	756 / 767 / 94	790 / 935 / 76	848 / 737 / 137	914 / 912 / 113	933 / 859 / 168	1100 / 1028 / 133	929 / 792 / 130	1144 / 988 / 108	7.5 - 15		2 = 2					
60	1	800 / 350 / 143	866 / 484 / 129	796 / 472 / 194	875 / 647 / 175	825 / 599 / 259	897 / 764 / 218	703 / 582 / 210	833 / 705 / 168	795 / 331 / 147	857 / 459 / 133	790 / 447 / 199	863 / 615 / 179	811 / 568 / 225	880 / 729 / 215	671 / 552 / 215	822 / 693 / 178	15 - 30		3 = 3					
	2	866 / 484 / 129	936 / 637 / 112	875 / 659 / 175	926 / 831 / 146	897 / 774 / 218	1010 / 950 / 177	833 / 715 / 168	1006 / 877 / 137	857 / 459 / 133	923 / 608 / 115	863 / 626 / 179	913 / 795 / 150	880 / 739 / 225	974 / 914 / 184	822 / 703 / 178	1006 / 875 / 147	7.5 - 15		3 = 3					
60	3	819 / 802 / 105	842 / 969 / 84	918 / 773 / 155	974 / 949 / 126	970 / 896 / 191	1134 / 1061 / 150	965 / 826 / 147	1182 / 1022 / 121	811 / 767 / 108	835 / 935 / 88	904 / 737 / 160	960 / 912 / 131	944 / 859 / 197	1100 / 1028 / 157	929 / 792 / 152	1144 / 988 / 126	15 - 30		1 = 1					

Exposure Category : B

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		45	1	748 / 396 / 119	821 / 536 / 106	757 / 535 / 160	819 / 697 / 138	783 / 645 / 201	871 / 797 / 164	717 / 596 / 156	866 / 735 / 127	765 / 437 / 114	845 / 586 / 100	777 / 588 / 153	819 / 736 / 126	792 / 685 / 186	932 / 858 / 154	776 / 650 / 148	927 / 791 / 119	799 / 489 / 111	865 / 633 / 95	795 / 638 / 145	839 / 789 / 119	818 / 737 / 175	984 / 911 / 143
45	2	821 / 536 / 106	892 / 686 / 89	796 / 690 / 134	865 / 866 / 111	871 / 808 / 164	1043 / 984 / 133	866 / 746 / 127	1081 / 943 / 107	845 / 586 / 100	920 / 741 / 83	819 / 750 / 126	903 / 927 / 103	900 / 840 / 149	1099 / 1040 / 122	927 / 803 / 119	1143 / 1001 / 99	865 / 633 / 95	947 / 789 / 78	839 / 803 / 119	948 / 979 / 96	984 / 923 / 143	1193 / 1134 / 117	980 / 852 / 111	1190 / 1045 / 91
45	3	748 / 835 / 81	828 / 1043 / 67	851 / 806 / 119	967 / 982 / 96	1004 / 930 / 143	1218 / 1142 / 117	1000 / 857 / 111	1214 / 1052 / 91	763 / 894 / 75	868 / 1099 / 61	847 / 838 / 107	1018 / 1039 / 88	1064 / 990 / 133	1268 / 1193 / 106	1060 / 913 / 103	1328 / 1154 / 87	773 / 944 / 70	940 / 1196 / 59	913 / 922 / 103	1105 / 1132 / 84	1111 / 1038 / 122	1369 / 1291 / 101	1156 / 998 / 99	1366 / 1189 / 78
50	1	769 / 387 / 127	832 / 522 / 112	774 / 522 / 171	849 / 697 / 150	809 / 645 / 220	872 / 797 / 180	717 / 596 / 171	866 / 735 / 139	782 / 427 / 121	877 / 586 / 109	790 / 573 / 162	847 / 736 / 137	816 / 685 / 203	932 / 858 / 168	776 / 650 / 162	927 / 791 / 130	814 / 476 / 118	896 / 633 / 103	827 / 638 / 158	866 / 789 / 129	841 / 737 / 191	984 / 911 / 156	806 / 680 / 148	980 / 839 / 121
50	2	832 / 522 / 112	921 / 686 / 97	826 / 690 / 146	889 / 866 / 121	872 / 808 / 180	1043 / 984 / 145	866 / 746 / 139	1081 / 943 / 117	877 / 586 / 109	947 / 741 / 91	847 / 750 / 137	913 / 927 / 113	900 / 840 / 162	1099 / 1040 / 133	927 / 803 / 130	1143 / 1001 / 108	896 / 633 / 103	968 / 789 / 85	866 / 803 / 129	948 / 979 / 104	984 / 923 / 156	1193 / 1134 / 128	980 / 852 / 121	1190 / 1045 / 99
50	3	774 / 835 / 88	842 / 1043 / 73	877 / 806 / 129	967 / 982 / 104	1004 / 930 / 156	1218 / 1142 / 128	1000 / 857 / 121	1214 / 1052 / 99	788 / 894 / 82	868 / 1099 / 67	871 / 838 / 117	1018 / 1039 / 96	1064 / 990 / 145	1268 / 1193 / 116	1060 / 913 / 112	1328 / 1154 / 94	796 / 944 / 76	940 / 1196 / 64	920 / 922 / 113	1105 / 1132 / 92	1111 / 1038 / 133	1369 / 1291 / 110	1156 / 998 / 108	1366 / 1189 / 86
60	1	804 / 369 / 140	874 / 508 / 126	823 / 509 / 194	885 / 678 / 170	839 / 628 / 252	914 / 797 / 211	717 / 596 / 199	866 / 735 / 163	832 / 416 / 136	915 / 570 / 122	835 / 558 / 184	904 / 736 / 160	864 / 685 / 238	943 / 858 / 197	776 / 650 / 189	927 / 791 / 152	861 / 464 / 133	928 / 614 / 115	868 / 621 / 179	918 / 789 / 150	886 / 737 / 225	984 / 911 / 184	806 / 680 / 173	980 / 839 / 142
60	2	874 / 508 / 126	978 / 686 / 112	885 / 690 / 170	939 / 866 / 141	914 / 808 / 211	1043 / 984 / 170	866 / 746 / 163	1081 / 943 / 137	915 / 570 / 122	1001 / 741 / 105	904 / 750 / 160	959 / 927 / 131	910 / 840 / 191	1099 / 1040 / 157	927 / 803 / 152	1143 / 1001 / 126	928 / 614 / 115	1018 / 789 / 98	918 / 803 / 150	972 / 979 / 121	984 / 923 / 184	1193 / 1134 / 150	980 / 852 / 142	1190 / 1045 / 116
60	3	826 / 835 / 101	885 / 1043 / 84	930 / 806 / 150	986 / 982 / 121	1004 / 930 / 184	1218 / 1142 / 150	1000 / 857 / 142	1214 / 1052 / 116	836 / 894 / 95	893 / 1099 / 77	918 / 838 / 136	1018 / 1039 / 112	1064 / 990 / 170	1268 / 1193 / 136	1060 / 913 / 131	1328 / 1154 / 110	840 / 944 / 88	940 / 1196 / 74	966 / 922 / 131	1105 / 1132 / 107	1111 / 1038 / 157	1369 / 1291 / 130	1156 / 998 / 126	1366 / 1189 / 100
Wind Speed [mph]		170								180															
45	1	813 / 527 / 106	910 / 695 / 92	810 / 685 / 138	854 / 836 / 111	857 / 783 / 164	1026 / 954 / 133	879 / 746 / 132	1063 / 914 / 107	847 / 578 / 103	924 / 735 / 86	822 / 728 / 130	868 / 874 / 103	895 / 823 / 154	1101 / 1028 / 127	922 / 785 / 123	1098 / 947 / 99	ASCE Group Zone							
45	2	910 / 695 / 92	1028 / 861 / 75	854 / 851 / 111	981 / 1018 / 88	1026 / 967 / 133	1222 / 1165 / 106	1063 / 927 / 107	1280 / 1128 / 87	924 / 735 / 86	1064 / 896 / 70	868 / 890 / 103	1050 / 1093 / 84	1101 / 1042 / 127	1300 / 1242 / 101	1098 / 961 / 99	1365 / 1205 / 82								
45	3	815 / 1025 / 67	958 / 1223 / 53	951 / 965 / 96	1132 / 1164 / 77	1197 / 1123 / 117	1462 / 1382 / 96	1194 / 1034 / 91	1459 / 1273 / 74	835 / 1055 / 61	1015 / 1300 / 50	1021 / 1040 / 92	1203 / 1241 / 73	1218 / 1145 / 106	1546 / 1464 / 90	1276 / 1107 / 87	1543 / 1348 / 70								
50	1	824 / 513 / 112	939 / 695 / 100	840 / 685 / 150	879 / 836 / 121	861 / 783 / 180	1026 / 954 / 145	879 / 746 / 144	1063 / 914 / 117	856 / 562 / 109	952 / 735 / 94	851 / 728 / 142	886 / 874 / 113	895 / 823 / 168	1101 / 1028 / 139	922 / 785 / 135	1098 / 947 / 108	0 - 7.5							
50	2	939 / 695 / 100	1028 / 861 / 82	879 / 851 / 121	981 / 1018 / 96	1026 / 967 / 145	1222 / 1165 / 116	1063 / 927 / 117	1280 / 1128 / 94	952 / 735 / 94	1064 / 896 / 76	886 / 890 / 113	1050 / 1093 / 92	1101 / 1042 / 139	1300 / 1242 / 110	1098 / 961 / 108	1365 / 1205 / 90								
50	3	832 / 1025 / 73	958 / 1223 / 58	951 / 965 / 104	1132 / 1164 / 84	1197 / 1123 / 128	1462 / 1382 / 104	1194 / 1034 / 99	1459 / 1273 / 81	835 / 1055 / 67	1015 / 1300 / 55	1021 / 1040 / 100	1203 / 1241 / 79	1218 / 1145 / 116	1546 / 1464 / 99	1276 / 1107 / 94	1543 / 1348 / 77								
60	1	867 / 499 / 126	968 / 674 / 170	877 / 666 / 170	928 / 836 / 141	903 / 783 / 211	1026 / 954 / 170	879 / 746 / 168	1063 / 914 / 137	895 / 546 / 122	1007 / 735 / 108	909 / 728 / 165	932 / 874 / 131	915 / 823 / 197	1101 / 1028 / 163	922 / 785 / 158	1098 / 947 / 126	7.5 - 15							
60	2	968 / 674 / 112	1067 / 861 / 95	928 / 851 / 141	981 / 1018 / 112	1026 / 967 / 170	1222 / 1165 / 136	1063 / 927 / 137	1280 / 1128 / 110	1007 / 735 / 108	1072 / 896 / 88	932 / 890 / 131	1050 / 1093 / 107	1101 / 1042 / 163	1300 / 1242 / 130	1098 / 961 / 126	1365 / 1205 / 105								
60	3	875 / 1025 / 84	958 / 1223 / 67	974 / 965 / 121	1132 / 1164 / 97	1197 / 1123 / 150	1462 / 1382 / 123	1194 / 1034 / 116	1459 / 1273 / 95	868 / 1055 / 77	1015 / 1300 / 63	1021 / 1040 / 117	1203 / 1241 / 92	1218 / 1145 / 136	1546 / 1464 / 116	1276 / 1107 / 110	1543 / 1348 / 89								
Wind Speed [mph]		190								200															
45	1	856 / 611 / 97	933 / 767 / 81	831 / 765 / 122	928 / 939 / 100	961 / 887 / 149	1123 / 1051 / 117	956 / 818 / 115	1170 / 1012 / 95	889 / 660 / 95	985 / 823 / 78	835 / 796 / 115	986 / 1002 / 96	986 / 914 / 138	1186 / 1113 / 112	1020 / 875 / 111	1239 / 1074 / 91	15 - 30							
45	2	933 / 767 / 81	1135 / 960 / 67	928 / 956 / 100	1114 / 1164 / 80	1123 / 1065 / 117	1370 / 1312 / 96	1170 / 1027 / 95	1444 / 1276 / 78	985 / 823 / 78	1203 / 1020 / 64	947 / 979 / 92	1174 / 1230 / 77	1186 / 1128 / 112	1433 / 1374 / 90	1239 / 1089 / 91	1514 / 1340 / 74								
45	3	885 / 1123 / 59	1067 / 1369 / 48	1040 / 1064 / 84	1268 / 1311 / 69	1288 / 1213 / 101	1620 / 1537 / 85	1352 / 1176 / 82	1617 / 1415 / 66	932 / 1187 / 56	1111 / 1428 / 45	1098 / 1127 / 80	1325 / 1373 / 65	1350 / 1275 / 96	1422 / 1239 / 78										
50	1	888 / 611 / 106	959 / 767 / 88	858 / 765 / 133	928 / 939 / 108	961 / 887 / 162	1123 / 1051 / 128	956 / 818 / 126	1170 / 1012 / 103	919 / 660 / 103	996 / 823 / 85	861 / 796 / 125	986 / 1002 / 104	986 / 914 / 151	1186 / 1113 / 122	1020 / 875 / 121	1239 / 1074 / 99	30 - 45							
50	2	959 / 767 / 88	1135 / 960 / 73	928 / 956 / 108	1114 / 1164 / 88	1123 / 1065 / 128	1370 / 1312 / 104	1170 / 1027 / 103	1444 / 1276 / 86	996 / 823 / 85	1203 / 1020 / 70	947 / 979 / 100	1174 / 1230 / 84	1186 / 1128 / 122	1433 / 1374 / 99	1239 / 1089 / 99	1514 / 1340 / 81								
50	3	885 / 1123 / 64	1067 / 1369 / 52	1040 / 1064 / 92	1268 / 1311 / 75	1288 / 1213 / 110	1620 / 1537 / 93	1352 / 1176 / 90	1617 / 1415 / 72	932 / 1187 / 61	1111 / 1428 / 49	1098 / 1127 / 88	1325 / 1373 / 71	1350 / 1275 / 104	1422 / 1239 / 86										
60	1	923 / 593 / 119	1011 / 767 / 101	912 / 765 / 155	967 / 939 / 126	961 / 887 / 191	1123 / 1051 / 150	956 / 818 / 147	1170 / 1012 / 121	951 / 640 / 115	1047 / 823 / 98	912 / 796 / 146	1000 / 1002 / 121	986 / 914 / 177	1186 / 1113 / 143	1020 / 875 / 142	1239 / 1074 / 116								
60	2	1011 / 767 / 101	1135 / 960 / 84	967 / 956 / 126	1114 / 1164 / 102	1123 / 1065 / 150	1370 / 1312 / 123	1170 / 1027 / 121	1444 / 1276 / 100	1047 / 823 / 98	1203 / 1020 / 81	960 / 979 / 117	1174 / 1230 / 97	1186 / 1128 / 143	1433 / 1374 / 116	1239 / 1089 / 116	1514 / 1340 / 95								
60	3	895 / 1123 / 74	1067 / 1369 / 60	1040 / 1064 / 107	1268 / 1311 / 88	1288 / 1213 / 130	1620 / 1537 / 109	1352 / 1176 / 105	1617 / 1415 / 84	932 / 1187 / 70	1111 / 1428 / 56	1098 / 1127 / 102	1325 / 1373 / 83	1350 / 1275 / 123	1422 / 1239 / 100										

Exposure Category : B

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	3 = 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
70	1	803 / 235 / 171	850 / 340 / 159	802 / 329 / 238	841 / 458 / 216	790 / 432 / 330	852 / 580 / 291	628 / 457 / 288	701 / 579 / 240	804 / 254 / 167	857 / 364 / 155	806 / 353 / 232	851 / 490 / 210	804 / 463 / 322	871 / 619 / 283	638 / 480 / 276	725 / 603 / 228	826 / 278 / 167	864 / 388 / 151	810 / 377 / 227	860 / 521 / 205	817 / 494 / 314	890 / 657 / 275	646 / 502 / 264	746 / 623 / 216		
	2	850 / 340 / 159	905 / 469 / 143	841 / 467 / 216	908 / 638 / 194	852 / 588 / 291	939 / 771 / 251	701 / 588 / 240	830 / 712 / 192	857 / 364 / 155	918 / 500 / 139	851 / 499 / 210	923 / 679 / 188	871 / 627 / 283	933 / 792 / 236	725 / 612 / 228	876 / 755 / 186	864 / 388 / 151	930 / 531 / 135	860 / 531 / 205	938 / 719 / 183	890 / 666 / 275	955 / 834 / 228	746 / 632 / 216	922 / 797 / 180		
	3	882 / 650 / 147	871 / 798 / 119	881 / 570 / 199	970 / 769 / 177	926 / 717 / 267	998 / 892 / 220	786 / 661 / 204	962 / 822 / 168	893 / 693 / 143	884 / 845 / 115	895 / 608 / 194	958 / 790 / 166	921 / 739 / 251	988 / 907 / 204	832 / 703 / 198	1012 / 868 / 162	878 / 714 / 135	895 / 890 / 111	908 / 645 / 188	975 / 833 / 161	943 / 781 / 244	1022 / 950 / 197	876 / 743 / 192	1059 / 911 / 156		
80	1	839 / 225 / 183	876 / 323 / 169	835 / 314 / 255	884 / 446 / 236	807 / 412 / 356	878 / 565 / 321	642 / 448 / 318	714 / 579 / 271	859 / 248 / 183	903 / 355 / 169	836 / 336 / 249	891 / 477 / 230	818 / 441 / 347	895 / 602 / 312	664 / 480 / 311	725 / 603 / 257	858 / 265 / 178	908 / 378 / 165	859 / 368 / 249	898 / 507 / 224	850 / 481 / 347	911 / 638 / 303	671 / 502 / 298	746 / 623 / 244		
	2	876 / 323 / 169	943 / 456 / 156	884 / 455 / 236	940 / 619 / 212	878 / 572 / 321	982 / 771 / 285	714 / 588 / 271	830 / 712 / 217	903 / 355 / 169	953 / 486 / 151	891 / 486 / 230	952 / 659 / 205	895 / 610 / 312	974 / 792 / 267	725 / 612 / 257	876 / 755 / 210	908 / 378 / 165	962 / 515 / 147	898 / 516 / 224	964 / 697 / 199	911 / 647 / 303	995 / 834 / 258	746 / 632 / 244	922 / 797 / 203		
	3	923 / 632 / 160	925 / 798 / 134	916 / 555 / 218	992 / 745 / 193	944 / 696 / 294	1036 / 892 / 250	786 / 661 / 230	962 / 822 / 190	931 / 673 / 156	936 / 845 / 129	927 / 591 / 212	1009 / 790 / 187	965 / 739 / 285	1023 / 907 / 232	832 / 703 / 223	1012 / 868 / 183	939 / 714 / 151	946 / 890 / 125	965 / 645 / 212	1025 / 833 / 181	986 / 781 / 276	1045 / 950 / 223	876 / 743 / 217	1059 / 911 / 176		
90	1	898 / 219 / 197	919 / 314 / 182	882 / 306 / 276	924 / 435 / 256	840 / 401 / 388	901 / 549 / 349	669 / 448 / 353	737 / 579 / 301	887 / 236 / 192	920 / 336 / 178	881 / 328 / 269	928 / 464 / 249	849 / 429 / 378	916 / 584 / 339	675 / 470 / 338	745 / 603 / 286	906 / 258 / 192	947 / 368 / 178	880 / 350 / 262	932 / 493 / 242	880 / 469 / 378	929 / 619 / 329	696 / 502 / 331	750 / 623 / 271		
	2	919 / 314 / 182	977 / 443 / 168	924 / 443 / 256	968 / 601 / 228	901 / 557 / 349	994 / 747 / 309	737 / 588 / 301	830 / 712 / 241	920 / 336 / 178	984 / 472 / 163	928 / 473 / 249	978 / 639 / 221	916 / 593 / 339	1015 / 792 / 299	745 / 612 / 286	876 / 755 / 233	947 / 368 / 178	990 / 500 / 158	932 / 502 / 242	1019 / 697 / 221	929 / 628 / 329	1034 / 834 / 289	750 / 632 / 271	922 / 797 / 226		
	3	960 / 614 / 173	978 / 798 / 148	948 / 539 / 235	1045 / 745 / 214	959 / 675 / 319	1074 / 892 / 279	786 / 661 / 256	962 / 822 / 211	965 / 654 / 168	988 / 845 / 143	985 / 591 / 235	1060 / 790 / 207	977 / 716 / 309	1059 / 907 / 259	832 / 703 / 248	1012 / 868 / 203	970 / 693 / 163	996 / 890 / 138	993 / 626 / 228	1074 / 833 / 200	995 / 755 / 299	1079 / 950 / 249	876 / 743 / 241	1059 / 911 / 196		
Wind Speed [mph]		110								115																	
70	1	827 / 297 / 163	870 / 412 / 147	814 / 401 / 221	892 / 567 / 205	829 / 524 / 306	908 / 694 / 267	668 / 534 / 258	785 / 659 / 210	829 / 315 / 159	901 / 447 / 147	839 / 436 / 221	901 / 598 / 199	842 / 554 / 298	925 / 729 / 259	673 / 552 / 246	822 / 693 / 204										
	2	870 / 412 / 147	942 / 561 / 131	892 / 577 / 205	952 / 758 / 177	908 / 703 / 267	976 / 875 / 220	785 / 668 / 210	965 / 837 / 174	901 / 447 / 147	952 / 589 / 127	901 / 609 / 199	965 / 795 / 172	925 / 739 / 259	995 / 914 / 212	822 / 703 / 204	1006 / 875 / 168										
	3	887 / 753 / 131	872 / 898 / 103	948 / 701 / 188	991 / 874 / 155	964 / 821 / 189	1063 / 991 / 180	890 / 757 / 180	1104 / 951 / 150	867 / 767 / 123	880 / 935 / 109	960 / 737 / 183	1005 / 912 / 150	983 / 859 / 228	1100 / 1028 / 181	929 / 792 / 174	1144 / 988 / 144										
80	1	857 / 282 / 174	911 / 401 / 160	860 / 391 / 243	929 / 552 / 224	860 / 511 / 338	926 / 673 / 294	693 / 534 / 291	785 / 659 / 237	878 / 307 / 174	915 / 423 / 156	861 / 414 / 236	936 / 582 / 218	870 / 539 / 330	941 / 707 / 285	697 / 552 / 277	822 / 693 / 230										
	2	911 / 401 / 160	971 / 544 / 143	929 / 562 / 224	1007 / 758 / 199	926 / 682 / 250	1014 / 875 / 237	785 / 668 / 196	965 / 837 / 196	915 / 423 / 156	1010 / 589 / 143	936 / 592 / 218	1018 / 795 / 193	941 / 717 / 285	1032 / 914 / 241	822 / 703 / 230	1006 / 875 / 190										
	3	946 / 753 / 147	919 / 898 / 116	976 / 680 / 205	1039 / 874 / 174	1005 / 821 / 267	1065 / 991 / 214	890 / 757 / 203	1104 / 951 / 169	922 / 767 / 138	925 / 935 / 111	986 / 715 / 199	1051 / 912 / 168	1023 / 859 / 258	1100 / 1028 / 205	929 / 792 / 196	1144 / 988 / 163										
90	1	903 / 275 / 187	949 / 390 / 173	903 / 381 / 262	963 / 536 / 242	888 / 497 / 368	971 / 673 / 329	717 / 534 / 263	785 / 659 / 263	924 / 299 / 187	949 / 411 / 168	902 / 403 / 256	967 / 565 / 235	896 / 525 / 319	984 / 707 / 319	720 / 552 / 308	822 / 693 / 256										
	2	949 / 390 / 173	1028 / 544 / 158	963 / 546 / 242	1028 / 734 / 214	971 / 682 / 329	1052 / 875 / 279	785 / 668 / 263	965 / 837 / 218	949 / 411 / 168	1034 / 571 / 153	967 / 575 / 235	1036 / 770 / 207	984 / 717 / 319	1069 / 914 / 269	822 / 703 / 256	1006 / 875 / 211										
	3	1005 / 753 / 163	965 / 898 / 128	1001 / 660 / 221	1086 / 874 / 194	1046 / 821 / 299	1097 / 991 / 239	890 / 757 / 226	1104 / 951 / 188	978 / 767 / 153	969 / 935 / 123	1008 / 693 / 214	1097 / 912 / 187	1062 / 859 / 229	1113 / 1028 / 229	929 / 792 / 218	1144 / 988 / 181										
Wind Speed [mph]		120								130																	
70	1	852 / 341 / 159	907 / 471 / 143	843 / 460 / 216	910 / 629 / 194	854 / 583 / 291	941 / 764 / 251	703 / 582 / 240	833 / 705 / 192	829 / 315 / 159	901 / 447 / 147	839 / 436 / 221	901 / 598 / 199	842 / 554 / 298	925 / 729 / 259	673 / 552 / 246	822 / 693 / 204										
	2	907 / 471 / 143	993 / 637 / 127	910 / 640 / 194	977 / 831 / 166	941 / 774 / 251	1012 / 950 / 204	833 / 715 / 192	1006 / 877 / 156	901 / 447 / 147	952 / 589 / 127	901 / 609 / 199	965 / 795 / 172	925 / 739 / 259	995 / 914 / 212	822 / 703 / 204	1006 / 875 / 168										
	3	873 / 802 / 119	885 / 969 / 96	972 / 773 / 177	1018 / 949 / 144	1001 / 896 / 220	1134 / 1061 / 173	965 / 826 / 168	1182 / 1022 / 138	867 / 767 / 123	880 / 935 / 100	960 / 737 / 183	1005 / 912 / 150	983 / 859 / 228	1100 / 1028 / 181	929 / 792 / 174	1144 / 988 / 144										
80	1	877 / 324 / 169	944 / 458 / 156	886 / 448 / 236	942 / 611 / 212	880 / 567 / 321	985 / 764 / 285	717 / 582 / 271	833 / 705 / 217	878 / 307 / 174	915 / 423 / 156	861 / 414 / 236	936 / 582 / 218	870 / 539 / 330	941 / 707 / 285	697 / 552 / 277	822 / 693 / 230										
	2	944 / 458 / 156	1018 / 617 / 138	942 / 622 / 212	1028 / 831 / 187	985 / 774 / 285	1047 / 950 / 232	833 / 715 / 217	1006 / 877 / 176	915 / 423 / 156	1010 / 589 / 143	936 / 592 / 218	1018 / 795 / 193	941 / 717 / 285	1032 / 914 / 241	822 / 703 / 230	1006 / 875 / 190										
	3	926 / 802 / 134	928 / 969 / 107	994 / 748 / 193	1062 / 949 / 162	1039 / 896 / 250	1134 / 1061 / 196	965 / 826 / 190	1182 / 1022 / 156	922 / 767 / 138	925 / 935 / 111	986 / 715 / 199	1051 / 912 / 168	1023 / 859 / 258	1100 / 1028 / 205	929 / 792 / 196	1144 / 988 / 163										
90	1	920 / 316 / 182	978 / 445 / 168	925 / 437 / 256	970 / 593 / 228	903 / 551 / 349	996 / 740 / 309	739 / 582 / 301	833 / 705 / 241	924 / 299 / 187	949 / 411 / 168	902 / 403 / 256	967 / 565 / 235	896 / 525 / 319	984 / 707 / 319	720 / 552 / 308	822 / 693 / 256										
	2	978 / 445 / 168	1039 / 597 / 148	970 / 604 / 228	1043 / 804 / 200	996 / 750 / 309	1083 / 950 / 259	833 / 715 / 241	1006 / 877 / 196	949 / 411 / 168	1034 / 571 / 153	967 / 575 / 235	1036 / 770 / 207	984 / 717 / 319	1069 / 914 / 269	822 / 703 / 256	1006 / 875 / 211										
	3	980 / 802 / 148	971 / 969 / 119	1047 / 748 / 214	1106 / 949 / 180	1077 / 896 / 279	1134 / 1061 / 219	965 / 826 / 211	1182 / 1022 / 173	978 / 767 / 153	969 / 935 / 123	1008 / 693 / 214	1097 / 912 / 187	1062 / 859 / 229	1113 / 1028 / 229	929 / 792 / 218	1144 / 988 / 181										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge						
70	1	853 / 360 / 155	913 / 494 / 139	846 / 484 / 210	918 / 658 / 188	865 / 611 / 283	956 / 797 / 244	717 / 596 / 228	866 / 735 / 186	879 / 405 / 151	950 / 554 / 135	876 / 544 / 205	960 / 736 / 183	886 / 665 / 267	982 / 858 / 228	776 / 650 / 216	927 / 791 / 174	880 / 440 / 143	958 / 595 / 127	906 / 605 / 199	971 / 789 / 172	931 / 737 / 259	1002 / 911 / 212	806 / 680 / 198	980 / 839 / 162
	2	913 / 494 / 139	1003 / 665 / 123	918 / 670 / 188	988 / 866 / 161	956 / 808 / 244	1043 / 984 / 197	866 / 746 / 186	1081 / 943 / 156	950 / 554 / 135	1020 / 716 / 115	960 / 750 / 183	1004 / 927 / 150	948 / 840 / 220	1099 / 1040 / 181	927 / 803 / 174	1143 / 1001 / 144	958 / 595 / 127	1068 / 789 / 111	971 / 803 / 172	1014 / 979 / 139	1002 / 923 / 212	1193 / 1134 / 173	980 / 852 / 162	1190 / 1045 / 132
	3	878 / 835 / 115	928 / 1043 / 96	983 / 806 / 172	1028 / 982 / 139	1017 / 930 / 212	1218 / 1142 / 173	1000 / 857 / 162	1214 / 1052 / 132	884 / 894 / 107	932 / 1099 / 88	966 / 838 / 155	1043 / 1039 / 128	1064 / 990 / 197	1268 / 1193 / 157	1060 / 913 / 150	1328 / 1154 / 126	885 / 944 / 100	974 / 1196 / 84	1012 / 922 / 150	1105 / 1132 / 122	1111 / 1038 / 181	1369 / 1291 / 149	1156 / 998 / 144	1366 / 1189 / 114
	1	900 / 350 / 169	947 / 480 / 151	887 / 471 / 230	947 / 639 / 205	889 / 594 / 312	999 / 797 / 276	717 / 596 / 257	866 / 735 / 210	897 / 384 / 160	981 / 537 / 147	913 / 529 / 224	985 / 714 / 199	932 / 665 / 303	1022 / 858 / 258	776 / 650 / 244	927 / 791 / 196	918 / 428 / 156	1015 / 595 / 143	940 / 588 / 218	1024 / 789 / 193	946 / 714 / 285	1039 / 911 / 241	806 / 680 / 223	980 / 839 / 183
	2	947 / 480 / 151	1025 / 643 / 134	947 / 651 / 205	1037 / 866 / 181	999 / 808 / 276	1061 / 984 / 223	866 / 746 / 210	1081 / 943 / 176	981 / 537 / 147	1071 / 716 / 129	985 / 727 / 199	1050 / 927 / 168	987 / 840 / 250	1099 / 1040 / 205	927 / 803 / 196	1143 / 1001 / 163	1015 / 595 / 143	1118 / 789 / 125	1024 / 803 / 193	1056 / 979 / 156	1039 / 923 / 241	1193 / 1134 / 196	980 / 852 / 183	1190 / 1045 / 149
	3	930 / 835 / 129	971 / 1043 / 107	1035 / 806 / 193	1071 / 982 / 156	1054 / 930 / 241	1218 / 1142 / 196	1000 / 857 / 183	1214 / 1052 / 149	933 / 894 / 120	972 / 1099 / 98	1013 / 838 / 174	1082 / 1039 / 143	1076 / 990 / 223	1268 / 1193 / 178	1060 / 913 / 169	1328 / 1154 / 142	930 / 944 / 111	1011 / 1196 / 94	1058 / 922 / 168	1133 / 1132 / 137	1111 / 1038 / 205	1369 / 1291 / 169	1156 / 998 / 163	1366 / 1189 / 129
	1	917 / 332 / 178	979 / 466 / 163	924 / 458 / 249	1003 / 639 / 228	910 / 577 / 339	1007 / 771 / 299	739 / 596 / 286	866 / 735 / 233	935 / 373 / 173	1009 / 521 / 158	947 / 514 / 242	1007 / 692 / 214	950 / 646 / 329	1061 / 858 / 289	776 / 650 / 271	927 / 791 / 218	953 / 415 / 168	1039 / 577 / 153	971 / 571 / 235	1042 / 764 / 207	990 / 714 / 319	1076 / 911 / 269	806 / 680 / 248	980 / 839 / 203
	2	979 / 466 / 163	1078 / 643 / 148	1003 / 651 / 228	1086 / 866 / 200	1007 / 782 / 299	1095 / 984 / 249	866 / 746 / 233	1081 / 943 / 196	1009 / 521 / 158	1085 / 692 / 138	1007 / 704 / 214	1096 / 927 / 187	1025 / 840 / 279	1112 / 1040 / 229	927 / 803 / 218	1143 / 1001 / 181	1039 / 577 / 153	1126 / 761 / 133	1042 / 778 / 207	1099 / 979 / 173	1076 / 923 / 269	1193 / 1134 / 219	980 / 852 / 203	1190 / 1045 / 166
	3	982 / 835 / 143	1014 / 1043 / 119	1053 / 780 / 207	1113 / 982 / 173	1091 / 930 / 269	1218 / 1142 / 219	1000 / 857 / 203	1214 / 1052 / 166	981 / 894 / 133	1011 / 1099 / 109	1061 / 838 / 194	1121 / 1039 / 159	1111 / 990 / 249	1268 / 1193 / 199	1060 / 913 / 188	1328 / 1154 / 158	975 / 944 / 123	1049 / 1196 / 104	1104 / 922 / 187	1170 / 1132 / 152	1121 / 1038 / 229	1369 / 1291 / 189	1156 / 998 / 181	1366 / 1189 / 143
Wind Speed [mph]		170								180															
70	1	905 / 485 / 139	993 / 653 / 123	909 / 647 / 188	977 / 836 / 161	945 / 783 / 244	1026 / 954 / 197	879 / 746 / 192	1063 / 914 / 156	930 / 531 / 135	1029 / 711 / 119	938 / 706 / 183	978 / 874 / 150	955 / 823 / 228	1101 / 1028 / 189	922 / 785 / 180	1098 / 947 / 144								
	2	993 / 653 / 123	1116 / 861 / 107	977 / 851 / 161	1015 / 1018 / 128	1026 / 967 / 197	1222 / 1165 / 157	1063 / 927 / 156	1280 / 1128 / 126	1029 / 711 / 119	1117 / 896 / 100	978 / 890 / 150	1054 / 1093 / 122	1101 / 1042 / 189	1300 / 1242 / 149	1098 / 961 / 144	1365 / 1205 / 120								
	3	917 / 1025 / 96	961 / 1223 / 76	1016 / 965 / 139	1132 / 1164 / 111	1197 / 1123 / 173	1462 / 1382 / 142	1194 / 1034 / 132	1459 / 1273 / 108	907 / 1055 / 88	1015 / 1300 / 72	1057 / 1040 / 133	1203 / 1241 / 105	1218 / 1145 / 157	1546 / 1464 / 134	1276 / 1107 / 126	1543 / 1348 / 102								
	1	940 / 471 / 151	1015 / 632 / 134	967 / 647 / 212	1027 / 836 / 181	988 / 783 / 276	1048 / 954 / 223	879 / 746 / 217	1063 / 914 / 176	962 / 515 / 147	1046 / 687 / 129	964 / 685 / 199	1024 / 874 / 168	995 / 823 / 258	1101 / 1028 / 214	922 / 785 / 203	1098 / 947 / 163								
	2	1015 / 632 / 134	1121 / 829 / 116	1027 / 851 / 181	1054 / 1018 / 143	1048 / 967 / 223	1222 / 1165 / 178	1063 / 927 / 176	1280 / 1128 / 142	1046 / 687 / 129	1162 / 896 / 111	1024 / 890 / 168	1092 / 1093 / 137	1101 / 1042 / 214	1300 / 1242 / 169	1098 / 961 / 163	1365 / 1205 / 136								
	3	960 / 1025 / 107	995 / 1223 / 85	1059 / 965 / 156	1132 / 1164 / 125	1197 / 1123 / 196	1462 / 1382 / 161	1194 / 1034 / 149	1459 / 1273 / 122	946 / 1055 / 98	1024 / 1300 / 80	1097 / 1040 / 150	1203 / 1241 / 118	1218 / 1145 / 178	1546 / 1464 / 152	1276 / 1107 / 142	1543 / 1348 / 115								
	1	972 / 457 / 163	1069 / 632 / 148	995 / 628 / 228	1076 / 836 / 200	997 / 758 / 299	1082 / 954 / 249	879 / 746 / 241	1063 / 914 / 196	990 / 500 / 158	1098 / 687 / 143	1019 / 685 / 221	1070 / 874 / 187	1034 / 823 / 289	1126 / 1028 / 239	922 / 785 / 226	1098 / 947 / 181								
	2	1069 / 632 / 148	1167 / 829 / 128	1076 / 851 / 200	1093 / 1018 / 159	1082 / 967 / 249	1222 / 1165 / 199	1063 / 927 / 196	1280 / 1128 / 158	1098 / 687 / 143	1207 / 896 / 123	1070 / 890 / 187	1129 / 1093 / 152	1126 / 1042 / 239	1300 / 1242 / 189	1098 / 961 / 181	1365 / 1205 / 151								
	3	1003 / 1025 / 119	1029 / 1223 / 94	1101 / 965 / 173	1159 / 1164 / 138	1197 / 1123 / 219	1462 / 1382 / 180	1194 / 1034 / 166	1459 / 1273 / 136	986 / 1055 / 109	1056 / 1300 / 89	1138 / 1040 / 166	1203 / 1241 / 131	1218 / 1145 / 199	1546 / 1464 / 170	1276 / 1107 / 158	1543 / 1348 / 128								
Wind Speed [mph]		190								200															
70	1	955 / 576 / 131	1063 / 767 / 115	967 / 765 / 177	1011 / 939 / 144	994 / 887 / 220	1123 / 1051 / 173	956 / 818 / 168	1170 / 1012 / 138	980 / 621 / 127	1097 / 823 / 111	963 / 796 / 166	1043 / 1002 / 139	994 / 914 / 204	1186 / 1113 / 165	1020 / 875 / 162	1239 / 1074 / 132								
	2	1063 / 767 / 115	1158 / 960 / 96	1011 / 956 / 144	1114 / 1164 / 116	1123 / 1065 / 173	1370 / 1312 / 142	1170 / 1027 / 138	1444 / 1276 / 114	1097 / 823 / 111	1203 / 1020 / 92	1001 / 979 / 133	1174 / 1230 / 111	1186 / 1128 / 165	1433 / 1374 / 134	1239 / 1089 / 132	1514 / 1340 / 108								
	3	932 / 1123 / 84	1067 / 1369 / 68	1047 / 1064 / 122	1268 / 1311 / 100	1288 / 1213 / 149	1620 / 1537 / 126	1352 / 1176 / 120	1617 / 1415 / 96	955 / 1187 / 80	1111 / 1428 / 64	1098 / 1127 / 116	1325 / 1373 / 94	1350 / 1275 / 142	1422 / 1239 / 114										
	1	983 / 559 / 143	1077 / 741 / 125	989 / 741 / 193	1056 / 939 / 162	1032 / 887 / 250	1123 / 1051 / 196	956 / 818 / 190	1170 / 1012 / 156	1004 / 601 / 138	1106 / 793 / 120	1014 / 796 / 187	1085 / 1002 / 156	1029 / 914 / 232	1186 / 1113 / 187	1020 / 875 / 183	1239 / 1074 / 149								
	2	1077 / 741 / 125	1201 / 960 / 107	1056 / 956 / 162	1126 / 1164 / 131	1123 / 1065 / 196	1370 / 1312 / 161	1170 / 1027 / 156	1444 / 1276 / 129	1106 / 793 / 120	1237 / 1020 / 103	1042 / 979 / 150	1174 / 1230 / 125	1186 / 1128 / 187	1433 / 1374 / 152	1239 / 1089 / 149	1514 / 1340 / 122								
	3	970 / 1123 / 94	1067 / 1369 / 76	1084 / 1064 / 137	1268 / 1311 / 112	1288 / 1213 / 169	1620 / 1537 / 143	1352 / 1176 / 109	1617 / 1415 / 109	990 / 1187 / 89	1111 / 1428 / 72	1114 / 1127 / 131	1325 / 1373 / 106	1350 / 1275 / 161	1422 / 1239 / 129										
	1	1008 / 541 / 153	1127 / 741 / 138	1042 / 741 / 214	1100 / 939 / 180	1071 / 887 / 279	1123 / 1051 / 219	956 / 818 / 211	1170 / 1012 / 173	1026 / 582 / 148	1154 / 793 / 133	1065 / 796 / 207	1128 / 1002 / 173	1065 / 914 / 259	1186 / 1113 / 209	1020 / 875 / 203	1239 / 1074 / 166								
	2	1127 / 741 / 138	1244 / 960 / 119	1100 / 956 / 180	1162 / 1164 / 145	1123 / 1065 / 219	1370 / 1312 / 180	1170 / 1027 / 173	1444 / 1276 / 143	1154 / 793 / 133	1278 / 1020 / 114	1083 / 979 / 166	1191 / 1230 / 138	1186 / 1128 / 209	1433 / 1374 / 170	1239 / 1089 / 166	1514 / 1340 / 136								
	3	1007 / 1123 / 104	1078 / 1369 / 84	1122 / 1064 / 152	1268 / 1311 / 125	1288 / 1213 / 189	1620 / 1537 / 160	1352 / 1176 / 151	1617 / 1415 / 121	1026 / 1187 / 99	1111 / 1428 / 79	1150 / 1127 / 145	1325 / 1373 / 118	1350 / 1275 / 180	1422 / 1239 / 143										

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	944 / 208 / 206	959 / 306 / 195	903 / 291 / 289	960 / 423 / 273	871 / 391 / 418	922 / 533 / 374	680 / 438 / 381	760 / 579 / 331	944 / 229 / 206	957 / 327 / 189	923 / 320 / 289	962 / 451 / 266	877 / 418 / 407	962 / 584 / 374	701 / 470 / 373	767 / 603 / 315	926 / 245 / 200	984 / 358 / 189	920 / 341 / 281	963 / 479 / 258	907 / 457 / 407	974 / 619 / 363	705 / 491 / 356	770 / 623 / 298
	2	959 / 306 / 195	1007 / 430 / 179	960 / 431 / 273	993 / 583 / 243	922 / 541 / 374	1036 / 747 / 341	760 / 588 / 331	830 / 712 / 265	957 / 327 / 189	1011 / 457 / 173	962 / 459 / 266	1032 / 639 / 243	962 / 593 / 374	1056 / 792 / 330	767 / 612 / 315	876 / 755 / 257	984 / 358 / 189	1047 / 500 / 173	963 / 488 / 258	1039 / 675 / 235	974 / 628 / 363	1074 / 834 / 319	770 / 632 / 298	922 / 797 / 249
	3	994 / 597 / 184	1032 / 798 / 162	976 / 523 / 251	1062 / 721 / 228	1003 / 675 / 352	1113 / 892 / 308	789 / 661 / 282	962 / 822 / 232	996 / 635 / 179	1039 / 845 / 157	1012 / 573 / 251	1074 / 764 / 220	1020 / 716 / 341	1094 / 907 / 286	832 / 703 / 273	1012 / 868 / 224	1029 / 693 / 179	1046 / 890 / 152	1017 / 607 / 243	1084 / 804 / 213	1036 / 755 / 330	1113 / 950 / 275	876 / 743 / 265	1059 / 911 / 215

Wind Speed [mph]		110								115															
100	1	945 / 268 / 200	982 / 379 / 184	942 / 371 / 281	993 / 521 / 258	913 / 484 / 396	986 / 653 / 352	724 / 521 / 348	794 / 659 / 290	940 / 283 / 195	1010 / 411 / 184	938 / 392 / 273	994 / 549 / 251	919 / 510 / 385	996 / 685 / 341	743 / 552 / 340	822 / 693 / 282	945 / 268 / 200	982 / 379 / 184	942 / 371 / 281	993 / 521 / 258	913 / 484 / 396	986 / 653 / 352	724 / 521 / 348	794 / 659 / 290
	2	982 / 379 / 184	1051 / 527 / 168	993 / 531 / 258	1046 / 711 / 228	986 / 662 / 352	1090 / 875 / 308	794 / 668 / 290	965 / 837 / 240	1010 / 411 / 184	1054 / 553 / 162	994 / 559 / 251	1087 / 770 / 228	996 / 695 / 341	1105 / 914 / 297	822 / 703 / 282	1006 / 875 / 232	982 / 379 / 184	1051 / 527 / 168	993 / 531 / 258	1046 / 711 / 228	986 / 662 / 352	1090 / 875 / 308	794 / 668 / 290	965 / 837 / 240
	3	1032 / 731 / 173	1012 / 898 / 141	1022 / 639 / 235	1134 / 874 / 213	1051 / 794 / 319	1130 / 991 / 264	890 / 757 / 249	1104 / 951 / 207	1033 / 767 / 168	1014 / 935 / 135	1060 / 693 / 235	1143 / 912 / 205	1064 / 830 / 308	1144 / 1028 / 253	929 / 792 / 240	1144 / 988 / 199	1032 / 731 / 173	1012 / 898 / 141	1022 / 639 / 235	1134 / 874 / 213	1051 / 794 / 319	1130 / 991 / 264	890 / 757 / 249	1104 / 951 / 207

Wind Speed [mph]		120								130															
100	1	960 / 307 / 195	1009 / 432 / 179	961 / 425 / 273	995 / 575 / 243	924 / 536 / 374	1005 / 716 / 330	762 / 582 / 331	833 / 705 / 265	940 / 283 / 195	1010 / 411 / 184	938 / 392 / 273	994 / 549 / 251	919 / 510 / 385	996 / 685 / 341	743 / 552 / 340	822 / 693 / 282	960 / 307 / 195	1009 / 432 / 179	961 / 425 / 273	995 / 575 / 243	924 / 536 / 374	1005 / 716 / 330	762 / 582 / 331	833 / 705 / 265
	2	1009 / 432 / 179	1092 / 597 / 162	995 / 585 / 243	1092 / 804 / 220	1005 / 726 / 330	1118 / 950 / 286	833 / 715 / 265	1006 / 877 / 215	1010 / 411 / 184	1054 / 553 / 162	994 / 559 / 251	1087 / 770 / 228	996 / 695 / 341	1105 / 914 / 297	822 / 703 / 282	1006 / 875 / 232	1009 / 432 / 179	1092 / 597 / 162	995 / 585 / 243	1092 / 804 / 220	1005 / 726 / 330	1118 / 950 / 286	833 / 715 / 265	1006 / 877 / 215
	3	1034 / 802 / 162	1014 / 969 / 130	1064 / 724 / 228	1150 / 949 / 198	1116 / 896 / 308	1155 / 1061 / 242	965 / 826 / 232	1182 / 1022 / 191	1033 / 767 / 168	1014 / 935 / 135	1060 / 693 / 235	1143 / 912 / 205	1064 / 830 / 308	1144 / 1028 / 253	929 / 792 / 240	1144 / 988 / 199	1034 / 802 / 162	1014 / 969 / 130	1064 / 724 / 228	1150 / 949 / 198	1116 / 896 / 308	1155 / 1061 / 242	965 / 826 / 232	1182 / 1022 / 191

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	954 / 323 / 189	1006 / 452 / 173	958 / 446 / 266	1027 / 620 / 243	956 / 577 / 374	1048 / 771 / 330	760 / 596 / 315	866 / 735 / 257	969 / 363 / 184	1033 / 505 / 168	978 / 500 / 258	1060 / 692 / 235	965 / 626 / 352	1063 / 829 / 308	793 / 650 / 298	927 / 791 / 240	984 / 403 / 179	1059 / 558 / 162	998 / 554 / 251	1092 / 764 / 228	1001 / 692 / 341	1112 / 911 / 297	806 / 680 / 273	980 / 839 / 224
	2	1006 / 452 / 173	1094 / 622 / 157	1027 / 631 / 243	1096 / 836 / 213	1048 / 782 / 330	1129 / 984 / 275	866 / 746 / 257	1081 / 943 / 215	1033 / 505 / 168	1135 / 692 / 152	1060 / 704 / 235	1142 / 927 / 205	1063 / 840 / 308	1143 / 1040 / 253	927 / 803 / 240	1143 / 1001 / 199	1059 / 558 / 162	1175 / 761 / 146	1092 / 778 / 228	1141 / 979 / 190	1112 / 923 / 297	1200 / 1134 / 242	980 / 852 / 224	1190 / 1045 / 182
	3	1034 / 835 / 157	1057 / 1043 / 130	1067 / 754 / 220	1156 / 982 / 190	1127 / 930 / 297	1218 / 1142 / 242	1000 / 857 / 224	1214 / 1052 / 182	1029 / 894 / 146	1050 / 1099 / 119	1109 / 838 / 213	1160 / 1039 / 175	1145 / 990 / 275	1268 / 1193 / 220	1060 / 913 / 207	1328 / 1154 / 174	1019 / 944 / 135	1086 / 1196 / 114	1150 / 922 / 205	1208 / 1132 / 167	1152 / 1038 / 253	1369 / 1291 / 209	1156 / 998 / 199	1366 / 1189 / 158

Wind Speed [mph]		170								180																										
100	1	1031 / 457 / 179	1085 / 611 / 157	1019 / 609 / 243	1086 / 807 / 213	1038 / 758 / 330	1116 / 954 / 275	879 / 746 / 265	1063 / 914 / 215	1047 / 500 / 173	1111 / 663 / 152	1039 / 663 / 235	1116 / 874 / 205	1074 / 823 / 319	1159 / 1028 / 264	922 / 785 / 249	1098 / 947 / 199	1085 / 611 / 157	1214 / 829 / 141	1086 / 821 / 213	1132 / 1018 / 175	1116 / 967 / 275	1222 / 1165 / 220	1063 / 927 / 215	1280 / 1128 / 174	1111 / 663 / 152	1251 / 896 / 135	1116 / 890 / 205	1167 / 1093 / 167	1159 / 1042 / 264	1300 / 1242 / 209	1098 / 961 / 199	1365 / 1205 / 166			
	2	1046 / 1025 / 130	1063 / 1223 / 103	1144 / 965 / 190	1193 / 1164 / 152	1203 / 1123 / 242	1462 / 1382 / 198	1194 / 1034 / 182	1459 / 1273 / 149	1025 / 1055 / 119	1088 / 1300 / 98	1179 / 1040 / 182	1230 / 1241 / 145	1218 / 1145 / 220	1546 / 1464 / 187	1276 / 1107 / 174	1543 / 1348 / 141																			
	3																																			

Wind Speed [mph]		190								200																										
100	1	1064 / 541 / 168	1135 / 715 / 146	1059 / 717 / 228	1144 / 939 / 198	1109 / 887 / 308	1147 / 1051 / 242	956 / 818 / 232	1170 / 1012 / 191	1079 / 582 / 162	1158 / 764 / 141	1078 / 770 / 220	1170 / 1002 / 190	1100 / 914 / 286	1186 / 1113 / 231	1020 / 875 / 224	1239 / 1074 / 182	1135 / 715 / 146	1287 / 960 / 130	1144 / 956 / 198	1198 / 1164 / 160	1147 / 1065 / 242	1370 / 1312 / 198	1170 / 1027 / 191	1444 / 1276 / 158	1158 / 764 / 141	1320 / 1020 / 125	1124 / 979 / 182	1225 / 1230 / 152	1186 / 1128 / 231	1433 / 1374 / 187	1239 / 1089 / 182	1514 / 1340 / 149			
	2	1045 / 1123 / 114	1109 / 1369 / 92	1159 / 1064 / 167	1268 / 1311 / 137	1288 / 1213 / 209	1620 / 1537 / 176	1352 / 1176 / 166	1617 / 1415 / 133	1062 / 1187 / 108	1123 / 1428 / 87	1185 / 1127 / 160	1325 / 1373 / 129	1350 / 1275 / 198		1422 / 1239 / 158																				
	3																																			

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Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
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	2 = 2
	3 = 3
30 - 45	1 = 1
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x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		0	1	531/392/41	639/498/34	556/512/44	646/622/35	667/587/45	796/721/36	661/542/49	791/665/39	554/414/39	662/521/32	567/527/41	667/647/33	691/613/42	816/743/34	685/566/46	837/707/38	575/436/38	700/556/31	587/551/39	703/687/32	712/635/40	859/785/33
0	2	639/498/34	763/618/28	646/633/35	756/763/28	796/731/36	937/877/29	791/675/39	967/839/33	662/521/32	807/658/27	667/658/33	797/809/27	816/753/34	984/924/28	837/717/38	1017/886/31	700/556/31	850/697/26	684/680/31	836/853/26	859/796/33	1028/969/27	854/735/36	1065/930/30
0	3	623/760/25	747/933/21	740/729/30	869/876/24	897/825/31	1103/1030/26	923/786/35	1100/949/28	657/806/24	783/982/20	759/751/29	912/923/23	944/872/30	1154/1080/25	940/803/33	1150/994/27	667/822/23	816/1028/19	798/794/28	953/967/23	990/916/29	1200/1125/24	985/844/31	1197/1036/26
5	1	531/392/41	639/498/34	556/512/51	646/622/40	667/587/55	796/721/45	661/542/56	791/665/45	554/414/39	662/521/32	567/527/48	667/647/38	691/613/53	816/743/42	685/566/53	837/707/44	575/436/38	700/556/31	587/551/46	703/687/37	712/635/50	859/785/41	707/587/50	854/724/41
5	2	639/498/34	763/618/28	646/633/40	756/763/32	796/731/45	937/877/36	791/675/45	967/839/37	662/521/32	807/658/27	667/658/38	797/809/31	816/753/42	984/924/34	837/717/44	1017/886/36	700/556/31	850/697/26	684/680/36	836/853/30	859/796/41	1028/969/33	854/735/41	1065/930/35
5	3	623/760/25	747/933/21	740/729/35	869/876/28	897/825/38	1103/1030/32	923/786/40	1100/949/32	657/806/24	783/982/20	759/751/33	912/923/27	944/872/37	1154/1080/30	940/803/37	1150/994/31	667/822/23	816/1028/19	798/794/32	953/967/26	990/916/36	1200/1125/29	985/844/36	1197/1036/29
10	1	534/392/49	639/498/40	556/512/65	646/622/52	667/587/72	796/721/58	661/542/68	791/665/55	554/414/47	662/521/38	567/527/61	667/647/50	691/613/68	816/743/55	685/566/64	837/707/53	575/436/45	700/556/37	587/551/59	703/687/48	712/635/65	859/785/53	707/587/61	854/724/50
10	2	639/498/40	763/618/33	646/633/52	756/763/42	796/731/58	937/877/46	791/675/55	967/839/45	662/521/38	807/658/32	667/658/50	797/809/40	816/753/55	984/924/45	837/717/53	1017/886/44	700/556/37	850/697/31	684/680/47	836/853/39	859/796/53	1028/969/43	854/735/50	1065/930/42
10	3	623/760/30	747/933/25	740/729/46	869/876/36	897/825/50	1103/1030/41	923/786/48	1100/949/39	657/806/29	783/982/24	759/751/43	912/923/35	944/872/48	1154/1080/39	940/803/45	1150/994/37	667/822/27	816/1028/23	798/794/42	953/967/34	990/916/46	1200/1125/38	985/844/44	1197/1036/36
Wind Speed [mph]		110								115															
0	1	594/455/36	718/575/30	604/573/37	718/705/30	750/673/39	899/826/32	744/621/43	895/761/35	625/484/35	753/607/29	635/607/37	751/742/30	765/690/37	938/865/31	781/655/42	934/797/34								
0	2	718/575/30	864/712/24	718/718/30	874/895/25	899/837/32	1069/1010/26	895/773/35	1110/971/29	753/607/29	902/747/24	751/755/30	875/900/23	906/846/30	1107/1048/25	934/809/34	1151/1009/28								
0	3	697/863/22	847/1070/18	835/835/27	991/1009/22	1032/959/28	1242/1166/23	1028/883/30	1238/1074/25	724/901/21	875/1108/18	841/844/25	1025/1047/21	1072/998/27	1277/1202/21	1068/919/29	1338/1163/25								
5	1	594/455/36	718/575/30	604/573/44	718/705/35	750/673/49	899/826/40	744/621/49	895/761/40	625/484/35	753/607/29	635/607/42	751/742/34	765/690/46	938/865/38	781/655/48	934/797/39								
5	2	718/575/30	864/712/24	718/718/35	874/895/29	899/837/40	1069/1010/32	895/773/40	1110/971/33	753/607/29	902/747/24	751/755/34	875/900/27	906/846/37	1107/1048/30	934/809/39	1151/1009/32								
5	3	697/863/22	847/1070/18	835/835/31	991/1009/25	1032/959/34	1242/1166/28	1028/883/35	1238/1074/28	724/901/21	875/1108/18	841/844/29	1025/1047/24	1072/998/33	1277/1202/27	1068/919/33	1338/1163/28								
10	1	594/455/43	718/575/36	604/573/56	718/705/46	750/673/63	899/826/51	744/621/60	895/761/48	625/484/42	753/607/35	635/607/55	751/742/44	765/690/60	938/865/50	781/655/58	934/797/47								
10	2	718/575/36	864/712/29	718/718/46	874/895/38	899/837/51	1069/1010/41	895/773/48	1110/971/40	753/607/35	902/747/28	751/755/44	875/900/35	906/846/48	1107/1048/39	934/809/47	1151/1009/39								
10	3	697/863/26	847/1070/22	835/835/40	991/1009/32	1032/959/45	1242/1166/36	1028/883/42	1238/1074/34	724/901/25	875/1108/21	841/844/38	1025/1047/31	1072/998/43	1277/1202/34	1068/919/40	1338/1163/34								
Wind Speed [mph]		120								130															
0	1	641/500/34	766/621/28	648/624/35	783/777/29	799/724/36	940/869/29	794/668/39	971/831/33	625/484/35	753/607/29	635/607/37	751/742/30	765/690/37	938/865/31	781/655/42	934/797/34								
0	2	766/621/28	938/780/23	759/766/28	906/934/23	940/881/29	1140/1082/24	971/843/33	1188/1043/27	753/607/29	902/747/24	751/755/30	875/900/23	906/846/30	1107/1048/25	934/809/34	1151/1009/28								
0	3	750/937/21	899/1141/17	872/879/24	1056/1081/20	1108/1034/26	1308/1232/20	1104/953/28	1373/1195/23	724/901/21	875/1108/18	841/844/25	1025/1047/21	1072/998/27	1277/1202/21	1068/919/29	1338/1163/25								
5	1	641/500/34	766/621/28	648/624/40	783/777/33	799/724/45	940/869/36	794/668/45	971/831/37	625/484/35	753/607/29	635/607/42	751/742/34	765/690/46	938/865/38	781/655/48	934/797/39								
5	2	766/621/28	938/780/23	759/766/32	906/934/26	940/881/36	1140/1082/29	971/843/37	1188/1043/31	753/607/29	902/747/24	751/755/34	875/900/27	906/846/37	1107/1048/30	934/809/39	1151/1009/32								
5	3	750/937/21	899/1141/17	872/879/28	1056/1081/23	1108/1034/32	1308/1232/25	1104/953/32	1373/1195/27	724/901/21	875/1108/18	841/844/29	1025/1047/24	1072/998/33	1277/1202/27	1068/919/33	1338/1163/28								
10	1	641/500/40	766/621/33	648/624/52	783/777/43	799/724/58	940/869/46	794/668/55	971/831/45	625/484/42	753/607/35	635/607/55	751/742/44	765/690/60	938/865/50	781/655/58	934/797/47								
10	2	766/621/33	938/780/27	759/766/42	906/934/34	940/881/46	1140/1082/38	971/843/45	1188/1043/37	753/607/35	902/747/28	751/755/44	875/900/35	906/846/48	1107/1048/39	934/809/47	1151/1009/39								
10	3	750/937/25	899/1141/20	872/879/36	1056/1081/30	1108/1034/41	1308/1232/33	1104/953/39	1373/1195/32	724/901/25	875/1108/21	841/844/38	1025/1047/31	1072/998/43	1277/1202/34	1068/919/40	1338/1163/34								

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge								
0	1	670 / 527 / 33	798 / 650 / 27	677 / 656 / 34	814 / 811 / 28	832 / 757 / 35	972 / 901 / 28	827 / 698 / 38	1006 / 862 / 31	709 / 565 / 31	857 / 705 / 25	711 / 696 / 31	840 / 843 / 25	864 / 792 / 32	1070 / 996 / 27	889 / 755 / 36	1066 / 918 / 29	760 / 613 / 29	910 / 754 / 24	758 / 749 / 30	918 / 927 / 24	915 / 843 / 30	1117 / 1044 / 25	943 / 805 / 34	1162 / 1004 / 28		
	2	798 / 650 / 27	972 / 811 / 22	787 / 799 / 27	972 / 1005 / 23	972 / 913 / 28	1169 / 1112 / 23	1006 / 875 / 31	1221 / 1074 / 26	857 / 705 / 25	1032 / 867 / 21	840 / 858 / 25	1024 / 1064 / 21	1027 / 969 / 26	1276 / 1217 / 21	1066 / 931 / 29	1336 / 1178 / 25	910 / 754 / 24	1126 / 950 / 20	884 / 909 / 23	1061 / 1107 / 19	1117 / 1059 / 25	1377 / 1316 / 20	1162 / 1019 / 28	1374 / 1213 / 22		
	3	774 / 970 / 20	919 / 1170 / 16	902 / 912 / 23	1083 / 1110 / 19	1140 / 1066 / 25	1331 / 1256 / 19	1137 / 982 / 27	1402 / 1221 / 22	814 / 1026 / 18	1000 / 1277 / 15	952 / 968 / 22	1181 / 1216 / 18	1193 / 1119 / 23	1441 / 1363 / 18	1246 / 1080 / 26	1523 / 1329 / 21	883 / 1119 / 18	1075 / 1378 / 14	1035 / 1057 / 24	1274 / 1315 / 20	1290 / 1214 / 27	1541 / 1461 / 21	1287 / 1118 / 27	1635 / 1429 / 23		
5	1	670 / 527 / 33	798 / 650 / 27	677 / 656 / 39	814 / 811 / 32	832 / 757 / 43	972 / 901 / 34	827 / 698 / 44	1006 / 862 / 36	709 / 565 / 31	857 / 705 / 25	711 / 696 / 36	840 / 843 / 29	864 / 792 / 40	1070 / 996 / 33	889 / 755 / 41	1066 / 918 / 33	760 / 613 / 29	910 / 754 / 24	758 / 749 / 34	918 / 927 / 28	915 / 843 / 37	1117 / 1044 / 30	943 / 805 / 39	1162 / 1004 / 32		
	2	798 / 650 / 27	972 / 811 / 22	787 / 799 / 31	972 / 1005 / 26	972 / 913 / 34	1169 / 1112 / 28	1006 / 875 / 36	1221 / 1074 / 29	857 / 705 / 25	1032 / 867 / 21	840 / 858 / 24	1024 / 1064 / 27	1027 / 969 / 32	1276 / 1217 / 27	1066 / 931 / 33	1336 / 1178 / 28	910 / 754 / 24	1126 / 950 / 20	884 / 909 / 27	1061 / 1107 / 22	1117 / 1059 / 30	1377 / 1316 / 25	1162 / 1019 / 32	1374 / 1213 / 25		
	3	774 / 970 / 20	919 / 1170 / 16	902 / 912 / 27	1083 / 1110 / 22	1140 / 1066 / 30	1331 / 1256 / 24	1137 / 982 / 31	1402 / 1221 / 25	814 / 1026 / 18	1000 / 1277 / 15	952 / 968 / 25	1181 / 1216 / 21	1193 / 1119 / 28	1441 / 1363 / 23	1246 / 1080 / 29	1523 / 1329 / 24	883 / 1119 / 18	1075 / 1378 / 14	1035 / 1057 / 24	1274 / 1315 / 20	1290 / 1214 / 27	1541 / 1461 / 21	1287 / 1118 / 27	1635 / 1429 / 23		
10	1	670 / 527 / 39	798 / 650 / 32	677 / 656 / 51	814 / 811 / 42	832 / 757 / 56	972 / 901 / 45	827 / 698 / 53	1006 / 862 / 44	709 / 565 / 37	857 / 705 / 30	711 / 696 / 47	840 / 843 / 38	864 / 792 / 51	1070 / 996 / 43	889 / 755 / 50	1066 / 918 / 40	760 / 613 / 35	910 / 754 / 28	758 / 749 / 44	918 / 927 / 36	915 / 843 / 48	1117 / 1044 / 39	943 / 805 / 47	1162 / 1004 / 39		
	2	798 / 650 / 32	972 / 811 / 26	787 / 799 / 40	972 / 1005 / 34	972 / 913 / 45	1169 / 1112 / 36	1006 / 875 / 44	1221 / 1074 / 36	857 / 705 / 30	1032 / 867 / 25	840 / 858 / 38	1024 / 1064 / 31	1027 / 969 / 41	1276 / 1217 / 34	1066 / 931 / 40	1336 / 1178 / 34	910 / 754 / 28	1126 / 950 / 24	884 / 909 / 35	1061 / 1107 / 28	1117 / 1059 / 39	1377 / 1316 / 33	1162 / 1019 / 39	1374 / 1213 / 31		
	3	774 / 970 / 24	919 / 1170 / 19	902 / 912 / 35	1083 / 1110 / 28	1140 / 1066 / 39	1331 / 1256 / 31	1137 / 982 / 37	1402 / 1221 / 31	814 / 1026 / 22	1000 / 1277 / 18	952 / 968 / 32	1181 / 1216 / 27	1193 / 1119 / 36	1441 / 1363 / 29	1246 / 1080 / 36	1523 / 1329 / 29	883 / 1119 / 21	1075 / 1378 / 17	1035 / 1057 / 31	1274 / 1315 / 26	1290 / 1214 / 34	1541 / 1461 / 28	1287 / 1118 / 32	1635 / 1429 / 28		
0	1	785 / 639 / 27	956 / 797 / 22	800 / 797 / 28	956 / 971 / 23	993 / 920 / 29	1204 / 1129 / 24	989 / 847 / 31	1201 / 1040 / 26	850 / 697 / 26	1030 / 863 / 21	836 / 838 / 26	1026 / 1047 / 22	1028 / 956 / 27	1225 / 1152 / 21	1065 / 916 / 30	1283 / 1114 / 25										
	2	956 / 797 / 22	1166 / 988 / 18	956 / 988 / 23	1138 / 1191 / 18	1150 / 1092 / 23	1389 / 1331 / 18	1201 / 1055 / 26	1468 / 1299 / 21	1030 / 863 / 21	1248 / 1061 / 18	984 / 1021 / 21	1210 / 1270 / 17	1225 / 1168 / 21	1464 / 1405 / 17	1283 / 1130 / 25	1552 / 1376 / 20										
	3	904 / 1150 / 16	1144 / 1470 / 14	1115 / 1143 / 20	1285 / 1330 / 15	1381 / 1303 / 20		1378 / 1200 / 22	1736 / 1519 / 19	960 / 1226 / 15	1205 / 1553 / 13	1134 / 1166 / 18	1354 / 1404 / 15	1465 / 1385 / 19		1462 / 1276 / 21											
5	1	785 / 639 / 27	956 / 797 / 22	800 / 797 / 32	956 / 971 / 26	993 / 920 / 36	1204 / 1129 / 29	989 / 847 / 36	1201 / 1040 / 29	850 / 697 / 26	1030 / 863 / 21	836 / 838 / 30	1026 / 1047 / 25	1028 / 956 / 33	1225 / 1152 / 27	1065 / 916 / 35	1283 / 1114 / 28										
	2	956 / 797 / 22	1166 / 988 / 18	956 / 988 / 26	1138 / 1191 / 21	1150 / 1092 / 28	1389 / 1331 / 23	1201 / 1055 / 29	1468 / 1299 / 24	1030 / 863 / 21	1248 / 1061 / 18	984 / 1021 / 24	1210 / 1270 / 20	1225 / 1168 / 27	1464 / 1405 / 21	1283 / 1130 / 28	1552 / 1376 / 23										
	3	904 / 1150 / 16	1144 / 1470 / 14	1115 / 1143 / 23	1285 / 1330 / 18	1381 / 1303 / 25		1378 / 1200 / 25	1736 / 1519 / 21	960 / 1226 / 15	1205 / 1553 / 13	1134 / 1166 / 21	1354 / 1404 / 17	1465 / 1385 / 24		1462 / 1276 / 24											
10	1	785 / 639 / 32	956 / 797 / 26	800 / 797 / 42	956 / 971 / 34	993 / 920 / 46	1204 / 1129 / 38	989 / 847 / 44	1201 / 1040 / 36	850 / 697 / 31	1030 / 863 / 25	836 / 838 / 39	1026 / 1047 / 32	1028 / 956 / 43	1225 / 1152 / 34	1065 / 916 / 42	1283 / 1114 / 34										
	2	956 / 797 / 26	1166 / 988 / 22	956 / 988 / 34	1138 / 1191 / 27	1150 / 1092 / 36	1389 / 1331 / 29	1201 / 1055 / 36	1468 / 1299 / 29	1030 / 863 / 25	1248 / 1061 / 21	984 / 1021 / 31	1210 / 1270 / 26	1225 / 1168 / 34	1464 / 1405 / 28	1283 / 1130 / 34	1552 / 1376 / 28										
	3	904 / 1150 / 19	1144 / 1470 / 16	1115 / 1143 / 30	1285 / 1330 / 23	1381 / 1303 / 33		1378 / 1200 / 31	1736 / 1519 / 26	960 / 1226 / 18	1205 / 1553 / 15	1134 / 1166 / 27	1354 / 1404 / 22	1465 / 1385 / 31		1462 / 1276 / 29											
0	1	886 / 732 / 24	1060 / 892 / 20	864 / 871 / 24	1046 / 1070 / 20	1097 / 1024 / 26	1295 / 1221 / 20	1094 / 943 / 28	1360 / 1183 / 23	915 / 760 / 23	1125 / 950 / 19	920 / 931 / 23	1104 / 1133 / 19	1163 / 1088 / 25	1358 / 1282 / 19	1160 / 1003 / 27	1430 / 1246 / 22										
	2	1060 / 892 / 20	1325 / 1130 / 17	1046 / 1089 / 20	1275 / 1342 / 16	1295 / 1237 / 20	1629 / 1566 / 17	1360 / 1200 / 23	1627 / 1444 / 19	1125 / 950 / 19	1396 / 1194 / 16	1104 / 1153 / 19	1333 / 1405 / 15	1358 / 1299 / 19		1430 / 1264 / 22											
	3	1012 / 1295 / 14		1199 / 1236 / 17	1506 / 1565 / 15	1540 / 1459 / 18		1538 / 1343 / 20		1057 / 1356 / 14		1256 / 1298 / 16		1605 / 1522 / 17		1602 / 1401 / 19											
5	1	886 / 732 / 24	1060 / 892 / 20	864 / 871 / 28	1046 / 1070 / 23	1097 / 1024 / 32	1295 / 1221 / 25	1094 / 943 / 32	1360 / 1183 / 27	915 / 760 / 23	1125 / 950 / 19	920 / 931 / 27	1104 / 1133 / 22	1163 / 1088 / 30	1358 / 1282 / 24	1160 / 1003 / 31	1430 / 1246 / 25										
	2	1060 / 892 / 20	1325 / 1130 / 17	1046 / 1089 / 23	1275 / 1342 / 19	1295 / 1237 / 25	1629 / 1566 / 21	1360 / 1200 / 27	1627 / 1444 / 21	1125 / 950 / 19	1396 / 1194 / 16	1104 / 1153 / 22	1333 / 1405 / 18	1358 / 1299 / 24		1430 / 1264 / 25											
	3	1012 / 1295 / 14		1199 / 1236 / 20	1506 / 1565 / 17	1540 / 1459 / 23		1538 / 1343 / 23		1057 / 1356 / 14		1256 / 1298 / 19		1605 / 1522 / 21		1602 / 1401 / 19											
10	1	886 / 732 / 29	1060 / 892 / 24	864 / 871 / 36	1046 / 1070 / 30	1097 / 1024 / 41	1295 / 1221 / 33	1094 / 943 / 39	1360 / 1183 / 32	915 / 760 / 27	1125 / 950 / 23	920 / 931 / 35	1104 / 1133 / 28	1163 / 1088 / 39	1358 / 1282 / 31	1160 / 1003 / 37	1430 / 1246 / 31										
	2	1060 / 892 / 24	1325 / 1130 / 20	1046 / 1089 / 30	1275 / 1342 / 24	1295 / 1237 / 33	1629 / 1566 / 28	1360 / 1200 / 32	1627 / 1444 / 26	1125 / 950 / 23	1396 / 1194 / 19	1104 / 1153 / 28	1333 / 1405 / 23	1358 / 1299 / 31		1430 / 1264 / 31											
	3	1012 / 1295 / 17		1199 / 1236 / 26	1506 / 1565 / 22	1540 / 1459 / 29		1538 / 1343 / 28		1057 / 1356 / 16		1256 / 1298 / 24		1605 / 1522 / 28		1602 / 1401 / 26											

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge	
		15	1	596 / 392 / 57	642 / 498 / 47	594 / 512 / 80	646 / 622 / 64	667 / 587 / 88	796 / 721 / 72	661 / 542 / 80	791 / 665 / 64	605 / 414 / 54	662 / 521 / 45	591 / 527 / 75	667 / 647 / 61	691 / 613 / 84	816 / 743 / 67	685 / 566 / 76	837 / 707 / 63	613 / 436 / 52	700 / 556 / 44	599 / 551 / 72	703 / 687 / 59	712 / 635 / 80	859 / 785 / 65

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
		15	1	670 / 527 / 46	798 / 650 / 37	677 / 656 / 62	814 / 811 / 51	832 / 757 / 69	972 / 901 / 55	827 / 698 / 63	1006 / 862 / 51	709 / 565 / 43	857 / 705 / 35	711 / 696 / 57	840 / 843 / 46	864 / 792 / 63	1070 / 996 / 53	889 / 755 / 59	1066 / 918 / 48	760 / 613 / 40	910 / 754 / 33	758 / 749 / 54	918 / 927 / 44	915 / 843 / 59	1117 / 1044 / 49	943 / 805 / 55
2	798 / 650 / 37		972 / 811 / 31	787 / 799 / 49	972 / 1005 / 41	972 / 913 / 55	1169 / 1112 / 44	1006 / 875 / 51	1221 / 1074 / 42	857 / 705 / 35	1032 / 867 / 29	840 / 858 / 46	1024 / 1064 / 38	1027 / 969 / 51	1276 / 1217 / 42	1066 / 931 / 48	1336 / 1178 / 40	910 / 754 / 33	1126 / 950 / 27	884 / 909 / 43	1061 / 1107 / 35	1117 / 1059 / 49	1377 / 1316 / 40	1162 / 1019 / 46	1374 / 1213 / 36	
3	774 / 970 / 27		919 / 1170 / 22	902 / 912 / 43	1083 / 1110 / 35	1140 / 1066 / 49	1331 / 1256 / 38	1137 / 982 / 44	1402 / 1221 / 36	814 / 1026 / 25	1000 / 1277 / 21	952 / 968 / 40	1181 / 1216 / 33	1193 / 1119 / 44	1441 / 1363 / 36	1246 / 1080 / 42	1523 / 1329 / 34	883 / 1119 / 24	1075 / 1378 / 20	1035 / 1057 / 38	1274 / 1315 / 31	1290 / 1214 / 42	1541 / 1461 / 34	1287 / 1118 / 38	1635 / 1429 / 32	
20	1	712 / 527 / 52	798 / 650 / 42	687 / 656 / 74	814 / 811 / 60	832 / 757 / 86	972 / 901 / 68	827 / 698 / 73	1006 / 862 / 60	726 / 565 / 49	857 / 705 / 40	711 / 696 / 68	840 / 843 / 54	864 / 792 / 78	1070 / 996 / 65	889 / 755 / 69	1066 / 918 / 55	760 / 613 / 46	910 / 754 / 38	758 / 749 / 64	918 / 927 / 53	915 / 843 / 73	1117 / 1044 / 60	943 / 805 / 64	1162 / 1004 / 53	
	2	798 / 650 / 42	972 / 811 / 35	787 / 799 / 58	972 / 1005 / 49	972 / 913 / 68	1169 / 1112 / 55	1006 / 875 / 60	1221 / 1074 / 49	857 / 705 / 40	1032 / 867 / 33	840 / 858 / 45	1024 / 1064 / 52	1027 / 969 / 63	1276 / 1217 / 52	1066 / 931 / 55	1336 / 1178 / 47	910 / 754 / 38	1126 / 950 / 31	884 / 909 / 51	1061 / 1107 / 41	1117 / 1059 / 60	1377 / 1316 / 50	1162 / 1019 / 53	1374 / 1213 / 42	
	3	774 / 970 / 31	919 / 1170 / 25	902 / 912 / 51	1083 / 1110 / 41	1140 / 1066 / 60	1331 / 1256 / 47	1137 / 982 / 51	1402 / 1221 / 42	814 / 1026 / 29	1000 / 1277 / 24	952 / 968 / 47	1181 / 1216 / 39	1193 / 1119 / 55	1441 / 1363 / 44	1246 / 1080 / 49	1523 / 1329 / 40	883 / 1119 / 28	1075 / 1378 / 23	1035 / 1057 / 45	1274 / 1315 / 37	1290 / 1214 / 52	1541 / 1461 / 42	1287 / 1118 / 44	1635 / 1429 / 38	
25	1	712 / 527 / 52	798 / 650 / 42	687 / 656 / 74	814 / 811 / 60	832 / 757 / 103	972 / 901 / 81	827 / 698 / 86	1006 / 862 / 70	726 / 565 / 49	857 / 705 / 40	711 / 696 / 68	840 / 843 / 54	864 / 792 / 94	1070 / 996 / 78	889 / 755 / 80	1066 / 918 / 65	760 / 613 / 46	910 / 754 / 38	758 / 749 / 64	918 / 927 / 53	915 / 843 / 88	1117 / 1044 / 72	943 / 805 / 75	1162 / 1004 / 62	
	2	798 / 650 / 42	972 / 811 / 35	787 / 799 / 58	972 / 1005 / 49	972 / 913 / 81	1169 / 1112 / 66	1006 / 875 / 70	1221 / 1074 / 57	857 / 705 / 40	1032 / 867 / 33	840 / 858 / 54	1024 / 1064 / 45	1027 / 969 / 75	1276 / 1217 / 63	1066 / 931 / 65	1336 / 1178 / 55	910 / 754 / 38	1126 / 950 / 31	884 / 909 / 51	1061 / 1107 / 41	1117 / 1059 / 72	1377 / 1316 / 60	1162 / 1019 / 62	1374 / 1213 / 49	
	3	774 / 970 / 31	919 / 1170 / 25	902 / 912 / 51	1083 / 1110 / 41	1140 / 1066 / 72	1331 / 1256 / 56	1137 / 982 / 60	1402 / 1221 / 49	814 / 1026 / 29	1000 / 1277 / 24	952 / 968 / 47	1181 / 1216 / 39	1193 / 1119 / 66	1441 / 1363 / 53	1246 / 1080 / 57	1523 / 1329 / 47	883 / 1119 / 28	1075 / 1378 / 23	1035 / 1057 / 45	1274 / 1315 / 37	1290 / 1214 / 63	1541 / 1461 / 50	1287 / 1118 / 52	1635 / 1429 / 44	
15	1	785 / 639 / 37	956 / 797 / 31	800 / 797 / 51	956 / 971 / 41	993 / 920 / 57	1204 / 1129 / 46	989 / 847 / 51	1201 / 1040 / 42	850 / 697 / 36	1030 / 863 / 30	836 / 838 / 48	1026 / 1047 / 40	1028 / 956 / 53	1225 / 1152 / 42	1065 / 916 / 49	1283 / 1114 / 40									
	2	956 / 797 / 31	1166 / 988 / 25	956 / 988 / 41	1138 / 1191 / 33	1150 / 1092 / 44	1389 / 1331 / 36	1201 / 1055 / 42	1468 / 1299 / 34	1030 / 863 / 30	1248 / 1061 / 24	984 / 1021 / 38	1210 / 1270 / 31	1225 / 1168 / 42	1464 / 1405 / 34	1283 / 1130 / 40	1552 / 1376 / 32									
	3	904 / 1150 / 22	1144 / 1470 / 19	1115 / 1143 / 36	1285 / 1330 / 28	1381 / 1303 / 40		1378 / 1200 / 36	1736 / 1519 / 31	960 / 1226 / 21	1205 / 1553 / 18	1134 / 1166 / 33	1354 / 1404 / 27	1465 / 1385 / 38		1462 / 1276 / 34										
20	1	785 / 639 / 42	956 / 797 / 35	800 / 797 / 60	956 / 971 / 49	993 / 920 / 70	1204 / 1129 / 57	989 / 847 / 60	1201 / 1040 / 49	850 / 697 / 41	1030 / 863 / 34	836 / 838 / 56	1026 / 1047 / 47	1028 / 956 / 65	1225 / 1152 / 52	1065 / 916 / 58	1283 / 1114 / 47									
	2	956 / 797 / 35	1166 / 988 / 29	956 / 988 / 49	1138 / 1191 / 39	1150 / 1092 / 55	1389 / 1331 / 44	1201 / 1055 / 49	1468 / 1299 / 40	1030 / 863 / 34	1248 / 1061 / 28	984 / 1021 / 45	1210 / 1270 / 37	1225 / 1168 / 52	1464 / 1405 / 42	1283 / 1130 / 47	1552 / 1376 / 38									
	3	904 / 1150 / 25	1144 / 1470 / 21	1115 / 1143 / 43	1285 / 1330 / 33	1381 / 1303 / 50		1378 / 1200 / 42	1736 / 1519 / 36	960 / 1226 / 24	1205 / 1553 / 20	1134 / 1166 / 39	1354 / 1404 / 31	1465 / 1385 / 47		1462 / 1276 / 40										
25	1	785 / 639 / 42	956 / 797 / 35	800 / 797 / 60	956 / 971 / 49	993 / 920 / 84	1204 / 1129 / 69	989 / 847 / 70	1201 / 1040 / 57	850 / 697 / 41	1030 / 863 / 34	836 / 838 / 56	1026 / 1047 / 47	1028 / 956 / 78	1225 / 1152 / 63	1065 / 916 / 68	1283 / 1114 / 55									
	2	956 / 797 / 35	1166 / 988 / 29	956 / 988 / 49	1138 / 1191 / 39	1150 / 1092 / 66	1389 / 1331 / 53	1201 / 1055 / 57	1468 / 1299 / 47	1030 / 863 / 34	1248 / 1061 / 28	984 / 1021 / 45	1210 / 1270 / 37	1225 / 1168 / 63	1464 / 1405 / 50	1283 / 1130 / 55	1552 / 1376 / 44									
	3	904 / 1150 / 25	1144 / 1470 / 21	1115 / 1143 / 43	1285 / 1330 / 33	1381 / 1303 / 60		1378 / 1200 / 49	1736 / 1519 / 42	960 / 1226 / 24	1205 / 1553 / 20	1134 / 1166 / 39	1354 / 1404 / 31	1465 / 1385 / 56		1462 / 1276 / 47										
15	1	886 / 732 / 34	1060 / 892 / 27	864 / 871 / 44	1046 / 1070 / 36	1097 / 1024 / 51	1295 / 1221 / 40	1094 / 943 / 46	1360 / 1183 / 38	915 / 760 / 32	1125 / 950 / 26	920 / 931 / 43	1104 / 1133 / 35	1163 / 1088 / 49	1358 / 1282 / 38	1160 / 1003 / 44	1430 / 1246 / 36									
	2	1060 / 892 / 27	1325 / 1130 / 23	1046 / 1089 / 36	1275 / 1342 / 30	1295 / 1237 / 40	1629 / 1566 / 34	1360 / 1200 / 38	1627 / 1444 / 31	1125 / 950 / 26	1396 / 1194 / 22	1104 / 1153 / 35	1333 / 1405 / 28	1358 / 1299 / 38		1430 / 1264 / 36										
	3	1012 / 1295 / 20		1199 / 1236 / 31	1506 / 1565 / 27	1540 / 1459 / 36		1538 / 1343 / 32		1057 / 1356 / 19		1256 / 1298 / 30		1605 / 1522 / 34		1602 / 1401 / 31										
20	1	886 / 732 / 39	1060 / 892 / 31	864 / 871 / 53	1046 / 1070 / 43	1097 / 1024 / 63	1295 / 1221 / 50	1094 / 943 / 53	1360 / 1183 / 44	915 / 760 / 36	1125 / 950 / 30	920 / 931 / 51	1104 / 1133 / 41	1163 / 1088 / 60	1358 / 1282 / 47	1160 / 1003 / 51	1430 / 1246 / 42									
	2	1060 / 892 / 31	1325 / 1130 / 26	1046 / 1089 / 43	1275 / 1342 / 35	1295 / 1237 / 50	1629 / 1566 / 42	1360 / 1200 / 44	1627 / 1444 / 36	1125 / 950 / 30	1396 / 1194 / 25	1104 / 1153 / 41	1333 / 1405 / 33	1358 / 1299 / 47		1430 / 1264 / 42										
	3	1012 / 1295 / 23		1199 / 1236 / 37	1506 / 1565 / 31	1540 / 1459 / 44		1538 / 1343 / 38		1057 / 1356 / 21		1256 / 1298 / 35		1605 / 1522 / 42		1602 / 1401 / 36										
25	1	886 / 732 / 39	1060 / 892 / 31	864 / 871 / 53	1046 / 1070 / 43	1097 / 1024 / 75	1295 / 1221 / 60	1094 / 943 / 62	1360 / 1183 / 52	915 / 760 / 36	1125 / 950 / 30	920 / 931 / 51	1104 / 1133 / 41	1163 / 1088 / 72	1358 / 1282 / 56	1160 / 1003 / 60	1430 / 1246 / 49									
	2	1060 / 892 / 31	1325 / 1130 / 26	1046 / 1089 / 43	1275 / 1342 / 35	1295 / 1237 / 60	1629 / 1566 / 50	1360 / 1200 / 52	1627 / 1444 / 42	1125 / 950 / 30	1396 / 1194 / 25	1104 / 1153 / 41	1333 / 1405 / 33	1358 / 1299 / 56		1430 / 1264 / 49										
	3	1012 / 1295 / 23		1199 / 1236 / 37	1506 / 1565 / 31	1540 / 1459 / 53		1538 / 1343 / 44		1057 / 1356 / 21		1256 / 1298 / 35		1605 / 1522 / 50		1602 / 1401 / 42										

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		30	1	651/369/65	720/498/57	651/491/99	692/622/82	681/587/153	796/721/124	661/542/125	791/665/101	654/390/62	726/521/55	670/527/97	697/647/78	691/613/146	816/743/117	685/566/119	837/707/98	671/417/61	749/556/53	675/551/92	719/687/76	712/635/139	859/785/113
2	720/498/57		769/618/47	692/633/82	756/763/65	796/731/124	937/877/99	791/675/101	967/839/83	726/521/55	807/658/45	697/658/78	797/809/63	816/753/117	984/924/95	837/717/98	1017/886/80	749/556/53	850/697/44	699/680/74	836/853/61	859/796/113	1028/969/91	854/735/92	1065/930/77
3	647/760/43		747/933/35	740/729/72	869/876/57	897/825/106	1103/1030/88	923/786/89	1100/949/71	667/806/41	783/982/33	759/751/67	912/923/55	944/872/102	1154/1080/84	940/803/83	1150/994/69	667/822/39	816/1028/32	798/794/65	953/967/53	990/916/99	1200/1125/80	985/844/80	1197/1036/66
35	1	666/354/68	741/487/61	676/480/110	726/622/93	710/587/175	796/721/142	661/542/141	791/665/114	682/381/67	763/521/59	694/516/107	729/647/88	718/613/167	816/743/134	685/566/134	837/707/111	697/408/65	765/542/57	712/551/105	750/687/86	724/635/159	859/785/130	707/587/127	854/724/104
	2	741/487/61	800/618/51	726/633/93	758/763/74	796/731/142	937/877/113	791/675/114	967/839/94	763/521/59	826/658/49	729/658/88	797/809/72	816/753/134	984/924/109	837/717/111	1017/886/91	765/542/57	852/697/48	729/680/84	836/853/69	859/796/130	1028/969/105	854/735/104	1065/930/87
	3	676/760/46	747/933/38	765/729/81	869/876/65	897/825/121	1103/1030/100	923/786/101	1100/949/81	695/806/45	783/982/36	767/751/76	912/923/62	944/872/117	1154/1080/96	940/803/94	1150/994/77	689/822/42	816/1028/35	798/794/74	953/967/60	990/916/113	1200/1125/92	985/844/91	1197/1036/74
40	1	693/347/117	760/475/104	700/470/156	759/622/136	739/587/202	796/721/164	661/542/157	791/665/127	707/373/114	780/509/102	716/504/153	760/647/129	746/613/193	816/743/154	685/566/149	837/707/123	721/399/112	800/542/99	732/539/150	781/687/125	750/635/183	859/785/149	707/587/142	854/724/116
	2	760/475/104	831/618/89	759/633/136	785/763/108	796/731/164	937/877/130	791/675/127	967/839/105	780/509/102	857/658/86	760/658/129	808/809/104	816/753/154	984/924/125	837/717/123	1017/886/101	800/542/99	882/697/84	759/680/122	836/853/101	859/796/149	1028/969/121	854/735/116	1065/930/97
	3	704/760/81	753/933/66	794/729/118	869/876/94	897/825/140	1103/1030/116	923/786/112	1100/949/90	722/806/79	783/982/64	794/751/111	912/923/91	944/872/135	1154/1080/111	940/803/105	1150/994/86	715/822/74	816/1028/61	816/794/108	953/967/87	990/916/130	1200/1125/106	985/844/101	1197/1036/82
30	1	688/445/60	752/575/51	677/573/88	720/705/72	750/673/135	899/826/110	744/621/110	895/761/89	705/473/59	773/607/49	695/607/86	751/742/69	765/690/128	938/865/106	781/655/107	934/797/86	773/607/49	902/747/40	751/755/69	875/900/102	906/846/84	1107/1048/86	934/809/71	1151/1009/71
	2	752/575/51	864/712/41	720/718/72	874/895/59	899/837/110	1069/1010/88	895/773/89	1110/971/74	773/607/49	902/747/40	751/755/69	875/900/55	906/846/102	1107/1048/84	934/809/86	1151/1009/71	773/607/49	902/747/40	751/755/69	875/900/102	906/846/84	1107/1048/86	934/809/71	1151/1009/71
	3	697/863/37	847/1070/31	835/835/63	991/1009/51	1032/959/95	1242/1166/77	1028/883/77	1238/1074/63	724/901/36	875/1108/30	841/844/59	1025/1047/49	1072/998/91	1277/1202/73	1068/919/74	1338/1163/63	724/901/36	875/1108/30	841/844/59	1025/1047/49	1072/998/91	1277/1202/73	1068/919/74	1338/1163/63
35	1	713/435/64	786/575/55	713/573/100	749/705/81	750/673/154	899/826/125	744/621/124	895/761/101	728/462/62	806/607/54	730/607/98	767/742/79	765/690/146	938/865/121	781/655/121	934/797/97	806/607/62	902/747/54	767/755/79	875/900/117	906/846/96	1107/1048/97	934/809/81	1151/1009/81
	2	786/575/55	864/712/45	749/718/81	874/895/67	899/837/125	1069/1010/100	895/773/101	1110/971/84	806/607/62	902/747/54	767/755/79	875/900/62	906/846/117	1107/1048/96	934/809/97	1151/1009/81	806/607/62	902/747/54	767/755/79	875/900/117	906/846/96	1107/1048/97	934/809/81	1151/1009/81
	3	705/863/41	847/1070/34	835/835/72	991/1009/57	1032/959/109	1242/1166/88	1028/883/87	1238/1074/71	724/901/39	875/1108/32	841/844/67	1025/1047/55	1072/998/105	1277/1202/84	1068/919/84	1338/1163/71	724/901/39	875/1108/32	841/844/67	1025/1047/55	1072/998/105	1277/1202/84	1068/919/84	1338/1163/71
40	1	735/426/109	820/575/96	749/573/146	777/705/118	772/673/178	899/826/145	744/621/138	895/761/112	749/451/107	839/607/94	764/607/143	795/742/115	772/690/169	938/865/140	781/655/134	934/797/108	839/607/94	902/747/76	795/755/115	875/900/135	906/846/111	1107/1048/108	934/809/90	1151/1009/90
	2	820/575/96	877/712/79	777/718/118	874/895/98	899/837/145	1069/1010/116	895/773/112	1110/971/93	839/607/94	902/747/76	795/755/115	875/900/91	906/846/135	1107/1048/111	934/809/108	1151/1009/90	839/607/94	902/747/76	795/755/115	875/900/135	906/846/111	1107/1048/108	934/809/90	1151/1009/90
	3	730/863/71	847/1070/59	837/835/104	991/1009/84	1032/959/125	1242/1166/101	1028/883/97	1238/1074/79	743/901/69	875/1108/56	841/844/98	1025/1047/80	1072/998/121	1277/1202/97	1068/919/93	1338/1163/79	743/901/69	875/1108/56	841/844/98	1025/1047/80	1072/998/121	1277/1202/97	1068/919/93	1338/1163/79
30	1	722/500/57	771/621/47	694/624/82	783/777/67	799/724/124	940/869/99	794/668/101	971/831/83	705/473/59	773/607/49	695/607/86	751/742/69	765/690/128	938/865/106	781/655/107	934/797/86	773/607/49	902/747/40	751/755/69	875/900/102	906/846/84	1107/1048/86	934/809/71	1151/1009/71
	2	771/621/47	938/780/39	759/766/65	906/934/53	940/881/99	1140/1082/80	971/843/83	1188/1043/69	773/607/49	902/747/40	751/755/69	875/900/55	906/846/102	1107/1048/84	934/809/86	1151/1009/71	773/607/49	902/747/40	751/755/69	875/900/102	906/846/84	1107/1048/86	934/809/71	1151/1009/71
	3	750/937/35	899/1141/28	872/879/57	1056/1081/46	1108/1034/88	1308/1232/70	1104/953/71	1373/1195/60	724/901/36	875/1108/30	841/844/59	1025/1047/49	1072/998/91	1277/1202/73	1068/919/74	1338/1163/63	724/901/36	875/1108/30	841/844/59	1025/1047/49	1072/998/91	1277/1202/73	1068/919/74	1338/1163/63
35	1	743/489/61	802/621/51	727/624/93	785/777/76	799/724/142	940/869/113	794/668/114	971/831/94	728/462/62	806/607/54	730/607/98	767/742/79	765/690/146	938/865/121	781/655/121	934/797/97	806/607/62	902/747/54	767/755/79	875/900/117	906/846/96	1107/1048/97	934/809/81	1151/1009/81
	2	802/621/51	938/780/42	761/766/74	906/934/60	940/881/113	1140/1082/92	971/843/94	1188/1043/77	806/607/62	902/747/54	767/755/79	875/900/62	906/846/117	1107/1048/96	934/809/97	1151/1009/81	806/607/62	902/747/54	767/755/79	875/900/117	906/846/96	1107/1048/97	934/809/81	1151/1009/81
	3	750/937/38	899/1141/31	872/879/65	1056/1081/53	1108/1034/100	1308/1232/80	1104/953/81	1373/1195/67	724/901/39	875/1108/32	841/844/67	1025/1047/55	1072/998/105	1277/1202/84	1068/919/84	1338/1163/71	724/901/39	875/1108/32	841/844/67	1025/1047/55	1072/998/105	1277/1202/84	1068/919/84	1338/1163/71
40	1	762/477/104	833/621/89	761/624/136	812/777/111	799/724/164	940/869/130	794/668/127	971/831/105	749/451/107	839/607/94	764/607/143	795/742/115	772/690/169	938/865/140	781/655/134	934/797/108	839/607/94	902/747/76	795/755/115	875/900/135	906/846/111	1107/1048/108	934/809/90	1151/1009/90
	2	833/621/89	938/780/74	787/766/108	906/934/87	940/881/130	1140/1082/106	971/843/105	1188/1043/86	839/607/94	902/747/76	795/755/115	875/900/91	906/846/135	1107/1048/111	934/809/108	1151/1009/90	839/607/94	902/747/76	795/755/115	875/900/135	906/846/111	1107/1048/108	934/809/90	1151/1009/90
	3	755/937/66	899/1141/54	872/879/94	1056/1081/77	1108/1034/116	1308/1232/92	1104/953/90	1373/1195/75	743/901/69	875/1108/56	841/844/98	1025/1047/80	1072/998/121	1277/1202/97	1068/919/93	1338/1163/79	743/901/69	875/1108/56	841/844/98	1025/1047/80	1072/998/121	1277/1202/97	1068/919/93	1338/1163/79

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
7.5 - 15	3 = 3
	1 = 1
15 - 30	2 = 2
	3 = 3
30 - 45	1 = 1

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																																															
Wind Speed [mph]		140																150																160																															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																	
		30	1	738/527/56	798/650/45	710/656/80	814/811/65	832/757/120	972/901/95	827/698/98	1006/862/80	751/565/52	857/705/43	720/696/74	840/843/59	864/792/110	1070/996/91	889/755/92	1066/918/74	778/613/49	910/754/40	758/749/69	918/927/57	915/843/102	1117/1044/84	943/805/86	1162/1004/71	798/650/45	972/811/37	787/799/63	972/1005/53	972/913/95	1169/1112/77	1006/875/80	1221/1074/66	857/705/43	1032/867/35	840/858/59	1024/1064/49	1027/969/88	1276/1217/73	1066/931/74	1336/1178/63	910/754/40	1126/950/33	884/909/55	1061/1107/44	1117/1059/84	1377/1316/70	1162/1019/71	1374/1213/57														
2	774/970/33		919/1170/27	902/912/55	1083/1110/44	1140/1066/84	1331/1256/66	1137/982/69	1402/1221/57	814/1026/31	1000/1277/26	952/968/51	1181/1216/42	1193/1119/77	1441/1363/62	1246/1080/66	1523/1329/54	883/1119/30	1075/1378/24	1035/1057/49	1274/1315/40	1290/1214/73	1541/1461/59	1287/1118/60	1635/1429/51	774/970/33	919/1170/27	902/912/55	1083/1110/44	1140/1066/84	1331/1256/66	1137/982/69	1402/1221/57	814/1026/31	1000/1277/26	952/968/51	1181/1216/42	1193/1119/77	1441/1363/62	1246/1080/66	1523/1329/54	883/1119/30	1075/1378/24	1035/1057/49	1274/1315/40	1290/1214/73	1541/1461/59	1287/1118/60	1635/1429/51																
3	758/515/59		819/650/49	743/656/91	814/811/74	832/757/138	972/901/109	827/698/111	1006/862/91	785/565/57	857/705/46	749/696/84	840/843/67	864/792/125	1070/996/105	889/755/104	1066/918/84	811/613/54	910/754/44	773/749/79	918/927/65	915/843/117	1117/1044/96	943/805/97	1162/1004/81	819/650/49	972/811/41	787/799/72	972/1005/60	972/913/109	1169/1112/88	1006/875/91	1221/1074/74	857/705/46	1032/867/38	840/858/67	1024/1064/55	1027/969/100	1276/1217/84	1066/931/84	1336/1178/71	910/754/44	1126/950/36	884/909/62	1061/1107/50	1117/1059/96	1377/1316/80	1162/1019/81	1374/1213/64																
35	1		774/970/36	919/1170/29	902/912/62	1083/1110/50	1140/1066/96	1331/1256/75	1137/982/77	1402/1221/64	814/1026/34	1000/1277/28	952/968/57	1181/1216/48	1193/1119/88	1441/1363/71	1246/1080/74	1523/1329/61	883/1119/32	1075/1378/26	1035/1057/55	1274/1315/46	1290/1214/84	1541/1461/67	1287/1118/67	1635/1429/57	774/970/36	919/1170/29	902/912/62	1083/1110/50	1140/1066/96	1331/1256/75	1137/982/77	1402/1221/64	814/1026/34	1000/1277/28	952/968/57	1181/1216/48	1193/1119/88	1441/1363/71	1246/1080/74	1523/1329/61	883/1119/32	1075/1378/26	1035/1057/55	1274/1315/46	1290/1214/84	1541/1461/67	1287/1118/67	1635/1429/57															
2	775/502/102		850/650/86	775/656/132	828/811/108	832/757/159	972/901/125	827/698/123	1006/862/101	799/551/96	880/705/81	779/696/122	840/843/98	864/792/145	1070/996/121	889/755/116	1066/918/93	821/597/91	910/754/76	801/749/115	918/927/94	915/843/135	1117/1044/111	943/805/108	1162/1004/90	850/650/86	972/811/71	802/799/104	972/1005/87	972/913/125	1169/1112/101	1006/875/101	1221/1074/82	880/705/81	1032/867/66	840/858/98	1024/1064/80	1027/969/116	1276/1217/97	1066/931/93	1336/1178/79	910/754/76	1126/950/64	884/909/91	1061/1107/73	1117/1059/111	1377/1316/92	1162/1019/90	1374/1213/71																
3	774/970/64		919/1170/51	902/912/91	1083/1110/73	1140/1066/111	1331/1256/87	1137/982/86	1402/1221/71	814/1026/59	1000/1277/48	952/968/84	1181/1216/70	1193/1119/101	1441/1363/82	1246/1080/82	1523/1329/67	883/1119/56	1075/1378/46	1035/1057/80	1274/1315/66	1290/1214/97	1541/1461/77	1287/1118/75	1635/1429/64	774/970/64	919/1170/51	902/912/91	1083/1110/73	1140/1066/111	1331/1256/87	1137/982/86	1402/1221/71	814/1026/59	1000/1277/48	952/968/84	1181/1216/70	1193/1119/101	1441/1363/82	1246/1080/82	1523/1329/67	883/1119/56	1075/1378/46	1035/1057/80	1274/1315/66	1290/1214/97	1541/1461/77	1287/1118/75	1635/1429/64																
30	1		785/639/45	956/797/37	800/797/65	956/971/53	993/920/99	1204/1129/80	989/847/80	1201/1040/66	850/697/44	1030/863/36	836/838/61	1026/1047/51	1028/956/91	1225/1152/73	1065/916/77	1283/1114/63	1030/863/36	1248/1061/30	984/1021/49	1210/1270/40	1225/1168/73	1464/1405/59	1283/1130/63	1552/1376/51	956/797/37	1166/988/31	956/988/53	1138/1191/42	1150/1092/77	1389/1331/62	1201/1055/66	1468/1299/54	1030/863/36	1248/1061/30	984/1021/49	1210/1270/40	1225/1168/73	1464/1405/59	1283/1130/63	1552/1376/51	956/797/37	1166/988/31	956/988/53	1138/1191/42	1150/1092/77	1389/1331/62	1201/1055/66	1468/1299/54	1030/863/36	1248/1061/30	984/1021/49	1210/1270/40	1225/1168/73	1464/1405/59	1283/1130/63	1552/1376/51							
	2		904/1150/27	1144/1470/23	1115/1143/46	1285/1330/36	1381/1303/70	1378/1200/57	1736/1519/48	960/1226/26	1205/1553/22	1134/1166/42	1354/1404/34	1465/1385/66	1462/1276/54	904/1150/27	1144/1470/23	1115/1143/46	1285/1330/36	1381/1303/70	1378/1200/57	1736/1519/48	960/1226/26	1205/1553/22	1134/1166/42	1354/1404/34	1465/1385/66	1462/1276/54	904/1150/27	1144/1470/23	1115/1143/46	1285/1330/36	1381/1303/70	1378/1200/57	1736/1519/48	960/1226/26	1205/1553/22	1134/1166/42	1354/1404/34	1465/1385/66	1462/1276/54	904/1150/27	1144/1470/23	1115/1143/46	1285/1330/36	1381/1303/70	1378/1200/57	1736/1519/48	960/1226/26	1205/1553/22	1134/1166/42	1354/1404/34	1465/1385/66	1462/1276/54											
	3		810/639/49	956/797/41	800/797/74	956/971/60	993/920/113	1204/1129/92	989/847/91	1201/1040/74	852/697/48	1030/863/39	836/838/69	1026/1047/57	1028/956/105	1225/1152/84	1065/916/87	1283/1114/71	1030/863/39	1248/1061/32	984/1021/55	1210/1270/46	1225/1168/84	1464/1405/67	1283/1130/71	1552/1376/57	956/797/41	1166/988/34	956/988/60	1138/1191/48	1150/1092/88	1389/1331/71	1201/1055/74	1468/1299/61	1030/863/39	1248/1061/32	984/1021/55	1210/1270/46	1225/1168/84	1464/1405/67	1283/1130/71	1552/1376/57	956/797/41	1166/988/34	956/988/60	1138/1191/48	1150/1092/88	1389/1331/71	1201/1055/74	1468/1299/61	1030/863/39	1248/1061/32	984/1021/55	1210/1270/46	1225/1168/84	1464/1405/67	1283/1130/71	1552/1376/57							
	35	1	904/1150/29	1144/1470/25	1115/1143/53	1285/1330/41	1381/1303/80	1378/1200/64	1736/1519/54	960/1226/28	1205/1553/23	1134/1166/48	1354/1404/38	1465/1385/75	1462/1276/61	904/1150/29	1144/1470/25	1115/1143/53	1285/1330/41	1381/1303/80	1378/1200/64	1736/1519/54	960/1226/28	1205/1553/23	1134/1166/48	1354/1404/38	1465/1385/75	1462/1276/61	904/1150/29	1144/1470/25	1115/1143/53	1285/1330/41	1381/1303/80	1378/1200/64	1736/1519/54	960/1226/28	1205/1553/23	1134/1166/48	1354/1404/38	1465/1385/75	1462/1276/61	904/1150/29	1144/1470/25	1115/1143/53	1285/1330/41	1381/1303/80	1378/1200/64	1736/1519/54	960/1226/28	1205/1553/23	1134/1166/48	1354/1404/38	1465/1385/75	1462/1276/61											
	2	840/639/86	956/797/71	818/797/108	956/971/87	993/920/130	1204/1129/106	989/847/101	1201/1040/82	882/697/84	1030/863/69	836/838/101	1026/1047/84	1028/956/121	1225/1152/97	1065/916/97	1283/1114/79	840/639/86	956/797/71	818/797/108	956/971/87	993/920/130	1204/1129/106	989/847/101	1201/1040/82	882/697/84	1030/863/69	836/838/101	1026/1047/84	1028/956/121	1225/1152/97	1065/916/97	1283/1114/79	840/639/86	956/797/71	818/797/108	956/971/87	993/920/130	1204/1129/106	989/847/101	1201/1040/82	882/697/84	1030/863/69	836/838/101	1026/1047/84	1028/956/121	1225/1152/97	1065/916/97	1283/1114/79	840/639/86	956/797/71	818/797/108	956/971/87	993/920/130	1204/1129/106	989/847/101	1201/1040/82	882/697/84	1030/863/69	836/838/101	1026/1047/84	1028/956/121	1225/1152/97	1065/916/97	1283/1114/79
	3	956/797/71	1166/988/59	956/988/87	1138/1191/70	1150/1092/101	1389/1331/82	1201/1055/82	1468/1299/67	1030/863/69	1248/1061/56	984/1021/80	1210/1270/66	1225/1168/97	1464/1405/77	1283/1130/79	1552/1376/64	956/797/71	1166/988/59	956/988/87	1138/1191/70	1150/1092/101	1389/1331/82	1201/1055/82	1468/1299/67	1030/863/69	1248/1061/56	984/1021/80	1210/1270/66	1225/1168/97	1464/1405/77	1283/1130/79	1552/1376/64	956/797/71	1166/988/59	956/988/87	1138/1191/70	1150/1092/101	1389/1331/82	1201/1055/82	1468/1299/67	1030/863/69	1248/1061/56	984/1021/80	1210/1270/66	1225/1168/97	1464/1405/77	1283/1130/79	1552/1376/64																
	40	1	904/1150/51	1144/1470/43	1115/1143/77	1285/1330/59	1381/1303/92	1378/1200/71	1736/1519/60	960/1226/48	1205/1553/41	1134/1166/70	1354/1404/56	1465/1385/87	1462/1276/67	904/1150/51	1144/1470/43	1115/1143/77	1285/1330/59	1381/1303/92	1378/1200/71	1736/1519/60	960/1226/48	1205/1553/41	1134/1166/70	1354/1404/56	1465/1385/87	1462/1276/67	904/1150/51	1144/1470/43	1115/1143/77	1285/1330/59	1381/1303/92	1378/1200/71	1736/1519/60	960/1226/48	1205/1553/41	1134/1166/70	1354/1404/56	1465/1385/87	1462/1276/67</																								

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																		
Wind Speed [mph]		95								100								105										
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45				
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge			
		45	1	718 / 339 / 125	777 / 463 / 111	721 / 459 / 168	792 / 622 / 149	749 / 573 / 217	813 / 721 / 180	661 / 542 / 173	791 / 665 / 140	731 / 365 / 122	796 / 496 / 108	736 / 493 / 164	792 / 647 / 141	773 / 613 / 212	816 / 743 / 170	685 / 566 / 164	837 / 707 / 136	743 / 390 / 119	814 / 528 / 106	751 / 526 / 160	811 / 687 / 138	776 / 635 / 201	859 / 785 / 164	707 / 587 / 156	854 / 724 / 127	
2	777 / 463 / 111		862 / 618 / 97	792 / 633 / 149	811 / 763 / 119	813 / 731 / 180	937 / 877 / 143	791 / 675 / 140	967 / 839 / 115	796 / 496 / 108	887 / 658 / 95	792 / 658 / 141	834 / 809 / 115	816 / 753 / 170	984 / 924 / 138	837 / 717 / 136	1017 / 886 / 111	814 / 528 / 106	911 / 697 / 92	789 / 680 / 134	856 / 853 / 111	859 / 796 / 164	1028 / 969 / 133	854 / 735 / 127	1065 / 930 / 107			
3	733 / 760 / 89		776 / 933 / 72	823 / 729 / 130	869 / 876 / 103	897 / 825 / 154	1103 / 1030 / 127	923 / 786 / 123	1100 / 949 / 99	750 / 806 / 86	795 / 982 / 70	821 / 751 / 122	912 / 923 / 100	944 / 872 / 149	1154 / 1080 / 122	940 / 803 / 95	1150 / 994 / 95	741 / 822 / 81	816 / 1028 / 67	843 / 794 / 119	953 / 967 / 96	990 / 916 / 143	1200 / 1125 / 117	985 / 844 / 111	1197 / 1036 / 91			
50	1		742 / 332 / 133	793 / 452 / 118	742 / 449 / 179	804 / 606 / 158	758 / 559 / 232	836 / 721 / 197	661 / 542 / 188	791 / 665 / 153	753 / 356 / 130	809 / 483 / 115	755 / 482 / 175	823 / 647 / 154	780 / 597 / 226	837 / 743 / 185	685 / 566 / 180	837 / 707 / 148	763 / 381 / 127	825 / 514 / 112	768 / 514 / 171	842 / 687 / 150	802 / 635 / 220	862 / 785 / 180	707 / 587 / 171	854 / 724 / 139		
	2		793 / 452 / 118	894 / 618 / 106	804 / 617 / 158	837 / 763 / 129	836 / 731 / 197	937 / 877 / 156	791 / 675 / 153	967 / 839 / 126	809 / 483 / 115	918 / 658 / 103	823 / 658 / 154	859 / 809 / 125	837 / 753 / 185	984 / 924 / 151	837 / 717 / 148	1017 / 886 / 121	825 / 514 / 112	941 / 697 / 100	818 / 680 / 146	880 / 853 / 121	862 / 796 / 180	1028 / 969 / 145	854 / 735 / 139	1065 / 930 / 117		
	3		762 / 760 / 97	799 / 933 / 79	852 / 729 / 142	888 / 876 / 113	897 / 825 / 168	1103 / 1030 / 139	923 / 786 / 135	1100 / 949 / 108	778 / 806 / 94	817 / 982 / 76	848 / 751 / 133	912 / 923 / 108	944 / 872 / 162	1154 / 1080 / 133	940 / 803 / 126	1150 / 994 / 103	767 / 822 / 88	833 / 1028 / 73	869 / 794 / 129	953 / 967 / 104	990 / 916 / 156	1200 / 1125 / 128	985 / 844 / 121	1197 / 1036 / 99		
60	1		783 / 317 / 147	841 / 440 / 133	796 / 439 / 204	846 / 590 / 179	793 / 545 / 265	883 / 721 / 231	661 / 542 / 220	791 / 665 / 178	791 / 340 / 143	854 / 471 / 129	807 / 470 / 199	862 / 629 / 175	812 / 582 / 259	881 / 743 / 218	685 / 566 / 210	837 / 707 / 173	819 / 372 / 143	868 / 500 / 126	817 / 501 / 194	878 / 668 / 170	831 / 619 / 252	905 / 785 / 211	707 / 587 / 199	854 / 724 / 163		
	2		841 / 440 / 133	929 / 601 / 119	846 / 600 / 179	890 / 763 / 150	883 / 731 / 231	937 / 877 / 184	791 / 675 / 178	967 / 839 / 147	854 / 471 / 129	950 / 639 / 115	862 / 640 / 175	910 / 809 / 146	881 / 753 / 218	984 / 924 / 177	837 / 717 / 173	1017 / 886 / 142	868 / 500 / 126	970 / 676 / 112	878 / 680 / 170	930 / 853 / 141	905 / 796 / 211	1028 / 969 / 170	854 / 735 / 163	1065 / 930 / 137		
	3		819 / 760 / 112	846 / 933 / 91	910 / 729 / 165	933 / 876 / 131	917 / 825 / 197	1103 / 1030 / 163	923 / 786 / 158	1100 / 949 / 126	833 / 806 / 108	862 / 982 / 88	903 / 751 / 155	955 / 923 / 126	944 / 872 / 191	1154 / 1080 / 157	940 / 803 / 147	1150 / 994 / 121	819 / 822 / 101	876 / 1028 / 84	922 / 794 / 150	976 / 967 / 121	990 / 916 / 184	1200 / 1125 / 150	985 / 844 / 142	1197 / 1036 / 116		
45	1	755 / 416 / 117	831 / 560 / 103	766 / 559 / 157	806 / 705 / 130	798 / 673 / 196	899 / 826 / 159	744 / 621 / 152	895 / 761 / 123	767 / 441 / 114	848 / 591 / 100	780 / 592 / 153	823 / 742 / 126	796 / 690 / 186	938 / 865 / 154	781 / 655 / 148	934 / 797 / 119	ASCE Group Zone										
	2	831 / 560 / 103	905 / 712 / 86	806 / 718 / 130	876 / 895 / 107	899 / 837 / 159	1069 / 1010 / 127	895 / 773 / 123	1110 / 971 / 103	848 / 591 / 100	925 / 747 / 83	823 / 755 / 126	875 / 900 / 100	906 / 846 / 149	1107 / 1048 / 122	934 / 809 / 119	1151 / 1009 / 99	Panal Angle										
	3	755 / 863 / 78	847 / 1070 / 64	863 / 835 / 115	991 / 1009 / 92	1032 / 959 / 138	1242 / 1166 / 112	1028 / 883 / 107	1238 / 1074 / 87	767 / 901 / 75	875 / 1108 / 61	851 / 844 / 107	1025 / 1047 / 88	1072 / 998 / 133	1277 / 1202 / 106	1068 / 919 / 103	1338 / 1163 / 87	Mono Slope										
	50	1	774 / 406 / 124	841 / 545 / 109	781 / 546 / 167	835 / 705 / 142	823 / 673 / 214	899 / 826 / 174	744 / 621 / 166	895 / 761 / 135	785 / 430 / 121	856 / 574 / 106	793 / 577 / 162	851 / 742 / 137	820 / 690 / 203	938 / 865 / 168	781 / 655 / 162	934 / 797 / 130	0 - 7.5									
		2	841 / 545 / 109	933 / 712 / 94	835 / 718 / 142	900 / 895 / 117	899 / 837 / 174	1069 / 1010 / 139	895 / 773 / 135	1110 / 971 / 112	856 / 574 / 106	952 / 747 / 91	851 / 755 / 137	884 / 900 / 108	906 / 846 / 162	1107 / 1048 / 133	934 / 809 / 130	1151 / 1009 / 108	7.5 - 15									
		3	780 / 863 / 85	847 / 1070 / 70	888 / 835 / 125	991 / 1009 / 100	1032 / 959 / 151	1242 / 1166 / 122	1028 / 883 / 117	1238 / 1074 / 94	791 / 901 / 82	875 / 1108 / 67	875 / 844 / 117	1025 / 1047 / 96	1072 / 998 / 145	1277 / 1202 / 116	1068 / 919 / 112	1338 / 1163 / 94	15 - 30									
	60	1	827 / 396 / 140	880 / 529 / 122	828 / 532 / 189	893 / 705 / 165	850 / 655 / 245	927 / 826 / 204	744 / 621 / 158	895 / 761 / 152	835 / 419 / 136	893 / 558 / 119	838 / 563 / 184	908 / 742 / 160	868 / 690 / 238	948 / 865 / 197	781 / 655 / 189	934 / 797 / 152	30 - 45									
		2	880 / 529 / 122	988 / 712 / 108	893 / 718 / 165	947 / 895 / 136	927 / 837 / 204	1069 / 1010 / 163	895 / 773 / 158	1110 / 971 / 131	893 / 558 / 119	1006 / 747 / 105	908 / 755 / 160	928 / 900 / 126	915 / 846 / 191	1107 / 1048 / 157	934 / 809 / 152	1151 / 1009 / 126	1 = 1									
		3	830 / 863 / 98	888 / 1070 / 81	939 / 835 / 146	994 / 1009 / 117	1032 / 959 / 177	1242 / 1166 / 143	1028 / 883 / 137	1238 / 1074 / 110	840 / 901 / 95	898 / 1108 / 77	923 / 844 / 136	1025 / 1047 / 112	1072 / 998 / 170	1277 / 1202 / 136	1068 / 919 / 131	1338 / 1163 / 110	2 = 2									
45	1	779 / 465 / 111	865 / 621 / 97	794 / 624 / 149	840 / 777 / 122	815 / 724 / 180	940 / 869 / 143	794 / 668 / 140	971 / 831 / 115	767 / 441 / 114	848 / 591 / 100	780 / 592 / 153	823 / 742 / 126	796 / 690 / 186	938 / 865 / 154	781 / 655 / 148	934 / 797 / 119	ASCE Group Zone										
	2	865 / 621 / 97	944 / 780 / 81	813 / 766 / 119	906 / 934 / 96	940 / 881 / 143	1140 / 1082 / 117	971 / 843 / 115	1188 / 1043 / 95	848 / 591 / 100	925 / 747 / 83	823 / 755 / 126	875 / 900 / 100	906 / 846 / 149	1107 / 1048 / 122	934 / 809 / 119	1151 / 1009 / 99	Panal Angle										
	3	778 / 937 / 72	899 / 1141 / 59	872 / 879 / 103	1056 / 1081 / 84	1108 / 1034 / 127	1308 / 1232 / 101	1104 / 953 / 99	1373 / 1195 / 82	767 / 901 / 75	875 / 1108 / 61	851 / 844 / 107	1025 / 1047 / 88	1072 / 998 / 133	1277 / 1202 / 106	1068 / 919 / 103	1338 / 1163 / 87	Mono Slope										
	50	1	795 / 454 / 118	896 / 621 / 106	806 / 608 / 158	867 / 777 / 133	839 / 724 / 197	940 / 869 / 156	794 / 668 / 153	971 / 831 / 126	785 / 430 / 121	856 / 574 / 106	793 / 577 / 162	851 / 742 / 137	820 / 690 / 203	938 / 865 / 168	781 / 655 / 162	934 / 797 / 130	0 - 7.5									
		2	896 / 621 / 106	970 / 780 / 88	840 / 766 / 129	906 / 934 / 104	940 / 881 / 156	1140 / 1082 / 128	971 / 843 / 126	1188 / 1043 / 103	856 / 574 / 106	952 / 747 / 91	851 / 755 / 137	884 / 900 / 108	906 / 846 / 162	1107 / 1048 / 133	934 / 809 / 130	1151 / 1009 / 108	7.5 - 15									
		3	802 / 937 / 79	899 / 1141 / 64	890 / 879 / 113	1056 / 1081 / 92	1108 / 1034 / 139	1308 / 1232 / 110	1104 / 953 / 108	1373 / 1195 / 90	791 / 901 / 82	875 / 1108 / 67	875 / 844 / 117	1025 / 1047 / 96	1072 / 998 / 145	1277 / 1202 / 116	1068 / 919 / 112	1338 / 1163 / 94	15 - 30									
	60	1	842 / 442 / 133	931 / 603 / 119	847 / 592 / 179	921 / 777 / 155	885 / 724 / 231	940 / 869 / 184	794 / 668 / 178	971 / 831 / 147	835 / 419 / 136	893 / 558 / 119	838 / 563 / 184	908 / 742 / 160	868 / 690 / 238	948 / 865 / 197	781 / 655 / 189	934 / 797 / 152	30 - 45									
		2	931 / 603 / 119	1022 / 780 / 101	892 / 766 / 150	940 / 934 / 121	940 / 881 / 184	1140 / 1082 / 150	971 / 843 / 147	1188 / 1043 / 121	893 / 558 / 119	1006 / 747 / 105	908 / 755 / 160	928 / 900 / 126	915 / 846 / 191	1107 / 1048 / 157	934 / 809 / 152	1151 / 1009 / 126	1 = 1									
		3	848 / 937 / 91	905 / 1141 / 74	936 / 879 / 131	1056 / 1081 / 107	1108 / 1034 / 163	1308 / 1232 / 130	1104 / 953 / 126	1373 / 1195 / 105	840 / 901 / 95	898 / 1108 / 77	923 / 844 / 136	1025 / 1047 / 112	1072 / 998 / 170	1277 / 1202 / 136	1068 / 919 / 131	1338 / 1163 / 110	2 = 2									

Exposure Category : C

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																					
Wind Speed [mph]		140								150								160									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
45	1	790/490/108	880/650/95	807/656/145	855/811/119	834/757/175	972/901/138	827/698/136	1006/862/111	833/551/106	908/705/89	809/696/134	851/843/107	864/792/159	1070/996/133	889/755/127	1066/918/103	854/597/100	932/754/83	829/749/126	918/927/103	915/843/149	1117/1044/122	943/805/119	1162/1004/99		
	2	880/650/95	972/811/78	827/799/115	972/1005/96	972/913/138	1169/1112/112	1006/875/111	1221/1074/91	908/705/89	1032/867/72	851/858/107	1024/1064/88	1027/969/127	1276/1217/106	1066/931/103	1336/1178/87	932/754/83	1126/950/70	884/909/100	1061/1107/80	1117/1059/122	1377/1316/101	1162/1019/99	1374/1213/78		
	3	788/970/70	919/1170/56	902/912/100	1083/1110/80	1140/1066/122	1331/1256/96	1137/982/95	1402/1221/78	814/1026/64	1000/1277/53	952/968/92	1181/1216/77	1193/1119/112	1441/1363/90	1246/1080/91	1523/1329/74	883/1119/61	1075/1378/50	1035/1057/88	1274/1315/73	1290/1214/106	1541/1461/85	1287/1118/82	1635/1429/70		
50	1	825/490/118	911/650/103	817/639/154	881/811/129	856/757/191	972/901/151	827/698/148	1006/862/121	845/536/112	937/705/97	839/696/146	874/843/117	864/792/174	1070/996/145	889/755/139	1066/918/112	861/580/106	959/754/91	857/749/137	924/927/113	915/843/162	1117/1044/133	943/805/130	1162/1004/108		
	2	911/650/103	986/811/85	852/799/125	972/1005/104	972/913/151	1169/1112/122	1006/875/121	1221/1074/99	937/705/97	1032/867/79	874/858/117	1024/1064/96	1027/969/139	1276/1217/116	1066/931/112	1336/1178/94	959/754/91	1126/950/76	890/909/108	1061/1107/88	1117/1059/133	1377/1316/110	1162/1019/108	1374/1213/86		
	3	810/970/76	919/1170/61	903/912/108	1083/1110/88	1140/1066/133	1331/1256/104	1137/982/103	1402/1221/86	822/1026/70	1000/1277/58	952/968/100	1181/1216/84	1193/1119/122	1441/1363/99	1246/1080/99	1523/1329/81	883/1119/67	1075/1378/55	1035/1057/96	1274/1315/79	1290/1214/116	1541/1461/93	1287/1118/90	1635/1429/77		
60	1	849/465/129	943/631/115	856/621/175	934/811/150	901/757/225	972/901/177	827/698/173	1006/862/142	886/522/126	963/683/108	898/696/170	922/843/136	901/792/204	1070/996/170	889/755/163	1066/918/131	897/564/119	1012/754/105	913/749/160	970/927/131	922/843/191	1117/1044/157	943/805/152	1162/1004/126		
	2	943/631/115	1036/811/98	903/799/146	990/1005/121	972/913/177	1169/1112/143	1006/875/142	1221/1074/116	963/683/108	1060/867/91	922/858/136	1024/1064/112	1027/969/163	1276/1217/136	1066/931/131	1336/1178/110	1012/754/105	1126/950/88	934/909/126	1061/1107/102	1117/1059/157	1377/1316/130	1162/1019/126	1374/1213/100		
	3	855/970/88	919/1170/70	948/912/126	1083/1110/102	1140/1066/157	1331/1256/123	1137/982/121	1402/1221/100	863/1026/81	1000/1277/67	964/968/117	1181/1216/97	1193/1119/143	1441/1363/116	1246/1080/116	1523/1329/95	904/1119/77	1075/1378/63	1035/1057/112	1274/1315/92	1290/1214/136	1541/1461/109	1287/1118/105	1635/1429/89		
45	1	871/639/95	956/797/78	845/797/119	956/971/96	993/920/143	1204/1129/117	989/847/111	1201/1040/91	911/697/92	1030/863/75	856/838/111	1026/1047/92	1028/956/133	1225/1152/106	1065/916/107	1283/1114/87										
	2	956/797/78	1166/988/64	956/988/96	1138/1191/77	1150/1092/112	1389/1331/90	1201/1055/91	1468/1299/74	1030/863/75	1248/1061/61	984/1021/88	1210/1270/73	1225/1168/106	1464/1405/85	1283/1130/87	1552/1376/70										
	3	904/1150/56	1144/1470/48	1115/1143/84	1285/1330/65	1381/1303/101		1378/1200/78	1736/1519/66	960/1226/53	1205/1553/45	1134/1166/77	1354/1404/61	1465/1385/96	1462/1276/74												
50	1	901/639/103	974/797/85	871/797/129	956/971/104	993/920/156	1204/1129/128	989/847/121	1201/1040/99	941/697/100	1030/863/82	880/838/121	1026/1047/100	1028/956/145	1225/1152/116	1065/916/117	1283/1114/94										
	2	974/797/85	1166/988/70	956/988/104	1138/1191/84	1150/1092/122	1389/1331/99	1201/1055/81	1468/1299/81	1030/863/82	1248/1061/67	984/1021/96	1210/1270/79	1225/1168/116	1464/1405/93	1283/1130/94	1552/1376/77										
	3	904/1150/61	1144/1470/52	1115/1143/92	1285/1330/71	1381/1303/110		1378/1200/86	1736/1519/72	960/1226/58	1205/1553/49	1134/1166/84	1354/1404/67	1465/1385/104	1462/1276/81												
60	1	934/620/115	1024/797/98	924/797/150	978/971/121	993/920/184	1204/1129/150	989/847/142	1201/1040/116	970/676/112	1069/863/95	930/838/141	1026/1047/117	1028/956/170	1225/1152/136	1065/916/137	1283/1114/110										
	2	1024/797/98	1166/988/81	978/988/121	1138/1191/97	1150/1092/143	1389/1331/116	1201/1055/116	1468/1299/95	1069/863/95	1248/1061/77	984/1021/112	1210/1270/92	1225/1168/136	1464/1405/109	1283/1130/110	1552/1376/89										
	3	904/1150/70	1144/1470/60	1115/1143/107	1285/1330/83	1381/1303/130		1378/1200/100	1736/1519/84	960/1226/67	1205/1553/56	1134/1166/97	1354/1404/78	1465/1385/123	1462/1276/95												
45	1	922/732/86	1060/892/70	864/871/103	1046/1070/84	1097/1024/127	1295/1221/101	1094/943/99	1360/1183/82	927/760/81	1125/950/67	920/931/100	1104/1133/80	1163/1088/122	1358/1282/96	1160/1003/95	1430/1246/78										
	2	1060/892/70	1325/1130/59	1046/1089/84	1275/1342/69	1295/1237/101	1629/1566/85	1360/1200/82	1627/1444/66	1125/950/67	1396/1194/56	1104/1153/80	1333/1405/65	1358/1299/96	1430/1264/78												
	3	1012/1295/50		1199/1236/73	1506/1565/61	1540/1459/90		1538/1343/70		1057/1356/48		1256/1298/69		1605/1522/85	1602/1401/66												
50	1	950/732/94	1060/892/76	884/871/113	1046/1070/92	1097/1024/139	1295/1221/110	1094/943/108	1360/1183/90	953/760/88	1125/950/73	920/931/108	1104/1133/88	1163/1088/133	1358/1282/104	1160/1003/103	1430/1246/86										
	2	1060/892/76	1325/1130/64	1046/1089/92	1275/1342/75	1295/1237/110	1629/1566/93	1360/1200/90	1627/1444/72	1125/950/73	1396/1194/61	1104/1153/88	1333/1405/71	1358/1299/104	1430/1264/86												
	3	1012/1295/55		1199/1236/79	1506/1565/67	1540/1459/99		1538/1343/77		1057/1356/52		1256/1298/75		1605/1522/93	1602/1401/72												
60	1	1005/732/108	1069/892/88	930/871/131	1046/1070/107	1097/1024/163	1295/1221/130	1094/943/126	1360/1183/105	1005/760/101	1125/950/84	961/931/126	1104/1133/102	1163/1088/157	1358/1282/123	1160/1003/121	1430/1246/100										
	2	1069/892/88	1325/1130/74	1046/1089/107	1275/1342/88	1295/1237/130	1629/1566/109	1360/1200/105	1627/1444/84	1125/950/84	1396/1194/70	1104/1153/102	1333/1405/83	1358/1299/123	1430/1264/100												
	3	1012/1295/63		1199/1236/92	1506/1565/78	1540/1459/116		1538/1343/89		1057/1356/60		1256/1298/88		1605/1522/109	1602/1401/84												

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		95								100								105								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		
		70	1	838 / 309 / 163	885 / 429 / 147	826 / 418 / 221	884 / 574 / 199	824 / 531 / 298	902 / 700 / 259	670 / 542 / 252	791 / 665 / 204	843 / 332 / 159	896 / 458 / 143	834 / 447 / 216	897 / 612 / 194	841 / 567 / 291	925 / 743 / 251	685 / 566 / 240	837 / 707 / 198	849 / 354 / 155	906 / 486 / 139	841 / 476 / 210	910 / 649 / 188	858 / 602 / 283	947 / 785 / 244	707 / 587 / 228
110	1	854 / 376 / 151	916 / 514 / 135	871 / 519 / 210	923 / 685 / 183	874 / 637 / 275	968 / 826 / 236	744 / 621 / 222	895 / 761 / 180	881 / 409 / 151	953 / 558 / 135	879 / 548 / 205	964 / 742 / 183	890 / 670 / 267	987 / 865 / 228	781 / 655 / 216	934 / 797 / 174									
115	1	881 / 409 / 151	953 / 558 / 135	879 / 548 / 205	964 / 742 / 183	890 / 670 / 267	987 / 865 / 228	781 / 655 / 216	934 / 797 / 174																	
120	1	886 / 431 / 147	963 / 585 / 131	886 / 576 / 199	975 / 777 / 177	904 / 703 / 259	969 / 869 / 212	794 / 668 / 204	971 / 831 / 168	881 / 409 / 151	953 / 558 / 135	879 / 548 / 205	964 / 742 / 183	890 / 670 / 267	987 / 865 / 228	781 / 655 / 216	934 / 797 / 174									
130	1	886 / 431 / 147	963 / 585 / 131	886 / 576 / 199	975 / 777 / 177	904 / 703 / 259	969 / 869 / 212	794 / 668 / 204	971 / 831 / 168	881 / 409 / 151	953 / 558 / 135	879 / 548 / 205	964 / 742 / 183	890 / 670 / 267	987 / 865 / 228	781 / 655 / 216	934 / 797 / 174									

Exposure Category : C

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
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θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																																															
Wind Speed [mph]		140																150																160																															
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45																			
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge																	
		70	1	891/452/143	972/612/127	892/604/194	986/811/172	946/757/259	983/901/204	827/698/198	1006/862/162	924/507/139	1019/683/123	930/676/188	969/843/155	942/792/236	1070/996/197	889/755/186	1066/918/150	930/547/131	1030/729/115	969/749/183	1016/927/150	960/843/220	1117/1044/181	943/805/174	1162/1004/144	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102						
70	2	972/612/127	1086/811/111	954/799/166	1033/1005/139	983/913/204	1169/1112/165	1006/875/162	1221/1074/132	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
70	3	900/970/100	945/1170/80	992/912/144	1083/1110/116	1140/1066/181	1331/1256/142	1137/982/138	1402/1221/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
80	1	929/440/156	997/593/138	924/587/212	1005/785/187	962/734/285	1019/901/232	827/698/223	1006/862/183	959/493/151	1040/661/134	959/656/205	1017/843/174	983/792/267	1081/996/223	889/755/210	1066/918/169	989/547/147	1082/729/129	994/727/199	1062/927/168	998/843/250	1117/1044/205	943/805/196	1162/1004/163	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
80	2	997/593/138	1096/782/120	1005/799/187	1075/1005/156	1019/913/232	1169/1112/187	1006/875/183	1221/1074/149	1040/661/134	1153/867/116	1017/858/174	1086/1064/143	1038/969/214	1276/1217/178	1066/931/169	1336/1178/142	1082/729/129	1208/950/111	1022/909/162	1086/1107/131	1117/1059/205	1377/1316/169	1162/1019/163	1374/1213/129	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
80	3	945/970/111	981/1170/89	1036/912/162	1102/1110/131	1140/1066/205	1331/1256/161	1137/982/156	1402/1221/129	946/1026/103	1026/1277/85	1046/968/150	1181/1216/125	1193/1119/187	1441/1363/152	1246/1080/149	1523/1329/122	983/1119/98	1075/1378/80	1095/1057/143	1274/1315/118	1290/1214/178	1541/1461/143	1287/1118/136	1635/1429/115	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
90	1	963/427/168	1052/593/153	982/587/235	1056/785/207	974/711/309	1054/901/259	827/698/248	1006/862/203	990/479/163	1057/639/143	984/637/221	1065/843/194	1024/792/299	1115/996/249	889/755/233	1066/918/188	1017/530/158	1095/704/138	1016/704/214	1108/927/187	1036/843/279	1126/1044/229	943/805/218	1162/1004/181	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
90	2	1052/593/153	1144/782/133	1056/799/207	1118/1005/173	1054/913/259	1169/1112/209	1006/875/203	1221/1074/166	1057/639/143	1199/867/128	1065/858/194	1125/1064/159	1071/969/239	1276/1217/199	1066/931/188	1336/1178/158	1095/704/138	1203/912/119	1067/909/180	1122/1107/145	1126/1059/229	1377/1316/189	1162/1019/181	1374/1213/143	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
90	3	989/970/123	1016/1170/99	1080/912/180	1138/1110/145	1143/1066/229	1331/1256/180	1137/982/173	1402/1221/143	987/1026/114	1060/1277/94	1087/968/166	1196/1216/138	1193/1119/209	1441/1363/170	1246/1080/166	1523/1329/136	1022/1119/109	1101/1378/89	1134/1057/159	1274/1315/131	1290/1214/199	1541/1461/160	1287/1118/151	1635/1429/128	1019/683/123	1106/867/103	969/858/155	1047/1064/128	1027/969/189	1276/1217/157	1066/931/150	1336/1178/126	1030/729/115	1164/950/100	978/909/144	1061/1107/116	1117/1059/181	1377/1316/149	1162/1019/144	1374/1213/114	904/1026/92	1000/1277/76	1005/968/133	1181/1216/111	1193/1119/165	1441/1363/134	1246/1080/132	1523/1329/108	943/1119/88	1075/1378/72	1055/1057/128	1274/1315/105	1290/1214/157	1541/1461/126	1287/1118/120	1635/1429/102								
Wind Speed [mph]		170																180																190																200															
70	1	963/601/127	1074/797/111	976/797/172	1021/971/139	1009/920/212	1204/1129/173	989/847/162	1201/1040/132	995/655/123	1117/863/107	979/838/161	1061/1047/133	1028/956/197	1225/1152/157	1065/916/156	1283/1114/126	995/655/123	1117/863/107	979/838/161	1061/1047/133	1028/956/197	1225/1152/157	1065/916/156	1283/1114/126	1117/863/107	1248/1061/88	1017/1021/128	1210/1270/105	1225/1168/126	1464/1405/102	1283/1130/102	1552/1376/102	1117/863/107	1248/1061/88	1017/1021/128	1210/1270/105	1225/1168/126	1464/1405/102	1283/1130/102	1552/1376/102	963/1226/76	1205/1553/64	1134/1166/111	1354/1404/89	1465/1385/142	1462/1276/108	963/1226/76	1205/1553/64	1134/1166/111	1354/1404/89	1465/1385/142	1462/1276/108												
70	2	1074/797/111	1169/988/92	1021/988/139	1138/1191/111	1150/1092/165	1389/1331/134	1201/1055/132	1468/1299/108	1117/863/107	1248/1061/88	1017/1021/128	1210/1270/105	1225/1168/126	1464/1405/102	1283/1130/102	1552/1376/102	1117/863/107	1248/1061/88	1017/1021/128	1210/1270/105	1225/1168/126	1464/1405/102	1283/1130/102	1552/1376/102	963/1226/76	1205/1553/64	1134/1166/111	1354/1404/89	1465/1385/142	1462/1276/108	963/1226/76	1205/1553/64	1134/1166/111	1354/1404/89	1465/1385/142	1462/1276/108	963/1226/76	1205/1553/64	1134/1166/111	1354/1404/89	1465/1385/142	1462/1276/108	963/1226/76	1205/1553/64	1134/1166/111	1354/1404/89	1465/1385/142	1462/1276/108																
70	3	933/1150/80	1144/1470/68	1115/1143/122	1285/1330/94	1381/1303/149	1378/1200/114	1736/1519/96	963/1226/76	1205/1553/64	1134/1166/111	1354/1404/89	1465/1385/142	1462/1276/108	963/																																																		

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	955 / 279 / 200	996 / 394 / 184	927 / 376 / 273	978 / 526 / 251	928 / 503 / 396	1006 / 679 / 352	742 / 542 / 348	792 / 665 / 282	952 / 298 / 195	998 / 420 / 179	953 / 413 / 273	1014 / 577 / 251	939 / 536 / 385	1023 / 720 / 341	749 / 566 / 331	837 / 707 / 273	950 / 318 / 189	1000 / 445 / 173	953 / 439 / 266	1020 / 610 / 243	950 / 569 / 374	1039 / 760 / 330	753 / 587 / 315	854 / 724 / 257
	2	996 / 394 / 184	1069 / 548 / 168	978 / 536 / 251	1065 / 739 / 228	1006 / 688 / 352	1077 / 877 / 297	792 / 675 / 282	967 / 839 / 232	998 / 420 / 179	1078 / 581 / 162	1014 / 587 / 251	1077 / 782 / 220	1023 / 730 / 341	1099 / 924 / 286	837 / 717 / 273	1017 / 886 / 224	1000 / 445 / 173	1086 / 613 / 157	1020 / 621 / 243	1088 / 823 / 213	1039 / 770 / 330	1118 / 969 / 275	854 / 735 / 257	1065 / 930 / 215
	3	1048 / 760 / 173	1032 / 933 / 141	1040 / 665 / 235	1117 / 876 / 205	1075 / 825 / 319	1160 / 1030 / 264	923 / 786 / 249	1100 / 949 / 199	1055 / 806 / 168	1041 / 982 / 135	1050 / 704 / 228	1132 / 923 / 198	1097 / 872 / 308	1184 / 1080 / 253	940 / 803 / 232	1150 / 994 / 191	1026 / 822 / 157	1048 / 1028 / 130	1059 / 743 / 220	1146 / 967 / 190	1117 / 916 / 297	1205 / 1125 / 242	985 / 844 / 224	1197 / 1036 / 182

Wind Speed [mph]		110								115															
100	1	974 / 346 / 189	1034 / 484 / 173	981 / 478 / 266	1025 / 643 / 235	959 / 600 / 363	1054 / 798 / 319	775 / 621 / 306	895 / 761 / 249	971 / 366 / 184	1036 / 509 / 168	981 / 503 / 258	1063 / 697 / 235	968 / 631 / 352	1068 / 835 / 308	797 / 655 / 298	934 / 797 / 240	1036 / 509 / 168	1139 / 697 / 152	1063 / 709 / 235	1104 / 900 / 198	1068 / 846 / 308	1149 / 1048 / 253	934 / 809 / 240	1151 / 1009 / 199
	2	1034 / 484 / 173	1093 / 643 / 152	1025 / 655 / 235	1138 / 895 / 213	1054 / 809 / 319	1135 / 1010 / 264	895 / 773 / 249	1110 / 971 / 207	1036 / 509 / 168	1139 / 697 / 152	1063 / 709 / 235	1104 / 900 / 198	1068 / 846 / 308	1149 / 1048 / 253	934 / 809 / 240	1151 / 1009 / 199	1036 / 509 / 168	1139 / 697 / 152	1063 / 709 / 235	1104 / 900 / 198	1068 / 846 / 308	1149 / 1048 / 253	934 / 809 / 240	1151 / 1009 / 199
	3	1030 / 863 / 152	1053 / 1070 / 125	1105 / 807 / 220	1157 / 1009 / 182	1135 / 959 / 286	1242 / 1166 / 231	1028 / 883 / 215	1238 / 1074 / 174	1033 / 901 / 146	1055 / 1108 / 119	1113 / 844 / 213	1165 / 1047 / 175	1151 / 998 / 275	1277 / 1202 / 220	1068 / 919 / 207	1338 / 1163 / 174	1033 / 901 / 146	1055 / 1108 / 119	1113 / 844 / 213	1165 / 1047 / 175	1151 / 998 / 275	1277 / 1202 / 220	1068 / 919 / 207	1338 / 1163 / 174

Wind Speed [mph]		120								130															
100	1	997 / 396 / 184	1071 / 550 / 168	980 / 528 / 251	1067 / 729 / 228	1008 / 681 / 352	1080 / 869 / 297	795 / 668 / 282	971 / 831 / 232	971 / 366 / 184	1036 / 509 / 168	981 / 503 / 258	1063 / 697 / 235	968 / 631 / 352	1068 / 835 / 308	797 / 655 / 298	934 / 797 / 240	1036 / 509 / 168	1139 / 697 / 152	1063 / 709 / 235	1104 / 900 / 198	1068 / 846 / 308	1149 / 1048 / 253	934 / 809 / 240	1151 / 1009 / 199
	2	1071 / 550 / 168	1145 / 726 / 146	1067 / 742 / 228	1110 / 934 / 190	1080 / 881 / 297	1160 / 1082 / 242	971 / 843 / 232	1188 / 1043 / 191	1036 / 509 / 168	1139 / 697 / 152	1063 / 709 / 235	1104 / 900 / 198	1068 / 846 / 308	1149 / 1048 / 253	934 / 809 / 240	1151 / 1009 / 199	1036 / 509 / 168	1139 / 697 / 152	1063 / 709 / 235	1104 / 900 / 198	1068 / 846 / 308	1149 / 1048 / 253	934 / 809 / 240	1151 / 1009 / 199
	3	1034 / 937 / 141	1055 / 1141 / 114	1120 / 879 / 205	1171 / 1081 / 167	1164 / 1034 / 264	1308 / 1232 / 209	1104 / 953 / 199	1373 / 1195 / 166	1033 / 901 / 146	1055 / 1108 / 119	1113 / 844 / 213	1165 / 1047 / 175	1151 / 998 / 275	1277 / 1202 / 220	1068 / 919 / 207	1338 / 1163 / 174	1033 / 901 / 146	1055 / 1108 / 119	1113 / 844 / 213	1165 / 1047 / 175	1151 / 998 / 275	1277 / 1202 / 220	1068 / 919 / 207	1338 / 1163 / 174

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																													
Wind Speed [mph]		140								150								160																	
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45											
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge										
100	1	994 / 414 / 179	1072 / 574 / 162	1009 / 570 / 251	1070 / 759 / 220	1016 / 711 / 341	1090 / 901 / 286	827 / 698 / 273	1006 / 862 / 224	1017 / 464 / 173	1109 / 639 / 157	1039 / 637 / 243	1112 / 843 / 213	1029 / 766 / 319	1149 / 996 / 275	889 / 755 / 257	1066 / 918 / 207	1040 / 514 / 168	1145 / 704 / 152	1034 / 681 / 228	1153 / 927 / 205	1074 / 843 / 308	1157 / 1044 / 253	943 / 805 / 240	1162 / 1004 / 199										
	2	1072 / 574 / 162	1149 / 753 / 141	1070 / 772 / 220	1160 / 1005 / 190	1090 / 913 / 286	1169 / 1112 / 231	1006 / 875 / 224	1221 / 1074 / 182	1109 / 639 / 157	1198 / 833 / 135	1112 / 858 / 213	1164 / 1064 / 175	1103 / 969 / 264	1276 / 1217 / 220	1066 / 931 / 207	1336 / 1178 / 174	1145 / 704 / 152	1246 / 912 / 130	1111 / 909 / 198	1157 / 1107 / 160	1157 / 1059 / 253	1377 / 1316 / 209	1162 / 1019 / 199	1374 / 1213 / 158										
	3	1034 / 970 / 135	1052 / 1170 / 108	1124 / 912 / 198	1174 / 1110 / 160	1174 / 1066 / 253	1331 / 1256 / 198	1137 / 982 / 191	1402 / 1221 / 158	1028 / 1026 / 125	1094 / 1277 / 103	1128 / 968 / 182	1230 / 1216 / 152	1193 / 1119 / 231	1441 / 1363 / 187	1246 / 1080 / 182	1523 / 1329 / 149	1061 / 1119 / 119	1133 / 1378 / 98	1173 / 1057 / 175	1283 / 1315 / 145	1290 / 1214 / 220	1541 / 1461 / 176	1287 / 1118 / 166	1635 / 1429 / 141										
Wind Speed [mph]		170								180																									
100	1	1064 / 564 / 162	1181 / 768 / 146	1061 / 746 / 220	1148 / 971 / 190	1119 / 920 / 297	1208 / 1129 / 242	989 / 847 / 224	1201 / 1040 / 182	1086 / 613 / 157	1216 / 831 / 141	1088 / 809 / 213	1183 / 1047 / 182	1118 / 956 / 275	1225 / 1152 / 220	1065 / 916 / 215	1283 / 1114 / 174	1181 / 768 / 146	1292 / 988 / 125	1148 / 988 / 190	1198 / 1191 / 152	1153 / 1092 / 231	1389 / 1331 / 187	1201 / 1055 / 182	1468 / 1299 / 149	1216 / 831 / 141	1335 / 1061 / 119	1134 / 1021 / 175	1235 / 1270 / 145	1225 / 1168 / 220	1464 / 1405 / 176	1283 / 1130 / 174	1552 / 1376 / 141		
	2	1181 / 768 / 146	1292 / 988 / 125	1148 / 988 / 190	1198 / 1191 / 152	1153 / 1092 / 231	1389 / 1331 / 187	1201 / 1055 / 182	1468 / 1299 / 149	1216 / 831 / 141	1335 / 1061 / 119	1134 / 1021 / 175	1235 / 1270 / 145	1225 / 1168 / 220	1464 / 1405 / 176	1283 / 1130 / 174	1552 / 1376 / 141	1041 / 1150 / 108	1167 / 1470 / 92	1215 / 1143 / 167	1285 / 1330 / 129	1381 / 1303 / 209	1378 / 1200 / 158	1736 / 1519 / 133	1065 / 1226 / 103	1205 / 1553 / 87	1195 / 1166 / 152	1354 / 1404 / 122	1465 / 1385 / 198	1462 / 1276 / 149					
	3	1041 / 1150 / 108	1167 / 1470 / 92	1215 / 1143 / 167	1285 / 1330 / 129	1381 / 1303 / 209	1378 / 1200 / 158	1736 / 1519 / 133	1065 / 1226 / 103	1205 / 1553 / 87	1195 / 1166 / 152	1354 / 1404 / 122	1465 / 1385 / 198	1462 / 1276 / 149																					
Wind Speed [mph]		190								200																									
100	1	1108 / 661 / 152	1248 / 892 / 135	1113 / 871 / 205	1164 / 1070 / 167	1156 / 1024 / 264	1295 / 1221 / 209	1094 / 943 / 199	1360 / 1183 / 166	1129 / 708 / 146	1279 / 950 / 130	1138 / 931 / 198	1190 / 1133 / 160	1191 / 1088 / 253	1358 / 1282 / 198	1160 / 1003 / 191	1430 / 1246 / 158	1248 / 892 / 135	1375 / 1130 / 114	1164 / 1089 / 167	1275 / 1342 / 137	1295 / 1237 / 209	1629 / 1566 / 176	1360 / 1200 / 166	1627 / 1444 / 133	1279 / 950 / 130	1410 / 1194 / 108	1190 / 1153 / 160	1333 / 1405 / 129	1358 / 1299 / 198	1430 / 1264 / 158				
	2	1248 / 892 / 135	1375 / 1130 / 114	1164 / 1089 / 167	1275 / 1342 / 137	1295 / 1237 / 209	1629 / 1566 / 176	1360 / 1200 / 166	1627 / 1444 / 133	1279 / 950 / 130	1410 / 1194 / 108	1190 / 1153 / 160	1333 / 1405 / 129	1358 / 1299 / 198	1430 / 1264 / 158			1085 / 1295 / 98		1226 / 1236 / 145	1506 / 1565 / 122	1540 / 1459 / 187		1538 / 1343 / 141		1101 / 1356 / 92		1256 / 1298 / 137		1605 / 1522 / 176	1602 / 1401 / 133				
	3	1085 / 1295 / 98		1226 / 1236 / 145	1506 / 1565 / 122	1540 / 1459 / 187		1538 / 1343 / 141		1101 / 1356 / 92		1256 / 1298 / 137		1605 / 1522 / 176	1602 / 1401 / 133																				

Exposure Category : C

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																											
Wind Speed [mph]		95								100								105																			
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45													
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge												
		0	1	568 / 428 / 38	677 / 536 / 31	581 / 544 / 40	680 / 662 / 32	707 / 629 / 41	857 / 782 / 34	701 / 581 / 45	852 / 721 / 37	592 / 452 / 37	718 / 573 / 31	603 / 570 / 38	720 / 706 / 31	730 / 654 / 39	876 / 803 / 32	725 / 604 / 43	900 / 765 / 36	613 / 473 / 35	738 / 594 / 29	622 / 594 / 37	736 / 726 / 30	771 / 694 / 38	919 / 846 / 31	765 / 641 / 42	915 / 780 / 34										
2	677 / 536 / 31		822 / 673 / 26	680 / 674 / 32	808 / 823 / 26	830 / 768 / 33	993 / 935 / 27	852 / 732 / 37	1029 / 897 / 30	718 / 573 / 31	868 / 714 / 25	720 / 718 / 31	850 / 870 / 25	876 / 814 / 32	1041 / 982 / 26	900 / 776 / 36	1080 / 944 / 29	738 / 594 / 29	883 / 731 / 24	736 / 739 / 30	891 / 914 / 24	919 / 858 / 31	1084 / 1026 / 25	915 / 792 / 34	1127 / 987 / 28												
3	667 / 821 / 24		789 / 992 / 19	771 / 766 / 28	921 / 934 / 23	956 / 884 / 29	1159 / 1086 / 24	987 / 845 / 33	1209 / 1046 / 27	678 / 839 / 22	825 / 1040 / 18	813 / 812 / 27	964 / 981 / 22	1004 / 932 / 28	1208 / 1134 / 23	1039 / 892 / 31	1262 / 1094 / 26	710 / 882 / 21	857 / 1084 / 18	853 / 856 / 26	1004 / 1025 / 21	1050 / 977 / 27	1251 / 1177 / 21	1046 / 900 / 29	1311 / 1138 / 25												
5	1	568 / 428 / 38	677 / 536 / 31	581 / 544 / 47	680 / 662 / 37	707 / 629 / 50	857 / 782 / 41	701 / 581 / 50	852 / 721 / 41	592 / 452 / 37	718 / 573 / 31	603 / 570 / 45	720 / 706 / 36	730 / 654 / 47	876 / 803 / 38	725 / 604 / 48	900 / 765 / 40	613 / 473 / 35	738 / 594 / 29	622 / 594 / 42	736 / 726 / 34	771 / 694 / 46	919 / 846 / 37	765 / 641 / 47	915 / 780 / 38												
	2	677 / 536 / 31	822 / 673 / 26	680 / 674 / 37	808 / 823 / 30	830 / 768 / 39	993 / 935 / 32	852 / 732 / 41	1029 / 897 / 34	718 / 573 / 31	868 / 714 / 25	720 / 718 / 36	850 / 870 / 29	876 / 814 / 38	1041 / 982 / 31	900 / 776 / 40	1080 / 944 / 33	738 / 594 / 29	883 / 731 / 24	736 / 739 / 34	891 / 914 / 28	919 / 858 / 37	1084 / 1026 / 29	915 / 792 / 38	1127 / 987 / 31												
	3	667 / 821 / 24	789 / 992 / 19	771 / 766 / 32	921 / 934 / 26	956 / 884 / 34	1159 / 1086 / 28	987 / 845 / 36	1209 / 1046 / 30	678 / 839 / 22	825 / 1040 / 18	813 / 812 / 31	964 / 981 / 25	1004 / 932 / 33	1208 / 1134 / 27	1039 / 892 / 35	1262 / 1094 / 29	710 / 882 / 21	857 / 1084 / 18	853 / 856 / 30	1004 / 1025 / 24	1050 / 977 / 32	1251 / 1177 / 26	1046 / 900 / 33	1311 / 1138 / 27												
10	1	568 / 428 / 46	677 / 536 / 37	581 / 544 / 60	680 / 662 / 48	707 / 629 / 63	857 / 782 / 52	701 / 581 / 60	852 / 721 / 50	592 / 452 / 44	718 / 573 / 37	603 / 570 / 57	720 / 706 / 47	730 / 654 / 60	876 / 803 / 49	725 / 604 / 57	900 / 765 / 48	613 / 473 / 42	738 / 594 / 35	622 / 594 / 55	736 / 726 / 44	771 / 694 / 58	919 / 846 / 47	765 / 641 / 56	915 / 780 / 45												
	2	677 / 536 / 37	822 / 673 / 31	680 / 674 / 48	808 / 823 / 39	830 / 768 / 50	993 / 935 / 41	852 / 732 / 50	1029 / 897 / 40	718 / 573 / 37	868 / 714 / 30	720 / 718 / 47	850 / 870 / 38	876 / 814 / 49	1041 / 982 / 39	900 / 776 / 48	1080 / 944 / 39	738 / 594 / 35	883 / 731 / 28	736 / 739 / 44	891 / 914 / 36	919 / 858 / 47	1084 / 1026 / 37	915 / 792 / 45	1127 / 987 / 37												
	3	667 / 821 / 28	789 / 992 / 23	771 / 766 / 42	921 / 934 / 34	956 / 884 / 44	1159 / 1086 / 36	987 / 845 / 43	1209 / 1046 / 36	678 / 839 / 26	825 / 1040 / 22	813 / 812 / 40	964 / 981 / 32	1004 / 932 / 42	1208 / 1134 / 34	1039 / 892 / 42	1262 / 1094 / 34	710 / 882 / 25	857 / 1084 / 21	853 / 856 / 39	1004 / 1025 / 31	1050 / 977 / 41	1251 / 1177 / 33	1046 / 900 / 39	1311 / 1138 / 33												
0	1	632 / 493 / 34	776 / 629 / 28	639 / 615 / 35	772 / 765 / 29	788 / 713 / 36	961 / 888 / 30	805 / 677 / 41	957 / 818 / 33	664 / 522 / 33	791 / 644 / 27	671 / 650 / 34	806 / 803 / 28	825 / 750 / 35	1001 / 927 / 29	820 / 692 / 38	996 / 854 / 31	<table border="1"> <thead> <tr> <th colspan="2">ASCE Group Zone</th> </tr> <tr> <th>Panal Angle</th> <th>Mono Slope</th> </tr> </thead> <tbody> <tr> <td>0 - 7.5</td> <td>1 = 1 2 = 2 3 = 3</td> </tr> <tr> <td>7.5 - 15</td> <td>1 = 1 2 = 2 3 = 3</td> </tr> <tr> <td>15 - 30</td> <td>1 = 1 2 = 2 3 = 3</td> </tr> <tr> <td>30 - 45</td> <td>1 = 1 2 = 2 3 = 3</td> </tr> </tbody> </table>								ASCE Group Zone		Panal Angle	Mono Slope	0 - 7.5	1 = 1 2 = 2 3 = 3	7.5 - 15	1 = 1 2 = 2 3 = 3	15 - 30	1 = 1 2 = 2 3 = 3	30 - 45	1 = 1 2 = 2 3 = 3
	ASCE Group Zone																																				
	Panal Angle	Mono Slope																																			
0 - 7.5	1 = 1 2 = 2 3 = 3																																				
7.5 - 15	1 = 1 2 = 2 3 = 3																																				
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2	776 / 629 / 28	924 / 768 / 23	772 / 779 / 29	929 / 957 / 23	927 / 868 / 29	1124 / 1066 / 24	957 / 830 / 33	1171 / 1028 / 27	791 / 644 / 27	963 / 803 / 22	780 / 791 / 27	964 / 996 / 23	964 / 905 / 28	1159 / 1101 / 23	996 / 867 / 31	1210 / 1064 / 26																					
3	739 / 923 / 21	886 / 1124 / 17	892 / 898 / 25	1041 / 1065 / 20	1092 / 1018 / 26	1288 / 1214 / 20	1088 / 938 / 28	1353 / 1177 / 23	767 / 961 / 20	911 / 1159 / 16	894 / 903 / 23	1073 / 1100 / 19	1130 / 1057 / 25	1392 / 1314 / 20	1126 / 973 / 27	1389 / 1210 / 22																					
5	1	632 / 493 / 34	776 / 629 / 28	639 / 615 / 40	772 / 765 / 33	788 / 713 / 43	961 / 888 / 36	805 / 677 / 45	957 / 818 / 36	664 / 522 / 33	791 / 644 / 27	671 / 650 / 39	806 / 803 / 32	825 / 750 / 42	1001 / 927 / 34	820 / 692 / 43	996 / 854 / 35																				
	2	776 / 629 / 28	924 / 768 / 23	772 / 779 / 33	929 / 957 / 27	927 / 868 / 34	1124 / 1066 / 28	957 / 830 / 36	1171 / 1028 / 30	791 / 644 / 27	963 / 803 / 22	780 / 791 / 31	964 / 996 / 26	964 / 905 / 33	1159 / 1101 / 27	996 / 867 / 35	1210 / 1064 / 29																				
	3	739 / 923 / 21	886 / 1124 / 17	892 / 898 / 29	1041 / 1065 / 23	1092 / 1018 / 31	1288 / 1214 / 24	1088 / 938 / 31	1353 / 1177 / 26	767 / 961 / 20	911 / 1159 / 16	894 / 903 / 27	1073 / 1100 / 22	1130 / 1057 / 29	1392 / 1314 / 24	1126 / 973 / 30	1389 / 1210 / 25																				
10	1	632 / 493 / 40	776 / 629 / 34	639 / 615 / 52	772 / 765 / 43	788 / 713 / 55	961 / 888 / 46	805 / 677 / 54	957 / 818 / 43	664 / 522 / 39	791 / 644 / 32	671 / 650 / 51	806 / 803 / 42	825 / 750 / 54	1001 / 927 / 44	820 / 692 / 51	996 / 854 / 42																				
	2	776 / 629 / 34	924 / 768 / 27	772 / 779 / 43	929 / 957 / 35	927 / 868 / 44	1124 / 1066 / 36	957 / 830 / 43	1171 / 1028 / 36	791 / 644 / 32	963 / 803 / 26	780 / 791 / 40	964 / 996 / 34	964 / 905 / 42	1159 / 1101 / 34	996 / 867 / 42	1210 / 1064 / 34																				
	3	739 / 923 / 25	886 / 1124 / 20	892 / 898 / 38	1041 / 1065 / 30	1092 / 1018 / 39	1288 / 1214 / 31	1088 / 938 / 37	1353 / 1177 / 31	767 / 961 / 24	911 / 1159 / 19	894 / 903 / 35	1073 / 1100 / 28	1130 / 1057 / 37	1392 / 1314 / 31	1126 / 973 / 36	1389 / 1210 / 30																				
0	1	679 / 538 / 31	825 / 675 / 26	683 / 665 / 32	811 / 812 / 26	860 / 785 / 34	1037 / 964 / 28	855 / 724 / 37	1033 / 888 / 30	664 / 522 / 33	791 / 644 / 27	671 / 650 / 34	806 / 803 / 28	825 / 750 / 35	1001 / 927 / 29	820 / 692 / 38	996 / 854 / 31																				
	2	825 / 675 / 26	999 / 837 / 21	811 / 826 / 26	996 / 1032 / 22	997 / 939 / 27	1248 / 1188 / 23	1033 / 901 / 30	1245 / 1096 / 25	791 / 644 / 27	963 / 803 / 22	780 / 791 / 27	964 / 996 / 23	964 / 905 / 28	1159 / 1101 / 23	996 / 867 / 31	1210 / 1064 / 26																				
	3	792 / 996 / 19	981 / 1250 / 16	925 / 938 / 23	1155 / 1187 / 19	1164 / 1091 / 24	1421 / 1343 / 19	1214 / 1050 / 27	1418 / 1237 / 21	767 / 961 / 20	911 / 1159 / 16	894 / 903 / 23	1073 / 1100 / 19	1130 / 1057 / 25	1392 / 1314 / 20	1126 / 973 / 27	1389 / 1210 / 22																				
5	1	679 / 538 / 31	825 / 675 / 26	683 / 665 / 37	811 / 812 / 30	860 / 785 / 41	1037 / 964 / 33	855 / 724 / 41	1033 / 888 / 34	664 / 522 / 33	791 / 644 / 27	671 / 650 / 39	806 / 803 / 32	825 / 750 / 42	1001 / 927 / 34	820 / 692 / 43	996 / 854 / 35																				
	2	825 / 675 / 26	999 / 837 / 21	811 / 826 / 30	996 / 1032 / 25	997 / 939 / 32	1248 / 1188 / 27	1033 / 901 / 34	1245 / 1096 / 27	791 / 644 / 27	963 / 803 / 22	780 / 791 / 31	964 / 996 / 26	964 / 905 / 33	1159 / 1101 / 27	996 / 867 / 35	1210 / 1064 / 29																				
	3	792 / 996 / 19	981 / 1250 / 16	925 / 938 / 26	1155 / 1187 / 22	1164 / 1091 / 28	1421 / 1343 / 23	1214 / 1050 / 30	1418 / 1237 / 24	767 / 961 / 20	911 / 1159 / 16	894 / 903 / 27	1073 / 1100 / 22	1130 / 1057 / 29	1392 / 1314 / 24	1126 / 973 / 30	1389 / 1210 / 25																				
10	1	679 / 538 / 37	825 / 675 / 31	683 / 665 / 48	811 / 812 / 39	860 / 785 / 52	1037 / 964 / 42	855 / 724 / 50	1033 / 888 / 40	664 / 522 / 39	791 / 644 / 32	671 / 650 / 51	806 / 803 / 42	825 / 750 / 54	1001 / 927 / 44	820 / 692 / 51	996 / 854 / 42																				
	2	825 / 675 / 31	999 / 837 / 25	811 / 826 / 39	996 / 1032 / 32	997 / 939 / 41	1248 / 1188 / 34	1033 / 901 / 40	1245 / 1096 / 33	791 / 644 / 32	963 / 803 / 26	780 / 791 / 40	964 / 996 / 34	964 / 905 / 42	1159 / 1101 / 34	996 / 867 / 42	1210 / 1064 / 34																				
	3	792 / 996 / 23	981 / 1250 / 19	925 / 938 / 34	1155 / 1187 / 28	1164 / 1091 / 36	1421 / 1343 / 29	1214 / 1050 / 36	1418 / 1237 / 28	767 / 961 / 24	911 / 1159 / 19	894 / 903 / 35	1073 / 1100 / 28	1130 / 1057 / 37	1392 / 1314 / 31	1126 / 973 / 36	1389 / 1210 / 30																				

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft		92.5in x 45.9in		Load: Up / Down / Side , lbs																			
Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
0	1	710/566/31	858/706/25	711/697/31	841/844/25	865/793/32	1071/997/27	889/756/36	1067/919/29	747/603/28	919/762/24	765/757/30	892/902/23	924/852/30	1128/1055/25	952/813/34	1174/1014/28	798/650/27	972/811/22	788/785/27	973/989/23	973/902/28	1170/1097/23	1006/863/31	1222/1059/26
	2	858/706/25	1033/867/21	841/859/25	1025/1065/21	1028/970/26	1277/1218/21	1067/932/29	1338/1179/25	919/762/24	1091/921/19	892/918/23	1071/1118/19	1128/1069/25	1317/1260/19	1174/1029/28	1387/1226/22	972/811/22	1187/1006/18	973/1006/23	1158/1213/18	1170/1112/23	1413/1355/18	1222/1074/26	1494/1322/21
	3	815/1027/18	1001/1278/15	953/969/22	1182/1217/18	1194/1121/23	1442/1365/18	1247/1081/26	1524/1330/21	892/1130/18	1086/1392/14	1045/1068/21	1219/1259/16	1303/1226/21	1556/1476/17	1300/1129/23	1651/1443/20	920/1170/16	1096/1409/13	1083/1111/19	1307/1354/15	1332/1257/19	1403/1222/22		
5	1	710/566/31	858/706/25	711/697/36	841/844/29	865/793/38	1071/997/32	889/756/40	1067/919/33	747/603/28	919/762/24	765/757/34	892/902/27	924/852/36	1128/1055/29	952/813/38	1174/1014/31	798/650/27	972/811/22	788/785/31	973/989/26	973/902/33	1170/1097/27	1006/863/35	1222/1059/29
	2	858/706/25	1033/867/21	841/859/29	1025/1065/24	1028/970/31	1277/1218/26	1067/932/33	1338/1179/27	919/762/24	1091/921/19	892/918/27	1071/1118/22	1128/1069/29	1317/1260/23	1174/1029/31	1387/1226/25	972/811/22	1187/1006/18	973/1006/26	1158/1213/21	1170/1112/27	1413/1355/22	1222/1074/29	1494/1322/24
	3	815/1027/18	1001/1278/15	953/969/25	1182/1217/21	1194/1121/27	1442/1365/22	1247/1081/29	1524/1330/24	892/1130/18	1086/1392/14	1045/1068/24	1219/1259/19	1303/1226/26	1556/1476/21	1300/1129/26	1651/1443/22	920/1170/16	1096/1409/13	1083/1111/22	1307/1354/18	1332/1257/23	1403/1222/25		
10	1	710/566/37	858/706/30	711/697/47	841/844/38	865/793/49	1071/997/41	889/756/48	1067/919/39	747/603/34	919/762/28	765/757/44	892/902/35	924/852/46	1128/1055/37	952/813/45	1174/1014/37	798/650/32	972/811/26	788/785/40	973/989/34	973/902/42	1170/1097/34	1006/863/42	1222/1059/34
	2	858/706/30	1033/867/25	841/859/38	1025/1065/31	1028/970/39	1277/1218/33	1067/932/39	1338/1179/33	919/762/28	1091/921/23	892/918/35	1071/1118/28	1128/1069/37	1317/1260/29	1174/1029/37	1387/1226/30	972/811/26	1187/1006/22	973/1006/34	1158/1213/27	1170/1112/34	1413/1355/28	1222/1074/34	1494/1322/28
	3	815/1027/22	1001/1278/18	953/969/32	1182/1217/27	1194/1121/34	1442/1365/28	1247/1081/34	1524/1330/28	892/1130/21	1086/1392/17	1045/1068/31	1219/1259/24	1303/1226/33	1556/1476/26	1300/1129/31	1651/1443/27	920/1170/19	1096/1409/15	1083/1111/28	1307/1354/23	1332/1257/29	1403/1222/30		

Exposure Category : D

ASCE Group Zone

Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Wind Speed [mph]		170								180															
0	1	844/693/25	1016/852/21	856/859/26	1008/1028/21	1053/980/27	1255/1181/21	1049/903/29	1315/1142/25	883/731/24	1092/921/20	891/898/24	1078/1104/20	1084/1012/25	1335/1259/20	1127/973/28	1402/1220/23								
	2	1016/852/21	1279/1088/18	1008/1047/21	1240/1302/17	1255/1197/21	1500/1440/17	1315/1159/25	1591/1410/20	1092/921/20	1301/1110/16	1078/1124/20	1315/1384/16	1335/1276/20	1402/1238/23	1677/1489/19									
	3	984/1256/15		1162/1196/18	1387/1439/15	1418/1341/18		1499/1308/21		1043/1336/14		1236/1275/17		1495/1416/17		1585/1385/20									
5	1	844/693/25	1016/852/30	856/859/30	1008/1028/24	1053/980/32	1255/1181/26	1049/903/33	1315/1142/27	883/731/24	1092/921/20	891/898/28	1078/1104/23	1084/1012/29	1335/1259/24	1127/973/31	1402/1220/26								
	2	1016/852/21	1279/1088/18	1008/1047/24	1240/1302/20	1255/1197/26	1500/1440/21	1315/1159/27	1591/1410/22	1092/921/20	1301/1110/16	1078/1124/23	1315/1384/19	1335/1276/24	1402/1238/26	1677/1489/21									
	3	984/1256/15		1162/1196/21	1387/1439/17	1418/1341/22		1499/1308/24		1043/1336/14		1236/1275/20		1495/1416/21		1585/1385/22									
10	1	844/693/30	1016/852/25	856/859/39	1008/1028/31	1053/980/41	1255/1181/33	1049/903/39	1315/1142/33	883/731/28	1092/921/24	891/898/36	1078/1104/30	1084/1012/37	1335/1259/31	1127/973/37	1402/1220/31								
	2	1016/852/25	1279/1088/21	1008/1047/31	1240/1302/26	1255/1197/33	1500/1440/26	1315/1159/33	1591/1410/27	1092/921/24	1301/1110/19	1078/1124/30	1315/1384/24	1335/1276/31	1402/1238/31	1677/1489/25									
	3	984/1256/18		1162/1196/27	1387/1439/22	1418/1341/28		1499/1308/28		1043/1336/17		1236/1275/26		1495/1416/26		1585/1385/27									

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		15	1	612 / 428 / 53	677 / 536 / 44	598 / 544 / 74	680 / 662 / 59	707 / 629 / 77	857 / 782 / 63	701 / 581 / 70	852 / 721 / 58	622 / 452 / 51	718 / 573 / 43	607 / 570 / 70	720 / 706 / 57	730 / 654 / 73	876 / 803 / 59	725 / 604 / 67	900 / 765 / 56	630 / 473 / 49	738 / 594 / 40	622 / 594 / 67	736 / 726 / 54	771 / 694 / 71	919 / 846 / 57
2	677 / 536 / 44		822 / 673 / 36	680 / 674 / 59	808 / 823 / 48	830 / 768 / 61	993 / 935 / 49	852 / 732 / 58	1029 / 897 / 47	718 / 573 / 43	868 / 714 / 35	720 / 718 / 57	850 / 870 / 46	876 / 814 / 59	1041 / 982 / 47	900 / 776 / 56	1080 / 944 / 45	738 / 594 / 40	883 / 731 / 33	736 / 739 / 54	891 / 914 / 44	919 / 858 / 57	1084 / 1026 / 46	915 / 792 / 52	1127 / 987 / 43
3	667 / 821 / 33		789 / 992 / 26	771 / 766 / 51	921 / 934 / 41	956 / 884 / 53	1159 / 1086 / 44	987 / 845 / 51	1209 / 1046 / 42	678 / 839 / 31	825 / 1040 / 25	813 / 812 / 49	964 / 981 / 40	1004 / 932 / 51	1208 / 1134 / 42	1039 / 892 / 49	1262 / 1094 / 40	710 / 882 / 30	857 / 1084 / 24	853 / 856 / 48	1004 / 1025 / 38	1050 / 977 / 49	1251 / 1177 / 40	1046 / 900 / 45	1311 / 1138 / 38
20	1	643 / 411 / 59	707 / 536 / 50	648 / 544 / 87	680 / 662 / 70	707 / 629 / 92	857 / 782 / 76	701 / 581 / 80	852 / 721 / 66	663 / 442 / 57	732 / 573 / 49	656 / 570 / 83	720 / 706 / 68	730 / 654 / 87	876 / 803 / 71	725 / 604 / 76	900 / 765 / 64	684 / 473 / 56	738 / 594 / 46	661 / 594 / 80	736 / 726 / 64	771 / 694 / 85	919 / 846 / 69	765 / 641 / 74	915 / 780 / 60
	2	707 / 536 / 50	822 / 673 / 41	680 / 674 / 70	808 / 823 / 56	830 / 768 / 73	993 / 935 / 59	852 / 732 / 66	1029 / 897 / 54	732 / 573 / 49	868 / 714 / 40	720 / 718 / 68	850 / 870 / 54	876 / 814 / 71	1041 / 982 / 57	900 / 776 / 64	1080 / 944 / 51	738 / 594 / 46	883 / 731 / 38	736 / 739 / 64	891 / 914 / 53	919 / 858 / 69	1084 / 1026 / 55	915 / 792 / 60	1127 / 987 / 49
	3	667 / 821 / 38	789 / 992 / 30	771 / 766 / 60	921 / 934 / 49	956 / 884 / 64	1159 / 1086 / 52	987 / 845 / 58	1209 / 1046 / 47	678 / 839 / 35	825 / 1040 / 29	813 / 812 / 58	964 / 981 / 47	1004 / 932 / 62	1208 / 1134 / 50	1039 / 892 / 56	1262 / 1094 / 45	710 / 882 / 34	857 / 1084 / 28	853 / 856 / 56	1004 / 1025 / 45	1050 / 977 / 59	1251 / 1177 / 48	1046 / 900 / 51	1311 / 1138 / 43
25	1	643 / 411 / 59	707 / 536 / 50	648 / 544 / 87	680 / 662 / 70	707 / 629 / 110	857 / 782 / 91	701 / 581 / 93	852 / 721 / 76	663 / 442 / 57	732 / 573 / 49	656 / 570 / 83	720 / 706 / 68	730 / 654 / 105	876 / 803 / 85	725 / 604 / 88	900 / 765 / 74	684 / 473 / 56	738 / 594 / 46	661 / 594 / 80	736 / 726 / 64	771 / 694 / 102	919 / 846 / 82	765 / 641 / 86	915 / 780 / 69
	2	707 / 536 / 50	822 / 673 / 41	680 / 674 / 70	808 / 823 / 56	830 / 768 / 88	993 / 935 / 71	852 / 732 / 76	1029 / 897 / 62	732 / 573 / 49	868 / 714 / 40	720 / 718 / 68	850 / 870 / 54	876 / 814 / 85	1041 / 982 / 68	900 / 776 / 74	1080 / 944 / 60	738 / 594 / 46	883 / 731 / 38	736 / 739 / 64	891 / 914 / 53	919 / 858 / 82	1084 / 1026 / 65	915 / 792 / 69	1127 / 987 / 57
	3	667 / 821 / 38	789 / 992 / 30	771 / 766 / 60	921 / 934 / 49	956 / 884 / 77	1159 / 1086 / 63	987 / 845 / 67	1209 / 1046 / 55	678 / 839 / 35	825 / 1040 / 29	813 / 812 / 58	964 / 981 / 47	1004 / 932 / 74	1208 / 1134 / 60	1039 / 892 / 64	1262 / 1094 / 53	710 / 882 / 34	857 / 1084 / 28	853 / 856 / 56	1004 / 1025 / 45	1050 / 977 / 71	1251 / 1177 / 57	1046 / 900 / 60	1311 / 1138 / 50
15	1	637 / 493 / 47	776 / 629 / 39	639 / 615 / 64	772 / 765 / 53	788 / 713 / 67	961 / 888 / 55	805 / 677 / 63	957 / 818 / 51	664 / 522 / 46	791 / 644 / 37	671 / 650 / 62	806 / 803 / 51	825 / 750 / 65	1001 / 927 / 53	820 / 692 / 59	996 / 854 / 49	664 / 522 / 46	791 / 644 / 37	671 / 650 / 62	806 / 803 / 51	825 / 750 / 65	1001 / 927 / 53	820 / 692 / 59	996 / 854 / 49
	2	776 / 629 / 39	924 / 768 / 32	772 / 779 / 53	929 / 957 / 43	927 / 868 / 53	1124 / 1066 / 44	957 / 830 / 51	1171 / 1028 / 42	791 / 644 / 37	963 / 803 / 31	780 / 791 / 49	964 / 996 / 41	964 / 905 / 51	1159 / 1101 / 42	996 / 867 / 49	1210 / 1064 / 40	791 / 644 / 37	963 / 803 / 31	780 / 791 / 49	964 / 996 / 41	964 / 905 / 51	1159 / 1101 / 42	996 / 867 / 49	1210 / 1064 / 40
	3	739 / 923 / 29	886 / 1124 / 23	892 / 898 / 46	1041 / 1065 / 36	1092 / 1018 / 47	1288 / 1214 / 38	1088 / 938 / 43	1353 / 1177 / 36	767 / 961 / 27	911 / 1159 / 22	894 / 903 / 43	1073 / 1100 / 35	1130 / 1057 / 46	1392 / 1314 / 38	1126 / 973 / 42	1389 / 1210 / 34	767 / 961 / 27	911 / 1159 / 22	894 / 903 / 43	1073 / 1100 / 35	1130 / 1057 / 46	1392 / 1314 / 38	1126 / 973 / 42	1389 / 1210 / 34
20	1	688 / 493 / 54	776 / 629 / 45	664 / 615 / 76	772 / 765 / 62	788 / 713 / 80	961 / 888 / 66	805 / 677 / 72	957 / 818 / 58	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 78	1001 / 927 / 64	820 / 692 / 68	996 / 854 / 56	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 78	1001 / 927 / 64	820 / 692 / 68	996 / 854 / 56
	2	776 / 629 / 45	924 / 768 / 36	772 / 779 / 62	929 / 957 / 51	927 / 868 / 64	1124 / 1066 / 52	957 / 830 / 58	1171 / 1028 / 47	791 / 644 / 42	963 / 803 / 35	780 / 791 / 58	964 / 996 / 49	964 / 905 / 62	1159 / 1101 / 50	996 / 867 / 56	1210 / 1064 / 45	791 / 644 / 42	963 / 803 / 35	780 / 791 / 58	964 / 996 / 49	964 / 905 / 62	1159 / 1101 / 50	996 / 867 / 56	1210 / 1064 / 45
	3	739 / 923 / 33	886 / 1124 / 26	892 / 898 / 54	1041 / 1065 / 43	1092 / 1018 / 57	1288 / 1214 / 45	1088 / 938 / 49	1353 / 1177 / 41	767 / 961 / 31	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 55	1392 / 1314 / 45	1126 / 973 / 47	1389 / 1210 / 39	767 / 961 / 31	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 55	1392 / 1314 / 45	1126 / 973 / 47	1389 / 1210 / 39
25	1	688 / 493 / 54	776 / 629 / 45	664 / 615 / 76	772 / 765 / 62	788 / 713 / 96	961 / 888 / 79	805 / 677 / 83	957 / 818 / 67	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 94	1001 / 927 / 77	820 / 692 / 79	996 / 854 / 64	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 94	1001 / 927 / 77	820 / 692 / 79	996 / 854 / 64
	2	776 / 629 / 45	924 / 768 / 36	772 / 779 / 62	929 / 957 / 51	927 / 868 / 77	1124 / 1066 / 63	957 / 830 / 67	1171 / 1028 / 55	791 / 644 / 42	963 / 803 / 35	780 / 791 / 58	964 / 996 / 49	964 / 905 / 74	1159 / 1101 / 60	996 / 867 / 64	1210 / 1064 / 53	791 / 644 / 42	963 / 803 / 35	780 / 791 / 58	964 / 996 / 49	964 / 905 / 74	1159 / 1101 / 60	996 / 867 / 64	1210 / 1064 / 53
	3	739 / 923 / 33	886 / 1124 / 26	892 / 898 / 54	1041 / 1065 / 43	1092 / 1018 / 68	1288 / 1214 / 54	1088 / 938 / 57	1353 / 1177 / 48	767 / 961 / 31	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 65	1392 / 1314 / 54	1126 / 973 / 55	1389 / 1210 / 45	767 / 961 / 31	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 65	1392 / 1314 / 54	1126 / 973 / 55	1389 / 1210 / 45
15	1	679 / 538 / 44	825 / 675 / 36	683 / 665 / 59	811 / 812 / 48	860 / 785 / 63	1037 / 964 / 51	855 / 724 / 58	1033 / 888 / 47	664 / 522 / 46	791 / 644 / 37	671 / 650 / 62	806 / 803 / 51	825 / 750 / 65	1001 / 927 / 53	820 / 692 / 59	996 / 854 / 49	664 / 522 / 46	791 / 644 / 37	671 / 650 / 62	806 / 803 / 51	825 / 750 / 65	1001 / 927 / 53	820 / 692 / 59	996 / 854 / 49
	2	825 / 675 / 36	999 / 837 / 30	811 / 826 / 48	996 / 1032 / 40	997 / 939 / 49	1248 / 1188 / 42	1033 / 901 / 47	1245 / 1096 / 38	791 / 644 / 37	963 / 803 / 31	780 / 791 / 49	964 / 996 / 41	964 / 905 / 51	1159 / 1101 / 42	996 / 867 / 49	1210 / 1064 / 40	791 / 644 / 37	963 / 803 / 31	780 / 791 / 49	964 / 996 / 41	964 / 905 / 51	1159 / 1101 / 42	996 / 867 / 49	1210 / 1064 / 40
	3	792 / 996 / 26	981 / 1250 / 22	925 / 938 / 41	1155 / 1187 / 35	1164 / 1091 / 44	1421 / 1343 / 36	1214 / 1050 / 42	1418 / 1237 / 33	767 / 961 / 27	911 / 1159 / 22	894 / 903 / 43	1073 / 1100 / 35	1130 / 1057 / 46	1392 / 1314 / 38	1126 / 973 / 42	1389 / 1210 / 34	767 / 961 / 27	911 / 1159 / 22	894 / 903 / 43	1073 / 1100 / 35	1130 / 1057 / 46	1392 / 1314 / 38	1126 / 973 / 42	1389 / 1210 / 34
20	1	709 / 538 / 50	825 / 675 / 41	683 / 665 / 70	811 / 812 / 56	860 / 785 / 76	1037 / 964 / 62	855 / 724 / 66	1033 / 888 / 54	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 78	1001 / 927 / 64	820 / 692 / 68	996 / 854 / 56	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 78	1001 / 927 / 64	820 / 692 / 68	996 / 854 / 56
	2	825 / 675 / 41	999 / 837 / 34	811 / 826 / 56	996 / 1032 / 47	997 / 939 / 59	1248 / 1188 / 50	1033 / 901 / 54	1245 / 1096 / 43	791 / 644 / 42	963 / 803 / 35	780 / 791 / 58	964 / 996 / 49	964 / 905 / 62	1159 / 1101 / 50	996 / 867 / 56	1210 / 1064 / 45	791 / 644 / 42	963 / 803 / 35	780 / 791 / 58	964 / 996 / 49	964 / 905 / 62	1159 / 1101 / 50	996 / 867 / 56	1210 / 1064 / 45
	3	792 / 996 / 30	981 / 1250 / 25	925 / 938 / 49	1155 / 1187 / 41	1164 / 1091 / 52	1421 / 1343 / 43	1214 / 1050 / 47	1418 / 1237 / 37	767 / 961 / 31	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 55	1392 / 1314 / 45	1126 / 973 / 47	1389 / 1210 / 39	767 / 961 / 31	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 55	1392 / 1314 / 45	1126 / 973 / 47	1389 / 1210 / 39
25	1	709 / 538 / 50	825 / 675 / 41	683 / 665 / 70	811 / 812 / 56	860 / 785 / 91	1037 / 964 / 74	855 / 724 / 76	1033 / 888 / 62	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 94	1001 / 927 / 77	820 / 692 / 79	996 / 854 / 64	707 / 522 / 52	791 / 644 / 42	683 / 650 / 74	806 / 803 / 60	825 / 750 / 94	1001 / 927 / 77	820 / 692 / 79	996 / 854 / 64
	2	825 / 675 / 41	999 / 837 / 34	811 / 826 / 56	996 / 1032 / 47																				

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
15	1	710 / 566 / 43	858 / 706 / 35	711 / 697 / 57	841 / 844 / 46	865 / 793 / 59	1071 / 997 / 49	889 / 756 / 56	1067 / 919 / 45	747 / 603 / 39	919 / 762 / 33	765 / 757 / 54	892 / 902 / 43	924 / 852 / 55	1128 / 1055 / 46	952 / 813 / 52	1174 / 1014 / 43	798 / 650 / 37	972 / 811 / 31	788 / 785 / 49	973 / 989 / 41	973 / 902 / 51	1170 / 1097 / 42	1006 / 863 / 49	1222 / 1059 / 40
	2	858 / 706 / 35	1033 / 867 / 29	841 / 859 / 46	1025 / 1065 / 38	1028 / 970 / 47	1277 / 1218 / 40	1067 / 932 / 45	1338 / 1179 / 38	919 / 762 / 33	1091 / 921 / 26	892 / 918 / 43	1071 / 1118 / 35	1128 / 1069 / 46	1317 / 1260 / 36	1174 / 1029 / 43	1387 / 1226 / 34	972 / 811 / 31	1187 / 1006 / 25	973 / 1006 / 41	1158 / 1213 / 33	1170 / 1112 / 42	1413 / 1355 / 34	1222 / 1074 / 40	1494 / 1322 / 33
	3	815 / 1027 / 25	1001 / 1278 / 21	953 / 969 / 40	1182 / 1217 / 33	1194 / 1121 / 42	1442 / 1365 / 34	1247 / 1081 / 40	1524 / 1330 / 33	892 / 1130 / 24	1086 / 1392 / 20	1045 / 1068 / 38	1219 / 1259 / 30	1303 / 1226 / 40	1556 / 1476 / 32	1300 / 1129 / 36	1651 / 1443 / 31	920 / 1170 / 22	1096 / 1409 / 18	1083 / 1111 / 35	1307 / 1354 / 28	1332 / 1257 / 36	1403 / 1222 / 34		
20	1	726 / 566 / 49	858 / 706 / 40	711 / 697 / 68	841 / 844 / 54	865 / 793 / 71	1071 / 997 / 59	889 / 756 / 64	1067 / 919 / 51	747 / 603 / 45	919 / 762 / 38	765 / 757 / 64	892 / 902 / 51	924 / 852 / 66	1128 / 1055 / 55	952 / 813 / 60	1174 / 1014 / 49	798 / 650 / 42	972 / 811 / 35	788 / 785 / 58	973 / 989 / 49	973 / 902 / 62	1170 / 1097 / 50	1006 / 863 / 56	1222 / 1059 / 45
	2	858 / 706 / 40	1033 / 867 / 33	841 / 859 / 54	1025 / 1065 / 45	1028 / 970 / 57	1277 / 1218 / 48	1067 / 932 / 51	1338 / 1179 / 43	919 / 762 / 38	1091 / 921 / 30	892 / 918 / 51	1071 / 1118 / 41	1128 / 1069 / 55	1317 / 1260 / 43	1174 / 1029 / 49	1387 / 1226 / 39	972 / 811 / 35	1187 / 1006 / 29	973 / 1006 / 49	1158 / 1213 / 39	1170 / 1112 / 50	1413 / 1355 / 40	1222 / 1074 / 45	1494 / 1322 / 37
	3	815 / 1027 / 29	1001 / 1278 / 24	953 / 969 / 47	1182 / 1217 / 39	1194 / 1121 / 50	1442 / 1365 / 40	1247 / 1081 / 45	1524 / 1330 / 37	892 / 1130 / 28	1086 / 1392 / 23	1045 / 1068 / 45	1219 / 1259 / 35	1303 / 1226 / 48	1556 / 1476 / 38	1300 / 1129 / 41	1651 / 1443 / 35	920 / 1170 / 25	1096 / 1409 / 20	1083 / 1111 / 41	1307 / 1354 / 33	1332 / 1257 / 43	1403 / 1222 / 39		
25	1	726 / 566 / 49	858 / 706 / 40	711 / 697 / 68	841 / 844 / 54	865 / 793 / 85	1071 / 997 / 71	889 / 756 / 74	1067 / 919 / 60	747 / 603 / 45	919 / 762 / 38	765 / 757 / 64	892 / 902 / 51	924 / 852 / 79	1128 / 1055 / 65	952 / 813 / 69	1174 / 1014 / 57	798 / 650 / 42	972 / 811 / 35	788 / 785 / 58	973 / 989 / 49	973 / 902 / 74	1170 / 1097 / 60	1006 / 863 / 64	1222 / 1059 / 53
	2	858 / 706 / 40	1033 / 867 / 33	841 / 859 / 54	1025 / 1065 / 45	1028 / 970 / 68	1277 / 1218 / 57	1067 / 932 / 60	1338 / 1179 / 50	919 / 762 / 38	1091 / 921 / 30	892 / 918 / 51	1071 / 1118 / 41	1128 / 1069 / 65	1317 / 1260 / 51	1174 / 1029 / 57	1387 / 1226 / 45	972 / 811 / 35	1187 / 1006 / 29	973 / 1006 / 49	1158 / 1213 / 39	1170 / 1112 / 60	1413 / 1355 / 48	1222 / 1074 / 53	1494 / 1322 / 43
	3	815 / 1027 / 29	1001 / 1278 / 24	953 / 969 / 47	1182 / 1217 / 39	1194 / 1121 / 60	1442 / 1365 / 48	1247 / 1081 / 53	1524 / 1330 / 43	892 / 1130 / 28	1086 / 1392 / 23	1045 / 1068 / 45	1219 / 1259 / 35	1303 / 1226 / 57	1556 / 1476 / 46	1300 / 1129 / 48	1651 / 1443 / 41	920 / 1170 / 25	1096 / 1409 / 20	1083 / 1111 / 41	1307 / 1354 / 33	1332 / 1257 / 51	1403 / 1222 / 45		

Wind Speed [mph]		170								180															
15	1	844 / 693 / 35	1016 / 852 / 29	856 / 859 / 48	1008 / 1028 / 38	1053 / 980 / 49	1255 / 1181 / 40	1049 / 903 / 45	1315 / 1142 / 38	883 / 731 / 33	1092 / 921 / 27	891 / 898 / 44	1078 / 1104 / 36	1084 / 1012 / 46	1335 / 1259 / 38	1127 / 973 / 43	1402 / 1220 / 36								
	2	1016 / 852 / 29	1279 / 1088 / 24	1008 / 1047 / 38	1240 / 1302 / 31	1255 / 1197 / 40	1500 / 1440 / 32	1315 / 1159 / 38	1591 / 1410 / 31	1092 / 921 / 27	1301 / 1110 / 22	1078 / 1124 / 36	1315 / 1384 / 30	1335 / 1276 / 38		1402 / 1238 / 36	1677 / 1489 / 29								
	3	984 / 1256 / 21		1162 / 1196 / 33	1387 / 1439 / 27	1418 / 1341 / 34		1499 / 1308 / 33		1043 / 1336 / 20		1236 / 1275 / 31		1495 / 1416 / 32		1585 / 1385 / 31									
20	1	844 / 693 / 40	1016 / 852 / 33	856 / 859 / 56	1008 / 1028 / 45	1053 / 980 / 59	1255 / 1181 / 48	1049 / 903 / 51	1315 / 1142 / 43	883 / 731 / 38	1092 / 921 / 31	891 / 898 / 53	1078 / 1104 / 43	1084 / 1012 / 55	1335 / 1259 / 45	1127 / 973 / 49	1402 / 1220 / 41								
	2	1016 / 852 / 33	1279 / 1088 / 28	1008 / 1047 / 45	1240 / 1302 / 37	1255 / 1197 / 48	1500 / 1440 / 38	1315 / 1159 / 43	1591 / 1410 / 35	1092 / 921 / 31	1301 / 1110 / 25	1078 / 1124 / 43	1315 / 1384 / 35	1335 / 1276 / 45		1402 / 1238 / 41	1677 / 1489 / 33								
	3	984 / 1256 / 24		1162 / 1196 / 39	1387 / 1439 / 31	1418 / 1341 / 40		1499 / 1308 / 37		1043 / 1336 / 23		1236 / 1275 / 37		1495 / 1416 / 38		1585 / 1385 / 35									
25	1	844 / 693 / 40	1016 / 852 / 33	856 / 859 / 56	1008 / 1028 / 45	1053 / 980 / 71	1255 / 1181 / 57	1049 / 903 / 60	1315 / 1142 / 50	883 / 731 / 38	1092 / 921 / 31	891 / 898 / 53	1078 / 1104 / 43	1084 / 1012 / 65	1335 / 1259 / 54	1127 / 973 / 57	1402 / 1220 / 48								
	2	1016 / 852 / 33	1279 / 1088 / 28	1008 / 1047 / 45	1240 / 1302 / 37	1255 / 1197 / 57	1500 / 1440 / 46	1315 / 1159 / 50	1591 / 1410 / 41	1092 / 921 / 31	1301 / 1110 / 25	1078 / 1124 / 43	1315 / 1384 / 35	1335 / 1276 / 54		1402 / 1238 / 48	1677 / 1489 / 38								
	3	984 / 1256 / 24		1162 / 1196 / 39	1387 / 1439 / 31	1418 / 1341 / 40		1499 / 1308 / 43		1043 / 1336 / 23		1236 / 1275 / 37		1495 / 1416 / 46		1585 / 1385 / 41									

Wind Speed [mph]		190								200																
15	1	948 / 789 / 32	1166 / 986 / 26	953 / 966 / 43	1144 / 1176 / 35	1153 / 1080 / 44	1408 / 1330 / 36	1202 / 1040 / 42	1483 / 1293 / 34	976 / 816 / 30	1182 / 1003 / 24	972 / 989 / 40	1206 / 1242 / 33	1218 / 1144 / 42	1471 / 1393 / 34	1272 / 1103 / 40	1555 / 1358 / 33									
	2	1166 / 986 / 26	1375 / 1176 / 21	1144 / 1196 / 35	1382 / 1457 / 28	1408 / 1348 / 36		1483 / 1311 / 34		1182 / 1003 / 24	1442 / 1236 / 20	1145 / 1201 / 31	1439 / 1521 / 27	1471 / 1411 / 34		1555 / 1377 / 33										
	3	1096 / 1407 / 19		1302 / 1347 / 30				1661 / 1453 / 29		1141 / 1468 / 18		1361 / 1410 / 28														
20	1	948 / 789 / 36	1166 / 986 / 30	953 / 966 / 51	1144 / 1176 / 41	1153 / 1080 / 52	1408 / 1330 / 43	1202 / 1040 / 47	1483 / 1293 / 39	976 / 816 / 34	1182 / 1003 / 28	972 / 989 / 47	1206 / 1242 / 39	1218 / 1144 / 50	1471 / 1393 / 40	1272 / 1103 / 45	1555 / 1358 / 37									
	2	1166 / 986 / 30	1375 / 1176 / 24	1144 / 1196 / 41	1382 / 1457 / 33	1408 / 1348 / 43		1483 / 1311 / 39		1182 / 1003 / 28	1442 / 1236 / 23	1145 / 1201 / 37	1439 / 1521 / 31	1471 / 1411 / 40		1555 / 1377 / 37										
	3	1096 / 1407 / 21		1302 / 1347 / 35				1661 / 1453 / 33		1141 / 1468 / 20		1361 / 1410 / 33														
25	1	948 / 789 / 36	1166 / 986 / 30	953 / 966 / 51	1144 / 1176 / 41	1153 / 1080 / 63	1408 / 1330 / 51	1202 / 1040 / 55	1483 / 1293 / 45	976 / 816 / 34	1182 / 1003 / 28	972 / 989 / 47	1206 / 1242 / 39	1218 / 1144 / 60	1471 / 1393 / 48	1272 / 1103 / 53	1555 / 1358 / 43									
	2	1166 / 986 / 30	1375 / 1176 / 24	1144 / 1196 / 41	1382 / 1457 / 33	1408 / 1348 / 51		1483 / 1311 / 45		1182 / 1003 / 28	1442 / 1236 / 23	1145 / 1201 / 37	1439 / 1521 / 31	1471 / 1411 / 48		1555 / 1377 / 43										
	3	1096 / 1407 / 21		1302 / 1347 / 35				1661 / 1453 / 38		1141 / 1468 / 20		1361 / 1410 / 33														

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	3 = 3
	1 = 1
30 - 45	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
		30	1	645 / 411 / 59	708 / 536 / 50	650 / 544 / 88	682 / 662 / 70	707 / 629 / 129	857 / 782 / 106	701 / 581 / 106	852 / 721 / 87	665 / 442 / 58	734 / 573 / 49	657 / 570 / 84	720 / 706 / 68	730 / 654 / 122	876 / 803 / 99	725 / 604 / 101	900 / 765 / 84	685 / 473 / 56	739 / 594 / 46	662 / 594 / 80	736 / 726 / 64	771 / 694 / 119	919 / 846 / 96	765 / 641 / 98	915 / 780 / 79
2	708 / 536 / 50		822 / 673 / 41	682 / 674 / 70	808 / 823 / 57	830 / 768 / 102	993 / 935 / 83	852 / 732 / 87	1029 / 897 / 71	734 / 573 / 49	868 / 714 / 40	720 / 718 / 68	850 / 870 / 55	876 / 814 / 99	1041 / 982 / 79	900 / 776 / 84	1080 / 944 / 68	739 / 594 / 46	883 / 731 / 38	736 / 739 / 64	891 / 914 / 53	919 / 858 / 96	1084 / 1026 / 76	915 / 792 / 79	1127 / 987 / 65		
3	667 / 821 / 38		789 / 992 / 30	771 / 766 / 61	921 / 934 / 49	956 / 884 / 89	1159 / 1086 / 73	987 / 845 / 76	1209 / 1046 / 63	678 / 839 / 35	825 / 1040 / 29	813 / 812 / 59	964 / 981 / 47	1004 / 932 / 86	1208 / 1134 / 69	1039 / 892 / 74	1262 / 1094 / 60	710 / 882 / 34	857 / 1084 / 28	853 / 856 / 57	1004 / 1025 / 45	1050 / 977 / 83	1251 / 1177 / 66	1046 / 900 / 68	1311 / 1138 / 57		
35	1		668 / 402 / 62	740 / 536 / 54	684 / 544 / 97	709 / 662 / 78	707 / 629 / 147	857 / 782 / 121	701 / 581 / 119	852 / 721 / 98	686 / 432 / 61	765 / 573 / 53	690 / 570 / 92	733 / 706 / 75	730 / 654 / 139	876 / 803 / 113	725 / 604 / 113	900 / 765 / 95	705 / 463 / 60	769 / 594 / 50	693 / 594 / 88	736 / 726 / 71	771 / 694 / 136	919 / 846 / 109	765 / 641 / 110	915 / 780 / 89	
	2		740 / 536 / 54	822 / 673 / 45	709 / 674 / 78	808 / 823 / 63	830 / 768 / 117	993 / 935 / 94	852 / 732 / 98	1029 / 897 / 80	765 / 573 / 53	868 / 714 / 44	733 / 718 / 75	850 / 870 / 60	876 / 814 / 113	1041 / 982 / 91	900 / 776 / 95	1080 / 944 / 77	769 / 594 / 50	883 / 731 / 41	736 / 739 / 71	891 / 914 / 58	919 / 858 / 109	1084 / 1026 / 87	915 / 792 / 89	1127 / 987 / 74	
	3		675 / 821 / 41	789 / 992 / 33	771 / 766 / 67	921 / 934 / 54	956 / 884 / 102	1159 / 1086 / 83	987 / 845 / 86	1209 / 1046 / 70	678 / 839 / 38	825 / 1040 / 31	813 / 812 / 65	964 / 981 / 52	1004 / 932 / 98	1208 / 1134 / 79	1039 / 892 / 83	1262 / 1094 / 67	710 / 882 / 37	857 / 1084 / 30	853 / 856 / 63	1004 / 1025 / 50	1050 / 977 / 94	1251 / 1177 / 76	1046 / 900 / 77	1311 / 1138 / 64	
40	1		689 / 393 / 66	772 / 536 / 58	702 / 532 / 106	736 / 662 / 87	728 / 629 / 165	857 / 782 / 136	701 / 581 / 132	852 / 721 / 109	706 / 423 / 64	796 / 573 / 57	722 / 570 / 104	759 / 706 / 85	735 / 654 / 157	876 / 803 / 127	725 / 604 / 126	900 / 765 / 105	723 / 452 / 63	798 / 594 / 54	724 / 594 / 99	759 / 726 / 80	771 / 694 / 152	919 / 846 / 123	765 / 641 / 122	915 / 780 / 98	
	2		772 / 536 / 58	834 / 673 / 48	736 / 674 / 87	808 / 823 / 70	830 / 768 / 131	993 / 935 / 106	852 / 732 / 109	1029 / 897 / 88	796 / 573 / 57	868 / 714 / 47	759 / 718 / 85	850 / 870 / 68	876 / 814 / 127	1041 / 982 / 102	900 / 776 / 105	1080 / 944 / 85	798 / 594 / 54	883 / 731 / 44	759 / 739 / 80	891 / 914 / 66	919 / 858 / 123	1084 / 1026 / 98	915 / 792 / 98	1127 / 987 / 82	
	3		699 / 821 / 44	789 / 992 / 35	773 / 766 / 75	921 / 934 / 61	956 / 884 / 114	1159 / 1086 / 93	987 / 845 / 95	1209 / 1046 / 78	694 / 839 / 41	825 / 1040 / 34	813 / 812 / 73	964 / 981 / 58	1004 / 932 / 110	1208 / 1134 / 89	1039 / 892 / 92	1262 / 1094 / 75	711 / 882 / 40	857 / 1084 / 32	853 / 856 / 70	1004 / 1025 / 56	1050 / 977 / 106	1251 / 1177 / 85	1046 / 900 / 85	1311 / 1138 / 71	
30	1	690 / 493 / 54	776 / 629 / 45	665 / 615 / 76	772 / 765 / 62	788 / 713 / 112	961 / 888 / 92	805 / 677 / 95	957 / 818 / 76	709 / 522 / 53	791 / 644 / 43	684 / 650 / 74	806 / 803 / 61	825 / 750 / 109	1001 / 927 / 89	820 / 692 / 90	996 / 854 / 74	ASCE Group Zone	Panal Angle	Mono Slope	0 - 7.5	1 = 1	2 = 2	3 = 3			
	2	776 / 629 / 45	924 / 768 / 36	772 / 779 / 62	929 / 957 / 51	927 / 868 / 89	1124 / 1066 / 73	957 / 830 / 76	1171 / 1028 / 63	791 / 644 / 43	963 / 803 / 35	780 / 791 / 59	964 / 996 / 49	964 / 905 / 86	1159 / 1101 / 69	996 / 867 / 74	1210 / 1064 / 60					1 = 1					
	3	739 / 923 / 33	886 / 1124 / 27	892 / 898 / 55	1041 / 1065 / 43	1092 / 1018 / 79	1288 / 1214 / 63	1088 / 938 / 65	1353 / 1177 / 55	767 / 961 / 32	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 76	1392 / 1314 / 63	1126 / 973 / 63	1389 / 1210 / 52					2 = 2					
	35	1	724 / 493 / 58	792 / 629 / 49	695 / 615 / 84	772 / 765 / 69	788 / 713 / 128	961 / 888 / 106	805 / 677 / 107	957 / 818 / 86	725 / 510 / 56	791 / 644 / 46	713 / 650 / 82	806 / 803 / 67	825 / 750 / 124	1001 / 927 / 102	820 / 692 / 101				996 / 854 / 83	7.5 - 15	Panal Angle	Mono Slope	2 = 2	3 = 3	
		2	792 / 629 / 49	924 / 768 / 40	772 / 779 / 69	929 / 957 / 56	927 / 868 / 102	1124 / 1066 / 83	957 / 830 / 86	1171 / 1028 / 70	791 / 644 / 46	963 / 803 / 38	780 / 791 / 65	964 / 996 / 54	964 / 905 / 98	1159 / 1101 / 79	996 / 867 / 83				1210 / 1064 / 67						1 = 1
		3	739 / 923 / 35	886 / 1124 / 29	892 / 898 / 60	1041 / 1065 / 48	1092 / 1018 / 91	1288 / 1214 / 72	1088 / 938 / 74	1353 / 1177 / 61	767 / 961 / 34	911 / 1159 / 27	894 / 903 / 56	1073 / 1100 / 45	1130 / 1057 / 87	1392 / 1314 / 72	1126 / 973 / 70				1389 / 1210 / 58						2 = 2
	40	1	741 / 481 / 61	820 / 629 / 53	724 / 615 / 94	780 / 765 / 78	788 / 713 / 144	961 / 888 / 119	805 / 677 / 119	957 / 818 / 95	757 / 510 / 60	818 / 644 / 50	742 / 650 / 92	806 / 803 / 75	825 / 750 / 140	1001 / 927 / 114	820 / 692 / 112				996 / 854 / 92	15 - 30	Panal Angle	Mono Slope	1 = 1	2 = 2	
		2	820 / 629 / 53	924 / 768 / 43	780 / 779 / 78	929 / 957 / 63	927 / 868 / 114	1124 / 1066 / 93	957 / 830 / 95	1171 / 1028 / 78	818 / 644 / 50	963 / 803 / 41	780 / 791 / 73	964 / 996 / 61	964 / 905 / 110	1159 / 1101 / 89	996 / 867 / 92				1210 / 1064 / 75						3 = 3
		3	739 / 923 / 38	886 / 1124 / 31	892 / 898 / 68	1041 / 1065 / 53	1092 / 1018 / 102	1288 / 1214 / 81	1088 / 938 / 82	1353 / 1177 / 68	767 / 961 / 37	911 / 1159 / 29	894 / 903 / 63	1073 / 1100 / 51	1130 / 1057 / 98	1392 / 1314 / 81	1126 / 973 / 78				1389 / 1210 / 65						1 = 1
30	1	710 / 538 / 50	825 / 675 / 41	684 / 665 / 70	811 / 812 / 57	860 / 785 / 106	1037 / 964 / 86	855 / 724 / 87	1033 / 888 / 71	709 / 522 / 53	791 / 644 / 43	684 / 650 / 74	806 / 803 / 61	825 / 750 / 109	1001 / 927 / 89	820 / 692 / 90	996 / 854 / 74	ASCE Group Zone	Panal Angle	Mono Slope	30 - 45	1 = 1	2 = 2	3 = 3			
	2	825 / 675 / 41	999 / 837 / 34	811 / 826 / 57	996 / 1032 / 47	997 / 939 / 83	1248 / 1188 / 69	1033 / 901 / 71	1245 / 1096 / 57	791 / 644 / 43	963 / 803 / 35	780 / 791 / 59	964 / 996 / 49	964 / 905 / 86	1159 / 1101 / 69	996 / 867 / 74	1210 / 1064 / 60					1 = 1					
	3	792 / 996 / 30	981 / 1250 / 25	925 / 938 / 49	1155 / 1187 / 41	1164 / 1091 / 73	1421 / 1343 / 60	1214 / 1050 / 63	1418 / 1237 / 49	767 / 961 / 32	911 / 1159 / 25	894 / 903 / 51	1073 / 1100 / 41	1130 / 1057 / 76	1392 / 1314 / 63	1126 / 973 / 63	1389 / 1210 / 52					2 = 2					
	35	1	742 / 538 / 54	825 / 675 / 45	711 / 665 / 78	811 / 812 / 63	860 / 785 / 121	1037 / 964 / 98	855 / 724 / 98	1033 / 888 / 80	725 / 510 / 56	791 / 644 / 46	713 / 650 / 82	806 / 803 / 67	825 / 750 / 124	1001 / 927 / 102	820 / 692 / 101				996 / 854 / 83	7.5 - 15	Panal Angle	Mono Slope	2 = 2	3 = 3	
		2	825 / 675 / 45	999 / 837 / 37	811 / 826 / 63	996 / 1032 / 52	997 / 939 / 94	1248 / 1188 / 79	1033 / 901 / 80	1245 / 1096 / 64	791 / 644 / 46	963 / 803 / 38	780 / 791 / 65	964 / 996 / 54	964 / 905 / 98	1159 / 1101 / 79	996 / 867 / 83				1210 / 1064 / 67						1 = 1
		3	792 / 996 / 33	981 / 1250 / 27	925 / 938 / 54	1155 / 1187 / 45	1164 / 1091 / 83	1421 / 1343 / 68	1214 / 1050 / 70	1418 / 1237 / 55	767 / 961 / 34	911 / 1159 / 27	894 / 903 / 56	1073 / 1100 / 45	1130 / 1057 / 87	1392 / 1314 / 72	1126 / 973 / 70				1389 / 1210 / 58						2 = 2
	40	1	774 / 538 / 58	837 / 675 / 48	738 / 665 / 87	811 / 812 / 70	860 / 785 / 136	1037 / 964 / 110	855 / 724 / 109	1033 / 888 / 88	757 / 510 / 60	818 / 644 / 50	742 / 650 / 92	806 / 803 / 75	825 / 750 / 140	1001 / 927 / 114	820 / 692 / 112				996 / 854 / 92	15 - 30	Panal Angle	Mono Slope	1 = 1	2 = 2	
		2	837 / 675 / 48	999 / 837 / 40	811 / 826 / 70	996 / 1032 / 58	997 / 939 / 106	1248 / 1188 / 89	1033 / 901 / 88	1245 / 1096 / 71	818 / 644 / 50	963 / 803 / 41	780 / 791 / 73	964 / 996 / 61	964 / 905 / 110	1159 / 1101 / 89	996 / 867 / 92				1210 / 1064 / 75						3 = 3
		3	792 / 996 / 35	981 / 1250 / 29	925 / 938 / 61	1155 / 1187 / 51	1164 / 1091 / 93	1421 / 1343 / 76	1214 / 1050 / 78	1418 / 1237 / 61	767 / 961 / 37	911 / 1159 / 29	894 / 903 / 63	1073 / 1100 / 51	1130 / 1057 / 98	1392 / 1314 / 81	1126 / 973 / 78				1389 / 1210 / 65						1 = 1

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																
Wind Speed [mph]		140								150								160								
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge							
30	1	728 / 566 / 49	858 / 706 / 40	711 / 697 / 68	841 / 844 / 55	865 / 793 / 99	1071 / 997 / 83	889 / 756 / 84	1067 / 919 / 68	747 / 603 / 45	919 / 762 / 38	765 / 757 / 64	892 / 902 / 51	924 / 852 / 92	1128 / 1055 / 76	952 / 813 / 79	1174 / 1014 / 65	798 / 650 / 43	972 / 811 / 35	788 / 785 / 59	973 / 989 / 49	973 / 902 / 86	1170 / 1097 / 69	1006 / 863 / 74	1222 / 1059 / 60	
	2	858 / 706 / 40	1033 / 867 / 33	841 / 859 / 55	1025 / 1065 / 45	1028 / 970 / 79	1277 / 1218 / 66	1067 / 932 / 68	1338 / 1179 / 57	919 / 762 / 38	1091 / 921 / 30	892 / 918 / 51	1071 / 1118 / 41	1128 / 1069 / 76	1317 / 1260 / 60	1174 / 1029 / 65	1387 / 1226 / 52	972 / 811 / 35	1187 / 1006 / 29	973 / 1006 / 49	1158 / 1213 / 39	1170 / 1112 / 69	1413 / 1355 / 56	1222 / 1074 / 60	1494 / 1322 / 49	
	3	815 / 1027 / 29	1001 / 1278 / 24	953 / 969 / 47	1182 / 1217 / 39	1194 / 1121 / 69	1442 / 1365 / 56	1247 / 1081 / 60	1524 / 1330 / 49	892 / 1130 / 28	1086 / 1392 / 23	1045 / 1068 / 45	1219 / 1259 / 35	1303 / 1226 / 66	1556 / 1476 / 53	1300 / 1129 / 55	1651 / 1443 / 46	920 / 1170 / 25	1096 / 1409 / 20	1083 / 1111 / 41	1307 / 1354 / 33	1332 / 1257 / 60	1403 / 1222 / 52			
35	1	759 / 566 / 53	858 / 706 / 44	727 / 697 / 75	841 / 844 / 60	865 / 793 / 113	1071 / 997 / 94	889 / 756 / 95	1067 / 919 / 77	769 / 603 / 49	919 / 762 / 41	765 / 757 / 71	892 / 902 / 56	924 / 852 / 106	1128 / 1055 / 87	952 / 813 / 89	1174 / 1014 / 74	798 / 650 / 46	972 / 811 / 38	788 / 785 / 65	973 / 989 / 54	973 / 902 / 98	1170 / 1097 / 79	1006 / 863 / 83	1222 / 1059 / 67	
	2	858 / 706 / 44	1033 / 867 / 35	841 / 859 / 60	1025 / 1065 / 50	1028 / 970 / 91	1277 / 1218 / 76	1067 / 932 / 77	1338 / 1179 / 64	919 / 762 / 41	1091 / 921 / 33	892 / 918 / 56	1071 / 1118 / 45	1128 / 1069 / 87	1317 / 1260 / 68	1174 / 1029 / 74	1387 / 1226 / 58	972 / 811 / 38	1187 / 1006 / 31	973 / 1006 / 54	1158 / 1213 / 43	1170 / 1112 / 79	1413 / 1355 / 64	1222 / 1074 / 67	1494 / 1322 / 55	
	3	815 / 1027 / 31	1001 / 1278 / 26	953 / 969 / 52	1182 / 1217 / 43	1194 / 1121 / 79	1442 / 1365 / 64	1247 / 1081 / 67	1524 / 1330 / 55	892 / 1130 / 30	1086 / 1392 / 25	1045 / 1068 / 50	1219 / 1259 / 39	1303 / 1226 / 76	1556 / 1476 / 61	1300 / 1129 / 61	1651 / 1443 / 52	920 / 1170 / 27	1096 / 1409 / 22	1083 / 1111 / 45	1307 / 1354 / 37	1332 / 1257 / 68	1403 / 1222 / 58			
40	1	790 / 566 / 57	858 / 706 / 47	753 / 697 / 85	841 / 844 / 68	865 / 793 / 127	1071 / 997 / 106	889 / 756 / 105	1067 / 919 / 85	798 / 603 / 53	919 / 762 / 44	781 / 757 / 80	892 / 902 / 63	924 / 852 / 119	1128 / 1055 / 98	952 / 813 / 98	1174 / 1014 / 82	823 / 650 / 50	972 / 811 / 41	788 / 785 / 73	973 / 989 / 61	973 / 902 / 110	1170 / 1097 / 89	1006 / 863 / 92	1222 / 1059 / 75	
	2	858 / 706 / 47	1033 / 867 / 38	841 / 859 / 68	1025 / 1065 / 56	1028 / 970 / 102	1277 / 1218 / 85	1067 / 932 / 85	1338 / 1179 / 71	919 / 762 / 44	1091 / 921 / 35	892 / 918 / 63	1071 / 1118 / 51	1128 / 1069 / 98	1317 / 1260 / 76	1174 / 1029 / 82	1387 / 1226 / 65	972 / 811 / 41	1187 / 1006 / 34	973 / 1006 / 61	1158 / 1213 / 49	1170 / 1112 / 89	1413 / 1355 / 72	1222 / 1074 / 75	1494 / 1322 / 61	
	3	815 / 1027 / 34	1001 / 1278 / 28	953 / 969 / 58	1182 / 1217 / 49	1194 / 1121 / 89	1442 / 1365 / 72	1247 / 1081 / 75	1524 / 1330 / 61	892 / 1130 / 32	1086 / 1392 / 27	1045 / 1068 / 56	1219 / 1259 / 44	1303 / 1226 / 85	1556 / 1476 / 68	1300 / 1129 / 68	1651 / 1443 / 58	920 / 1170 / 29	1096 / 1409 / 24	1083 / 1111 / 51	1307 / 1354 / 41	1332 / 1257 / 76	1403 / 1222 / 65			
30	1	844 / 693 / 40	1016 / 852 / 33	856 / 859 / 57	1008 / 1028 / 45	1053 / 980 / 83	1255 / 1181 / 66	1049 / 903 / 68	1315 / 1142 / 57	883 / 731 / 38	1092 / 921 / 32	891 / 898 / 53	1078 / 1104 / 43	1084 / 1012 / 76	1335 / 1259 / 63	1127 / 973 / 65	1402 / 1220 / 55									
	2	1016 / 852 / 33	1279 / 1088 / 28	1008 / 1047 / 45	1240 / 1302 / 37	1255 / 1197 / 66	1500 / 1440 / 53	1315 / 1159 / 57	1591 / 1410 / 46	1092 / 921 / 32	1301 / 1110 / 25	1078 / 1124 / 43	1315 / 1384 / 35	1335 / 1276 / 63	1402 / 1238 / 55	1677 / 1489 / 44										
	3	984 / 1256 / 24		1162 / 1196 / 39	1387 / 1439 / 31	1418 / 1341 / 56		1499 / 1308 / 49		1043 / 1336 / 23		1236 / 1275 / 37		1495 / 1416 / 53		1585 / 1385 / 46										
35	1	844 / 693 / 44	1016 / 852 / 35	856 / 859 / 63	1008 / 1028 / 50	1053 / 980 / 94	1255 / 1181 / 76	1049 / 903 / 77	1315 / 1142 / 64	883 / 731 / 41	1092 / 921 / 34	891 / 898 / 58	1078 / 1104 / 48	1084 / 1012 / 87	1335 / 1259 / 72	1127 / 973 / 74	1402 / 1220 / 61									
	2	1016 / 852 / 35	1279 / 1088 / 30	1008 / 1047 / 50	1240 / 1302 / 41	1255 / 1197 / 76	1500 / 1440 / 61	1315 / 1159 / 64	1591 / 1410 / 52	1092 / 921 / 34	1301 / 1110 / 27	1078 / 1124 / 48	1315 / 1384 / 39	1335 / 1276 / 72	1402 / 1238 / 61	1677 / 1489 / 49										
	3	984 / 1256 / 26		1162 / 1196 / 43	1387 / 1439 / 35	1418 / 1341 / 64		1499 / 1308 / 55		1043 / 1336 / 25		1236 / 1275 / 41		1495 / 1416 / 61		1585 / 1385 / 52										
40	1	844 / 693 / 47	1016 / 852 / 38	856 / 859 / 70	1008 / 1028 / 56	1053 / 980 / 106	1255 / 1181 / 85	1049 / 903 / 85	1315 / 1142 / 71	883 / 731 / 44	1092 / 921 / 37	891 / 898 / 66	1078 / 1104 / 53	1084 / 1012 / 98	1335 / 1259 / 81	1127 / 973 / 82	1402 / 1220 / 68									
	2	1016 / 852 / 38	1279 / 1088 / 32	1008 / 1047 / 56	1240 / 1302 / 46	1255 / 1197 / 85	1500 / 1440 / 68	1315 / 1159 / 71	1591 / 1410 / 58	1092 / 921 / 37	1301 / 1110 / 29	1078 / 1124 / 53	1315 / 1384 / 44	1335 / 1276 / 81	1402 / 1238 / 68	1677 / 1489 / 55										
	3	984 / 1256 / 28		1162 / 1196 / 49	1387 / 1439 / 39	1418 / 1341 / 72		1499 / 1308 / 61		1043 / 1336 / 27		1236 / 1275 / 46		1495 / 1416 / 68		1585 / 1385 / 58										
30	1	948 / 789 / 36	1166 / 986 / 30	953 / 966 / 51	1144 / 1176 / 41	1153 / 1080 / 73	1408 / 1330 / 60	1202 / 1040 / 63	1483 / 1293 / 52	976 / 816 / 34	1182 / 1003 / 28	972 / 989 / 47	1206 / 1242 / 39	1218 / 1144 / 69	1471 / 1393 / 56	1272 / 1103 / 60	1555 / 1358 / 49									
	2	1166 / 986 / 30	1375 / 1176 / 24	1144 / 1196 / 41	1382 / 1457 / 33	1408 / 1348 / 60		1483 / 1311 / 52		1182 / 1003 / 28	1442 / 1236 / 23	1145 / 1201 / 37	1439 / 1521 / 31	1471 / 1411 / 56		1555 / 1377 / 49										
	3	1096 / 1407 / 22		1302 / 1347 / 35				1661 / 1453 / 44		1141 / 1468 / 20		1361 / 1410 / 33														
35	1	948 / 789 / 40	1166 / 986 / 33	953 / 966 / 56	1144 / 1176 / 45	1153 / 1080 / 83	1408 / 1330 / 68	1202 / 1040 / 70	1483 / 1293 / 58	976 / 816 / 37	1182 / 1003 / 30	972 / 989 / 52	1206 / 1242 / 43	1218 / 1144 / 79	1471 / 1393 / 64	1272 / 1103 / 67	1555 / 1358 / 55									
	2	1166 / 986 / 33	1375 / 1176 / 26	1144 / 1196 / 45	1382 / 1457 / 37	1408 / 1348 / 68		1483 / 1311 / 58		1182 / 1003 / 30	1442 / 1236 / 25	1145 / 1201 / 41	1439 / 1521 / 35	1471 / 1411 / 64		1555 / 1377 / 55										
	3	1096 / 1407 / 23		1302 / 1347 / 39				1661 / 1453 / 49		1141 / 1468 / 22		1361 / 1410 / 37														
40	1	948 / 789 / 43	1166 / 986 / 35	953 / 966 / 63	1144 / 1176 / 51	1153 / 1080 / 93	1408 / 1330 / 76	1202 / 1040 / 78	1483 / 1293 / 65	976 / 816 / 40	1182 / 1003 / 32	972 / 989 / 58	1206 / 1242 / 49	1218 / 1144 / 89	1471 / 1393 / 72	1272 / 1103 / 75	1555 / 1358 / 61									
	2	1166 / 986 / 35	1375 / 1176 / 28	1144 / 1196 / 51	1382 / 1457 / 41	1408 / 1348 / 76		1483 / 1311 / 65		1182 / 1003 / 32	1442 / 1236 / 27	1145 / 1201 / 46	1439 / 1521 / 39	1471 / 1411 / 72		1555 / 1377 / 61										
	3	1096 / 1407 / 25		1302 / 1347 / 44				1661 / 1453 / 55		1141 / 1468 / 24		1361 / 1410 / 41														

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	3 = 3
	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs																	
Wind Speed [mph]		95								100								105									
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45			
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge		
45	1	709 / 385 / 112	784 / 523 / 99	719 / 520 / 150	763 / 662 / 125	752 / 629 / 188	857 / 782 / 154	701 / 581 / 145	852 / 721 / 119	724 / 413 / 109	806 / 558 / 96	737 / 557 / 146	786 / 706 / 122	758 / 654 / 178	876 / 803 / 145	725 / 604 / 138	900 / 765 / 116	740 / 442 / 107	828 / 594 / 94	755 / 594 / 143	784 / 726 / 115	783 / 694 / 173	919 / 846 / 140	765 / 641 / 134	915 / 780 / 108		
	2	784 / 523 / 99	861 / 673 / 84	763 / 674 / 125	810 / 823 / 101	830 / 768 / 149	993 / 935 / 121	852 / 732 / 119	1029 / 897 / 97	806 / 558 / 96	888 / 714 / 81	786 / 718 / 122	850 / 870 / 98	876 / 814 / 145	1041 / 982 / 116	900 / 776 / 116	1080 / 944 / 93	828 / 594 / 94	885 / 731 / 76	784 / 739 / 115	891 / 914 / 94	919 / 858 / 140	1084 / 1026 / 111	915 / 792 / 108	1127 / 987 / 90		
	3	723 / 821 / 76	789 / 992 / 61	796 / 766 / 108	921 / 934 / 87	956 / 884 / 130	1159 / 1086 / 106	987 / 845 / 105	1209 / 1046 / 86	716 / 839 / 71	825 / 1040 / 59	821 / 812 / 104	964 / 981 / 84	1004 / 932 / 125	1208 / 1134 / 101	1039 / 892 / 101	1262 / 1094 / 82	732 / 882 / 69	857 / 1084 / 56	853 / 856 / 101	1004 / 1025 / 80	1050 / 977 / 121	1251 / 1177 / 97	1046 / 900 / 93	1311 / 1138 / 79		
	1	744 / 385 / 121	815 / 523 / 107	751 / 520 / 163	790 / 662 / 136	775 / 629 / 205	857 / 782 / 168	701 / 581 / 159	852 / 721 / 130	741 / 404 / 116	814 / 544 / 102	750 / 544 / 155	812 / 706 / 132	780 / 654 / 194	876 / 803 / 158	725 / 604 / 150	900 / 765 / 126	755 / 431 / 113	834 / 578 / 99	767 / 579 / 151	809 / 726 / 125	804 / 694 / 189	919 / 846 / 152	765 / 641 / 146	915 / 780 / 118		
	2	815 / 523 / 107	887 / 673 / 91	790 / 674 / 136	832 / 823 / 110	830 / 768 / 163	993 / 935 / 131	852 / 732 / 130	1029 / 897 / 106	814 / 544 / 102	913 / 714 / 88	812 / 718 / 132	856 / 870 / 106	876 / 814 / 158	1041 / 982 / 126	900 / 776 / 126	1080 / 944 / 102	834 / 578 / 99	909 / 731 / 83	809 / 739 / 125	891 / 914 / 102	919 / 858 / 152	1084 / 1026 / 121	915 / 792 / 118	1127 / 987 / 98		
	3	746 / 821 / 83	789 / 992 / 66	820 / 766 / 117	921 / 934 / 95	956 / 884 / 142	1159 / 1086 / 116	987 / 845 / 114	1209 / 1046 / 94	738 / 839 / 77	825 / 1040 / 63	843 / 812 / 114	964 / 981 / 91	1004 / 932 / 137	1208 / 1134 / 110	1039 / 892 / 110	1262 / 1094 / 90	754 / 882 / 74	857 / 1084 / 61	866 / 856 / 110	1004 / 1025 / 87	1050 / 977 / 131	1251 / 1177 / 105	1046 / 900 / 102	1311 / 1138 / 86		
	1	777 / 367 / 133	832 / 496 / 118	778 / 495 / 180	845 / 662 / 158	802 / 613 / 232	882 / 782 / 196	701 / 581 / 185	852 / 721 / 152	789 / 394 / 130	849 / 529 / 114	793 / 530 / 176	865 / 706 / 154	825 / 654 / 226	882 / 803 / 183	725 / 604 / 175	900 / 765 / 147	800 / 421 / 127	866 / 562 / 111	807 / 565 / 171	859 / 726 / 145	848 / 694 / 220	919 / 846 / 177	765 / 641 / 171	915 / 780 / 138		
	2	832 / 496 / 118	939 / 673 / 105	845 / 674 / 158	876 / 823 / 128	855 / 768 / 190	993 / 935 / 153	852 / 732 / 152	1029 / 897 / 123	849 / 529 / 114	964 / 714 / 102	865 / 718 / 154	898 / 870 / 123	882 / 814 / 183	1041 / 982 / 147	900 / 776 / 147	1080 / 944 / 119	866 / 562 / 111	956 / 731 / 95	859 / 739 / 145	919 / 914 / 119	919 / 858 / 177	1084 / 1026 / 141	915 / 792 / 138	1127 / 987 / 114		
	3	794 / 821 / 95	827 / 992 / 76	867 / 766 / 136	923 / 934 / 110	956 / 884 / 165	1159 / 1086 / 135	987 / 845 / 133	1209 / 1046 / 109	783 / 839 / 89	844 / 1040 / 73	889 / 812 / 132	964 / 981 / 106	1004 / 932 / 159	1208 / 1134 / 129	1039 / 892 / 128	1262 / 1094 / 105	797 / 882 / 86	858 / 1084 / 70	910 / 856 / 128	1004 / 1025 / 101	1050 / 977 / 153	1251 / 1177 / 122	1046 / 900 / 119	1311 / 1138 / 100		
Wind Speed [mph]		110								115																	
45	1	756 / 470 / 104	849 / 629 / 91	754 / 615 / 136	804 / 765 / 111	788 / 713 / 164	961 / 888 / 135	805 / 677 / 131	957 / 818 / 105	771 / 497 / 102	845 / 644 / 86	770 / 650 / 132	823 / 803 / 108	825 / 750 / 159	1001 / 927 / 130	820 / 692 / 123	996 / 854 / 101	ASCE Group Zone									
	2	849 / 629 / 91	924 / 768 / 74	804 / 779 / 111	929 / 957 / 91	927 / 868 / 130	1124 / 1066 / 106	957 / 830 / 105	1171 / 1028 / 86	845 / 644 / 86	963 / 803 / 71	796 / 791 / 104	964 / 996 / 87	964 / 905 / 125	1159 / 1101 / 101	996 / 867 / 101	1210 / 1064 / 82	0 - 7.5	Mono Slope		1 = 1						
	3	747 / 923 / 66	886 / 1124 / 54	892 / 898 / 98	1041 / 1065 / 77	1092 / 1018 / 92	1288 / 1214 / 90	1088 / 938 / 90	1353 / 1177 / 75	767 / 961 / 64	911 / 1159 / 51	894 / 903 / 91	1073 / 1100 / 73	1130 / 1057 / 111	1392 / 1314 / 92	1126 / 973 / 86	1389 / 1210 / 71		2 = 2		3 = 3						
	1	769 / 458 / 110	853 / 611 / 96	783 / 615 / 148	828 / 765 / 121	804 / 713 / 178	961 / 888 / 147	805 / 677 / 142	957 / 818 / 114	783 / 485 / 107	872 / 644 / 94	799 / 650 / 144	846 / 803 / 117	826 / 750 / 173	1001 / 927 / 142	820 / 692 / 134	996 / 854 / 110		7.5 - 15	1 = 1		2 = 2					
	2	853 / 611 / 96	931 / 768 / 80	828 / 779 / 121	929 / 957 / 99	927 / 868 / 142	1124 / 1066 / 116	957 / 830 / 114	1171 / 1028 / 94	872 / 644 / 94	963 / 803 / 77	819 / 791 / 114	964 / 996 / 95	964 / 905 / 137	1159 / 1101 / 110	996 / 867 / 110	1210 / 1064 / 90	3 = 3									
	3	768 / 923 / 72	886 / 1124 / 58	892 / 898 / 106	1041 / 1065 / 83	1092 / 1018 / 126	1288 / 1214 / 100	1088 / 938 / 98	1353 / 1177 / 82	780 / 961 / 69	911 / 1159 / 55	894 / 903 / 99	1073 / 1100 / 80	1130 / 1057 / 121	1392 / 1314 / 100	1126 / 973 / 94	1389 / 1210 / 78	15 - 30		1 = 1		2 = 2					
	1	812 / 447 / 124	883 / 594 / 108	821 / 599 / 167	876 / 765 / 141	846 / 713 / 208	961 / 888 / 171	805 / 677 / 166	957 / 818 / 133	823 / 473 / 121	926 / 644 / 108	834 / 632 / 163	893 / 803 / 136	866 / 750 / 202	1001 / 927 / 165	820 / 692 / 157	996 / 854 / 128		30 - 45	2 = 2		3 = 3					
	2	883 / 594 / 108	977 / 768 / 92	876 / 779 / 141	938 / 957 / 114	927 / 868 / 165	1124 / 1066 / 135	957 / 830 / 133	1171 / 1028 / 109	926 / 644 / 108	996 / 803 / 89	864 / 791 / 132	964 / 996 / 110	964 / 905 / 159	1159 / 1101 / 129	996 / 867 / 128	1210 / 1064 / 105			1 = 1		2 = 2					
	3	809 / 923 / 83	886 / 1124 / 67	929 / 898 / 123	1041 / 1065 / 97	1092 / 1018 / 147	1288 / 1214 / 116	1088 / 938 / 114	1353 / 1177 / 95	820 / 961 / 80	911 / 1159 / 64	912 / 903 / 114	1073 / 1100 / 92	1130 / 1057 / 141	1392 / 1314 / 116	1126 / 973 / 109	1389 / 1210 / 90	3 = 3									
Wind Speed [mph]		120								130																	
45	1	786 / 525 / 99	863 / 675 / 84	765 / 665 / 125	813 / 812 / 101	860 / 785 / 154	1037 / 964 / 125	855 / 724 / 119	1033 / 888 / 97	771 / 497 / 102	845 / 644 / 86	770 / 650 / 132	823 / 803 / 108	825 / 750 / 159	1001 / 927 / 130	820 / 692 / 123	996 / 854 / 101	0 - 7.5	Mono Slope		1 = 1						
	2	863 / 675 / 84	999 / 837 / 69	813 / 826 / 101	996 / 1032 / 84	997 / 939 / 121	1248 / 1188 / 101	1033 / 901 / 97	1245 / 1096 / 79	845 / 644 / 86	963 / 803 / 71	796 / 791 / 104	964 / 996 / 87	964 / 905 / 125	1159 / 1101 / 101	996 / 867 / 101	1210 / 1064 / 82		2 = 2		3 = 3						
	3	792 / 996 / 61	981 / 1250 / 51	925 / 938 / 87	1155 / 1187 / 73	1164 / 1091 / 106	1421 / 1343 / 87	1214 / 1050 / 86	1418 / 1237 / 67	767 / 961 / 64	911 / 1159 / 51	894 / 903 / 91	1073 / 1100 / 73	1130 / 1057 / 111	1392 / 1314 / 92	1126 / 973 / 86	1389 / 1210 / 71		7.5 - 15	1 = 1		2 = 2					
	1	796 / 511 / 105	889 / 675 / 91	792 / 665 / 136	834 / 812 / 110	860 / 785 / 168	1037 / 964 / 137	855 / 724 / 130	1033 / 888 / 106	783 / 485 / 107	872 / 644 / 94	799 / 650 / 144	846 / 803 / 117	826 / 750 / 173	1001 / 927 / 142	820 / 692 / 134	996 / 854 / 110	15 - 30		2 = 2		3 = 3					
	2	889 / 675 / 91	999 / 837 / 74	834 / 826 / 110	996 / 1032 / 91	997 / 939 / 131	1248 / 1188 / 110	1033 / 901 / 106	1245 / 1096 / 86	872 / 644 / 94	963 / 803 / 77	819 / 791 / 114	964 / 996 / 95	964 / 905 / 137	1159 / 1101 / 110	996 / 867 / 110	1210 / 1064 / 90			30 - 45	1 = 1		2 = 2				
	3	792 / 996 / 66	981 / 1250 / 55	925 / 938 / 95	1155 / 1187 / 80	1164 / 1091 / 116	1421 / 1343 / 95	1214 / 1050 / 94	1418 / 1237 / 73	780 / 961 / 69	911 / 1159 / 55	894 / 903 / 99	1073 / 1100 / 80	1130 / 1057 / 121	1392 / 1314 / 100	1126 / 973 / 94	1389 / 1210 / 78		3 = 3								
	1	834 / 498 / 118	942 / 675 / 105	847 / 665 / 158	878 / 812 / 128	885 / 785 / 196	1037 / 964 / 159	855 / 724 / 152	1033 / 888 / 123	823 / 473 / 121	926 / 644 / 108	834 / 632 / 163	893 / 803 / 136	866 / 750 / 202	1001 / 927 / 165	820 / 692 / 157	996 / 854 / 128	15 - 30	1 = 1		2 = 2						
	2	942 / 675 / 105	1014 / 837 / 86	878 / 826 / 128	996 / 1032 / 106	997 / 939 / 153	1248 / 1188 / 129	1033 / 901 / 123	1245 / 1096 / 100	926 / 644 / 108	996 / 803 / 89	864 / 791 / 132	964 / 996 / 110	964 / 905 / 159	1159 / 1101 / 129	996 / 867 / 128	1210 / 1064 / 105		30 - 45	2 = 2		3 = 3					
	3	829 / 996 / 76	981 / 1250 / 64	926 / 938 / 110	1155 / 1187 / 92	1164 / 1091 / 135	1421 / 1343 / 110	1214 / 1050 / 109	1418 / 1237 / 86	820 / 961 / 80	911 / 1159 / 64	912 / 903 / 114	1073 / 1100 / 92	1130 / 1057 / 141	1392 / 1314 / 116	1126 / 973 / 109	1389 / 1210 / 90			3 = 3							

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.<

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft				92.5in x 45.9in				Load: Up / Down / Side , lbs															
Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
		70	1	823 / 359 / 148	867 / 482 / 130	820 / 483 / 200	874 / 644 / 175	825 / 597 / 260	921 / 782 / 225	701 / 581 / 211	852 / 721 / 173	833 / 384 / 144	881 / 514 / 126	832 / 517 / 195	892 / 685 / 170	846 / 636 / 253	918 / 803 / 211	725 / 604 / 200	900 / 765 / 168	842 / 410 / 140	922 / 562 / 126	843 / 550 / 190	909 / 726 / 165	867 / 675 / 246	942 / 846 / 204

Exposure Category : D

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
15 - 30	1 = 1
	2 = 2
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof		30-60ft								92.5in x 45.9in								Load: Up / Down / Side , lbs																																	
Wind Speed [mph]		140																150																160																	
Panal Angle		0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45				0 - 7.5				7.5 - 15				15 - 30				30 - 45					
Ground Snow	Group	Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge		Array Interior		Array Edge							
		70	1	901/523/130	976/684/112	912/697/175	933/844/140	910/793/211	1071/997/176	889/756/168	1067/919/136	916/569/123	1031/762/108	931/757/165	950/902/130	937/852/197	1128/1055/162	952/813/157	1174/1014/130	956/631/119	1048/811/101	915/785/150	1000/989/125	973/902/183	1170/1097/148	1006/863/146	1222/1059/119	976/684/112	1071/867/94	933/859/140	1025/1065/115	1028/970/169	1277/1218/141	1067/932/136	1338/1179/114	1031/762/108	1092/921/87	950/918/130	1071/1118/105	1128/1069/162	1317/1260/127	1174/1029/130	1387/1226/103	1048/811/101	1187/1006/83	1000/1006/125	1158/1213/100	1170/1112/148	1413/1355/120	1222/1074/119	1494/1322/98
2	873/1027/83		1001/1278/69	974/969/120	1182/1217/100	1194/1121/148	1442/1365/120	1247/1081/119	1524/1330/98	919/1130/79	1086/1392/65	1045/1068/115	1219/1259/90	1303/1226/141	1556/1476/113	1300/1129/109	1651/1443/92	920/1170/72	1096/1409/58	1083/1111/105	1307/1354/85	1332/1257/127	1403/1222/103			873/1027/83	1001/1278/69	974/969/120	1182/1217/100	1194/1121/148	1442/1365/120	1247/1081/119	1524/1330/98	919/1130/79	1086/1392/65	1045/1068/115	1219/1259/90	1303/1226/141	1556/1476/113	1300/1129/109	1651/1443/92	920/1170/72	1096/1409/58	1083/1111/105	1307/1354/85	1332/1257/127	1403/1222/103				
3	932/508/141		1026/684/125	937/877/191	975/844/157	947/793/239	1071/997/199	889/756/189	1067/919/152	942/553/133	1043/737/117	951/734/180	990/902/146	971/852/223	1128/1055/184	952/813/177	1174/1014/146	978/612/129	1092/811/113	960/785/168	1038/989/140	988/902/207	1170/1097/168	1006/863/165	1222/1059/134	1026/684/125	1112/867/105	975/859/157	1052/1065/129	1028/970/192	1277/1218/160	1067/932/152	1338/1179/128	1043/737/117	1130/921/97	990/918/146	1071/1118/118	1128/1069/184	1317/1260/144	1174/1029/146	1387/1226/116	1092/811/113	1189/1006/93	1038/1006/140	1158/1213/112	1170/1112/168	1413/1355/136	1222/1074/134	1494/1322/110		
80	1		910/1027/93	1001/1278/77	1011/969/135	1182/1217/112	1194/1121/168	1442/1365/136	1247/1081/134	1524/1330/110	954/1130/89	1086/1392/73	1067/1068/129	1219/1259/101	1303/1226/160	1556/1476/128	1300/1129/122	1651/1443/104	949/1170/81	1096/1409/65	1083/1111/118	1307/1354/96	1332/1257/144	1403/1222/116			910/1027/93	1001/1278/77	1011/969/135	1182/1217/112	1194/1121/168	1442/1365/136	1247/1081/134	1524/1330/110	954/1130/89	1086/1392/73	1067/1068/129	1219/1259/101	1303/1226/160	1556/1476/128	1300/1129/122	1651/1443/104	949/1170/81	1096/1409/65	1083/1111/118	1307/1354/96	1332/1257/144	1403/1222/116			
2	959/494/151		1040/662/134	959/657/205	1018/844/174	983/793/267	1082/997/223	889/756/210	1067/919/169	994/553/147	1089/737/129	999/734/199	1029/902/162	1005/852/205	1128/1055/196	952/813/163	1174/1014/163	997/593/138	1096/782/120	1006/785/187	1076/989/156	1019/902/232	1170/1097/187	1006/863/183	1222/1059/149	1040/662/134	1154/867/116	1018/859/174	1087/1065/143	1039/970/214	1277/1218/178	1067/932/169	1338/1179/142	1089/737/129	1168/921/107	1029/918/162	1094/1118/131	1128/1069/205	1317/1260/161	1174/1029/163	1387/1226/129	1096/782/120	1225/1006/103	1076/1006/156	1158/1213/125	1170/1112/187	1413/1355/152	1222/1074/149	1494/1322/122		
3	946/1027/103		1027/1278/85	1047/969/150	1182/1217/125	1194/1121/187	1442/1365/152	1247/1081/149	1524/1330/122	989/1130/98	1086/1392/80	1102/1068/143	1219/1259/112	1303/1226/178	1556/1476/143	1300/1129/136	1651/1443/115	981/1170/89	1096/1409/72	1103/1111/131	1307/1354/106	1332/1257/161	1403/1222/129			946/1027/103	1027/1278/85	1047/969/150	1182/1217/125	1194/1121/187	1442/1365/152	1247/1081/149	1524/1330/122	989/1130/98	1086/1392/80	1102/1068/143	1219/1259/112	1303/1226/178	1556/1476/143	1300/1129/136	1651/1443/115	981/1170/89	1096/1409/72	1103/1111/131	1307/1354/106	1332/1257/161	1403/1222/129				
70	1		966/672/112	1058/852/94	956/859/145	1008/1028/115	1053/980/176	1255/1181/141	1049/903/136	1315/1142/114	1004/731/108	1104/921/90	960/898/135	1078/1104/110	1084/1012/162	1335/1259/134	1127/973/130	1402/1220/109									966/672/112	1058/852/94	956/859/145	1008/1028/115	1053/980/176	1255/1181/141	1049/903/136	1315/1142/114	1004/731/108	1104/921/90	960/898/135	1078/1104/110	1084/1012/162	1335/1259/134	1127/973/130	1402/1220/109									
	2		1058/852/94	1279/1088/79	1008/1047/115	1240/1302/95	1255/1197/141	1500/1440/113	1315/1159/114	1591/1410/92	1104/921/90	1301/1110/72	1078/1124/110	1315/1384/90	1335/1276/134		1402/1238/109	1677/1489/87									1058/852/94	1279/1088/79	1008/1047/115	1240/1302/95	1255/1197/141	1500/1440/113	1315/1159/114	1591/1410/92	1104/921/90	1301/1110/72	1078/1124/110	1315/1384/90	1335/1276/134		1402/1238/109	1677/1489/87									
	3		984/1256/69		1162/1196/100	1387/1439/80	1418/1341/120		1499/1308/98		1043/1336/65		1236/1275/95		1495/1416/113		1585/1385/92										984/1256/69		1162/1196/100	1387/1439/80	1418/1341/120		1499/1308/98		1043/1336/65		1236/1275/95		1495/1416/113		1585/1385/92										
	80	1	1015/672/125	1099/852/105	999/859/163	1039/1028/129	1053/980/199	1255/1181/160	1049/903/152	1315/1142/128	1052/731/121	1144/921/101	1001/898/152	1080/1104/124	1084/1012/184	1335/1259/152	1127/973/146	1402/1220/122								1015/672/125	1099/852/105	999/859/163	1039/1028/129	1053/980/199	1255/1181/160	1049/903/152	1315/1142/128	1052/731/121	1144/921/101	1001/898/152	1080/1104/124	1084/1012/184	1335/1259/152	1127/973/146	1402/1220/122										
	2	1099/852/105	1279/1088/89	1039/1047/129	1240/1302/107	1255/1197/160	1500/1440/128	1315/1159/104	1591/1410/104	1144/921/101	1301/1110/81	1080/1124/124	1315/1384/101	1335/1276/152		1402/1238/122	1677/1489/98									1099/852/105	1279/1088/89	1039/1047/129	1240/1302/107	1255/1197/160	1500/1440/128	1315/1159/104	1591/1410/104	1144/921/101	1301/1110/81	1080/1124/124	1315/1384/101	1335/1276/152		1402/1238/122	1677/1489/98										
	3	984/1256/77		1162/1196/112	1387/1439/90	1418/1341/136		1499/1308/110		1043/1336/73		1236/1275/107		1495/1416/128		1585/1385/104										984/1256/77		1162/1196/112	1387/1439/90	1418/1341/136		1499/1308/110		1043/1336/73		1236/1275/107		1495/1416/128		1585/1385/104											
	90	1	1030/650/134	1141/852/116	1043/859/181	1074/1028/143	1068/980/223	1255/1181/178	1049/903/169	1315/1142/142	1063/706/129	1183/921/111	1041/898/168	1113/1104/137	1084/1012/205	1335/1259/169	1127/973/163	1402/1220/136								1030/650/134	1141/852/116	1043/859/181	1074/1028/143	1068/980/223	1255/1181/178	1049/903/169	1315/1142/142	1063/706/129	1183/921/111	1041/898/168	1113/1104/137	1084/1012/205	1335/1259/169	1127/973/163	1402/1220/136										
	2	1141/852/116	1280/1088/98	1074/1047/143	1240/1302/118	1255/1197/178	1500/1440/143	1315/1159/142	1591/1410/115	1183/921/111	1301/1110/89	1113/1124/137	1315/1384/112	1335/1276/169		1402/1238/136	1677/1489/109									1141/852/116	1280/1088/98	1074/1047/143	1240/1302/118	1255/1197/178	1500/1440/143	1315/1159/142	1591/1410/115	1183/921/111	1301/1110/89	1113/1124/137	1315/1384/112	1335/1276/169		1402/1238/136	1677/1489/109										
	3	1015/1256/85		1162/1196/125	1387/1439/100	1418/1341/152		1499/1308/122		1044/1336/80		1236/1275/118		1495/1416/143		1585/1385/115										1015/1256/85		1162/1196/125	1387/1439/100	1418/1341/152		1499/1308/122		1044/1336/80		1236/1275/118		1495/1416/143		1585/1385/115											
70	1	1041/789/105	1166/986/87	996/966/130	1144/1176/105	1153/1080/155	1408/1330/127	1202/1040/125	1483/1293/103	1039/816/97	1182/1003/79	988/989/120	1206/1242/100	1218/1144/148	1471/1393/120	1272/1103/119	1555/1358/98								1041/789/105	1166/986/87	996/966/130	1144/1176/105	1153/1080/155	1408/1330/127	1202/1040/125	1483/1293/103	1039/816/97	1182/1003/79	988/989/120	1206/1242/100	1218/1144/148	1471/1393/120	1272/1103/119	1555/1358/98											
	2	1166/986/87	1375/1176/69	1144/1196/105	1382/1457/85	1408/1348/127		1483/1311/103		1182/1003/79	1442/1236/65	1145/1																																							

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof | 30-60ft | 92.5in x 45.9in | Load: Up / Down / Side , lbs

Wind Speed [mph]		95								100								105							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	920 / 324 / 180	981 / 456 / 166	926 / 447 / 253	974 / 607 / 226	908 / 565 / 344	1005 / 758 / 305	730 / 581 / 290	852 / 721 / 238	922 / 346 / 176	989 / 485 / 161	931 / 477 / 246	984 / 645 / 219	923 / 601 / 335	1027 / 803 / 295	737 / 604 / 275	900 / 765 / 231	949 / 379 / 176	996 / 514 / 156	935 / 507 / 239	994 / 682 / 212	938 / 637 / 325	1048 / 846 / 286	765 / 641 / 268	915 / 780 / 216
	2	981 / 456 / 166	1045 / 611 / 146	974 / 618 / 226	1051 / 823 / 198	1005 / 768 / 305	1054 / 935 / 246	852 / 732 / 238	1029 / 897 / 194	989 / 485 / 161	1058 / 648 / 142	984 / 657 / 219	1067 / 870 / 191	1027 / 814 / 295	1077 / 982 / 236	900 / 776 / 231	1080 / 944 / 186	996 / 514 / 156	1109 / 706 / 142	994 / 694 / 212	1082 / 914 / 185	1048 / 858 / 286	1097 / 1026 / 227	915 / 792 / 216	1127 / 987 / 179
	3	985 / 821 / 146	980 / 992 / 117	1020 / 741 / 205	1074 / 934 / 171	1051 / 884 / 266	1159 / 1086 / 217	987 / 845 / 208	1209 / 1046 / 171	961 / 839 / 137	990 / 1040 / 112	1070 / 812 / 205	1091 / 981 / 164	1075 / 932 / 256	1208 / 1134 / 207	1039 / 892 / 201	1262 / 1094 / 164	968 / 882 / 132	998 / 1084 / 108	1085 / 856 / 198	1106 / 1025 / 157	1096 / 977 / 246	1251 / 1177 / 197	1046 / 900 / 186	1311 / 1138 / 156

Wind Speed [mph]		110								115																							
100	1	951 / 401 / 171	1002 / 541 / 151	940 / 536 / 232	1036 / 742 / 212	951 / 671 / 315	1067 / 888 / 276	805 / 677 / 260	957 / 818 / 208	953 / 423 / 166	1041 / 587 / 151	972 / 581 / 232	1045 / 777 / 205	995 / 727 / 315	1084 / 927 / 266	820 / 692 / 246	996 / 854 / 201	1002 / 541 / 151	1122 / 741 / 137	1036 / 755 / 212	1095 / 957 / 178	1029 / 868 / 266	1124 / 1066 / 217	957 / 830 / 208	1171 / 1028 / 171	1041 / 587 / 151	1133 / 775 / 132	1045 / 791 / 205	1106 / 996 / 171	1044 / 905 / 256	1159 / 1101 / 207	996 / 867 / 201	1210 / 1064 / 164
	2	1002 / 541 / 151	1122 / 741 / 137	1036 / 755 / 212	1095 / 957 / 178	1029 / 868 / 266	1124 / 1066 / 217	957 / 830 / 208	1171 / 1028 / 171	1041 / 587 / 151	1133 / 775 / 132	1045 / 791 / 205	1106 / 996 / 171	1044 / 905 / 256	1159 / 1101 / 207	996 / 867 / 201	1210 / 1064 / 164	979 / 961 / 122	1006 / 1159 / 98	1069 / 903 / 178	1127 / 1100 / 144	1132 / 1057 / 227	1392 / 1314 / 187	1126 / 973 / 171	1389 / 1210 / 142								
	3	975 / 923 / 127	1004 / 1124 / 103	1098 / 898 / 191	1118 / 1065 / 151	1115 / 1018 / 236	1288 / 1214 / 187	1088 / 938 / 179	1353 / 1177 / 149	979 / 961 / 122	1006 / 1159 / 98	1069 / 903 / 178	1127 / 1100 / 144	1132 / 1057 / 227	1392 / 1314 / 187	1126 / 973 / 171	1389 / 1210 / 142																

Wind Speed [mph]		120								130																							
100	1	982 / 458 / 166	1047 / 614 / 146	976 / 610 / 226	1053 / 812 / 198	1008 / 761 / 305	1099 / 964 / 256	855 / 724 / 238	1033 / 888 / 194	953 / 423 / 166	1041 / 587 / 151	972 / 581 / 232	1045 / 777 / 205	995 / 727 / 315	1084 / 927 / 266	820 / 692 / 246	996 / 854 / 201	1047 / 614 / 146	1142 / 806 / 127	1053 / 826 / 198	1115 / 1032 / 164	1057 / 939 / 246	1248 / 1188 / 207	1033 / 901 / 194	1245 / 1096 / 156	1041 / 587 / 151	1133 / 775 / 132	1045 / 791 / 205	1106 / 996 / 171	1044 / 905 / 256	1159 / 1101 / 207	996 / 867 / 201	1210 / 1064 / 164
	2	1047 / 614 / 146	1142 / 806 / 127	1053 / 826 / 198	1115 / 1032 / 164	1057 / 939 / 246	1248 / 1188 / 207	1033 / 901 / 194	1245 / 1096 / 156	979 / 961 / 122	1006 / 1159 / 98	1069 / 903 / 178	1127 / 1100 / 144	1132 / 1057 / 227	1392 / 1314 / 187	1126 / 973 / 171	1389 / 1210 / 142																
	3	982 / 996 / 117	1059 / 1250 / 98	1077 / 938 / 171	1189 / 1187 / 144	1164 / 1091 / 217	1421 / 1343 / 177	1214 / 1050 / 171	1418 / 1237 / 134	979 / 961 / 122	1006 / 1159 / 98	1069 / 903 / 178	1127 / 1100 / 144	1132 / 1057 / 227	1392 / 1314 / 187	1126 / 973 / 171	1389 / 1210 / 142																

ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
	3 = 3
7.5 - 15	1 = 1
	2 = 2
	3 = 3
15 - 30	1 = 1
	2 = 2
	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
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Notation (ACSE 7-22)
a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
B=Horizontal dimension of building measured normal to wind direction, in ft(m).
h=Mean roof height, in ft(m).
θ=Angle of roof from horizontal, in degrees

K2 44-X Dual Rail System (ASCE 7-22)

Open Mono Slope Roof 30-60ft 92.5in x 45.9in Load: Up / Down / Side , lbs

Wind Speed [mph]		140								150								160							
Panal Angle		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45		0 - 7.5		7.5 - 15		15 - 30		30 - 45	
Ground Snow	Group	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge	Array Interior	Array Edge
100	1	983 / 479 / 161	1052 / 640 / 142	979 / 637 / 219	1060 / 844 / 191	1020 / 793 / 295	1112 / 997 / 246	889 / 756 / 231	1067 / 919 / 186	1015 / 536 / 156	1096 / 711 / 137	1015 / 711 / 212	1068 / 902 / 178	1039 / 852 / 276	1130 / 1055 / 227	952 / 813 / 216	1174 / 1014 / 179	1047 / 593 / 151	1139 / 782 / 132	1051 / 785 / 205	1113 / 989 / 171	1051 / 902 / 256	1170 / 1097 / 207	1006 / 863 / 201	1222 / 1059 / 164
	2	1052 / 640 / 142	1195 / 867 / 127	1060 / 859 / 191	1121 / 1065 / 157	1068 / 970 / 236	1277 / 1218 / 197	1067 / 932 / 186	1338 / 1179 / 156	1096 / 711 / 137	1206 / 921 / 117	1068 / 918 / 178	1126 / 1118 / 144	1130 / 1069 / 227	1317 / 1260 / 177	1174 / 1029 / 179	1387 / 1226 / 142	1139 / 782 / 132	1262 / 1006 / 112	1113 / 1006 / 171	1175 / 1213 / 137	1170 / 1112 / 207	1413 / 1355 / 168	1222 / 1074 / 164	1494 / 1322 / 134
	3	983 / 1027 / 112	1057 / 1278 / 93	1083 / 969 / 164	1193 / 1217 / 137	1194 / 1121 / 207	1442 / 1365 / 168	1247 / 1081 / 164	1524 / 1330 / 134	1024 / 1130 / 108	1105 / 1392 / 88	1137 / 1068 / 157	1219 / 1259 / 123	1303 / 1226 / 197	1556 / 1476 / 158	1300 / 1129 / 149	1651 / 1443 / 127	1013 / 1170 / 98	1096 / 1409 / 78	1135 / 1111 / 144	1307 / 1354 / 116	1332 / 1257 / 177		1403 / 1222 / 142	

Wind Speed [mph]		170								180																	
100	1	1078 / 650 / 146	1182 / 852 / 127	1087 / 859 / 198	1109 / 1028 / 157	1099 / 980 / 246	1255 / 1181 / 197	1049 / 903 / 186	1315 / 1142 / 156	1109 / 706 / 142	1223 / 921 / 122	1082 / 898 / 185	1146 / 1104 / 151	1097 / 1012 / 227	1335 / 1259 / 187	1127 / 973 / 179	1402 / 1220 / 149										
	2	1182 / 852 / 127	1315 / 1088 / 108	1109 / 1047 / 157	1240 / 1302 / 130	1255 / 1197 / 197	1500 / 1440 / 158	1315 / 1159 / 156	1591 / 1410 / 127	1223 / 921 / 122	1301 / 1110 / 98	1146 / 1124 / 151	1315 / 1384 / 123	1335 / 1276 / 187		1402 / 1238 / 149	1677 / 1489 / 119										
	3	1045 / 1256 / 93		1178 / 1196 / 137	1387 / 1439 / 110	1418 / 1341 / 168		1499 / 1308 / 134		1073 / 1336 / 88		1236 / 1275 / 130		1495 / 1416 / 158		1585 / 1385 / 127											

Wind Speed [mph]		190								200																	
100	1	1139 / 762 / 137	1262 / 986 / 117	1113 / 966 / 178	1181 / 1176 / 144	1153 / 1080 / 217	1408 / 1330 / 177	1202 / 1040 / 171	1483 / 1293 / 142	1168 / 816 / 132	1242 / 1003 / 108	1097 / 989 / 164	1211 / 1242 / 137	1218 / 1144 / 207	1471 / 1393 / 168	1272 / 1103 / 164	1555 / 1358 / 134										
	2	1262 / 986 / 117	1375 / 1176 / 93	1181 / 1196 / 144	1382 / 1457 / 116	1408 / 1348 / 177		1483 / 1311 / 142		1242 / 1003 / 108	1442 / 1236 / 88	1151 / 1201 / 130	1439 / 1521 / 110	1471 / 1411 / 168		1555 / 1377 / 134											
	3	1096 / 1407 / 83		1302 / 1347 / 123				1661 / 1453 / 119		1141 / 1468 / 78		1361 / 1410 / 116															

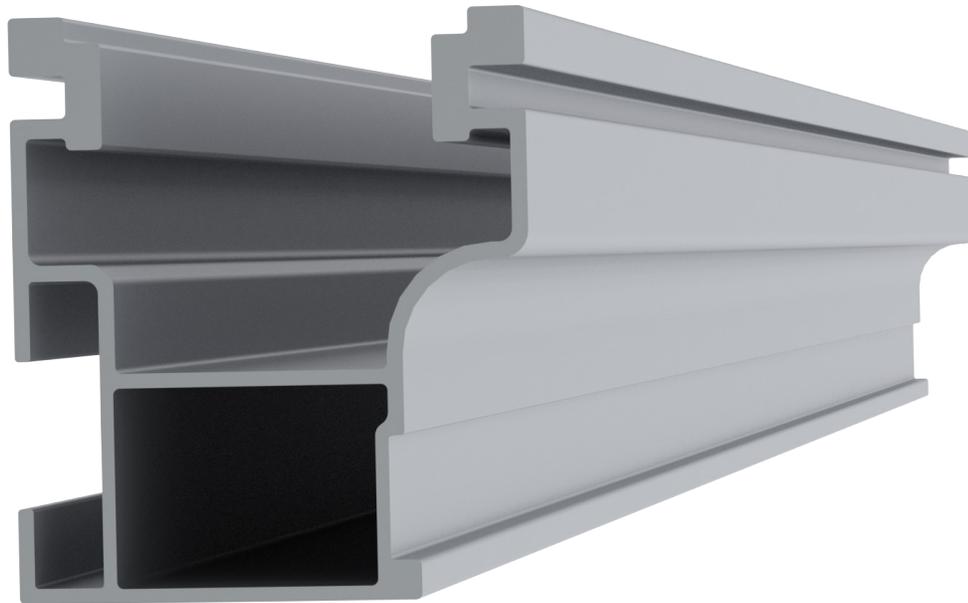
ASCE Group Zone	
Panal Angle	Mono Slope
0 - 7.5	1 = 1
	2 = 2
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7.5 - 15	1 = 1
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	3 = 3
30 - 45	1 = 1
	2 = 2
	3 = 3

Note: Spans in span tables can be used for both Landscape and Portrait Orientation, and spans are color-coded as follows

x ≥ 72"	64" to 71"	48" to 63"	x ≤ 47"
---------	------------	------------	---------

Notation (ACSE 7-22)
 a = 0.4h, never less 4% of least horizontal dimension or 3ft (0.9m). The horizontal dimensions used to compute the edges shall not include any overhang distances.
 B=Horizontal dimension of building measured normal to wind direction, in ft(m).
 h=Mean roof height, in ft(m).
 θ=Angle of roof from horizontal, in degrees

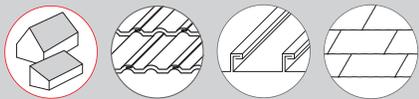
NEW!



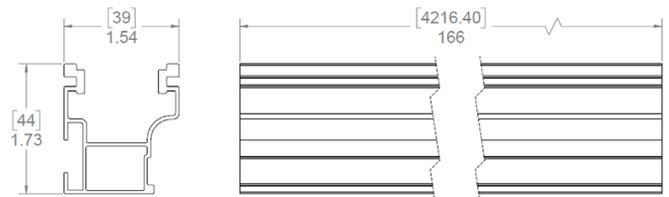
NEW PRODUCT

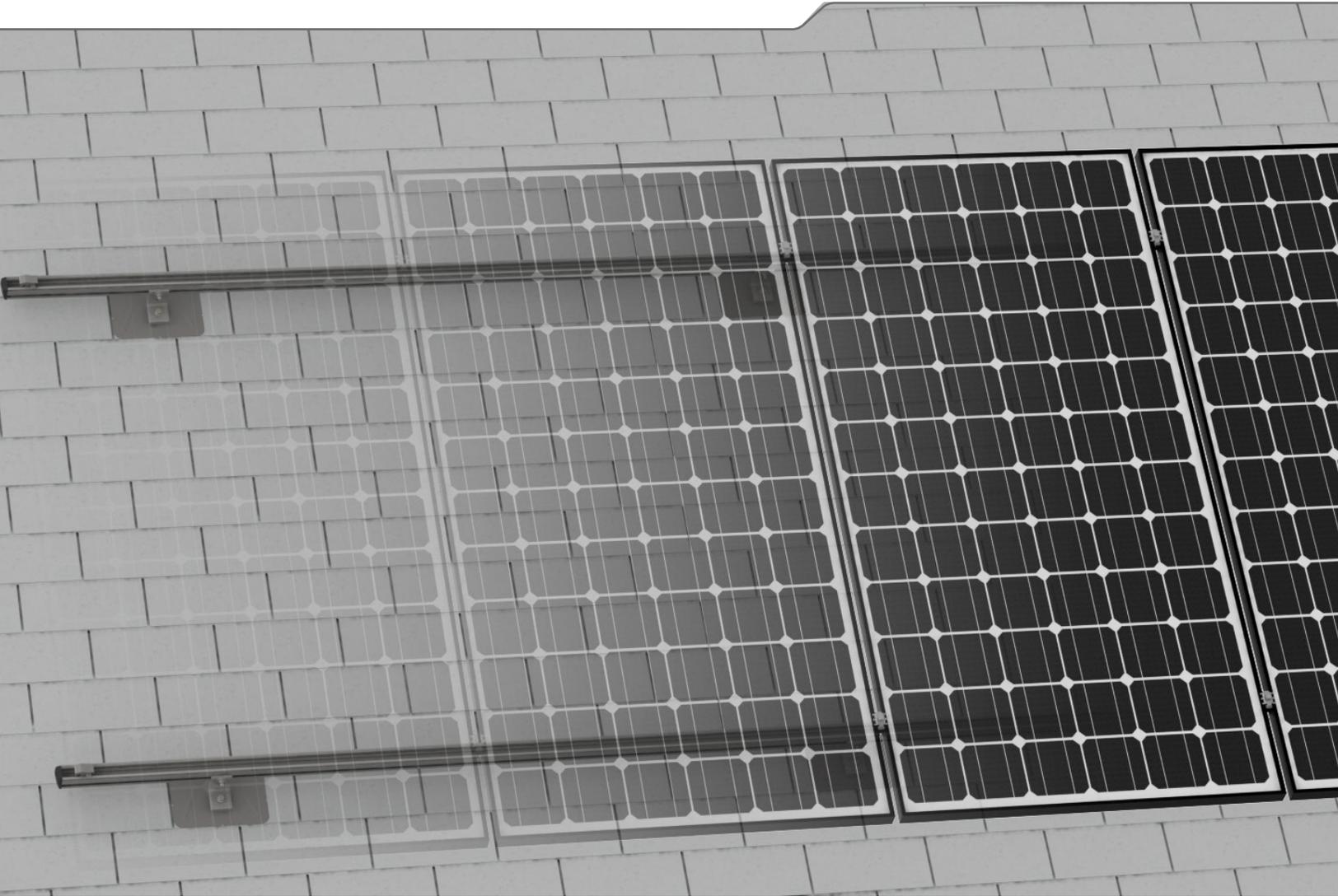
CrossRail 44-X

- ▶ Enhanced rail profile
- ▶ Maintains structural integrity of 48-X
- ▶ Built-in wire management
- ▶ Less material allows for competitive pricing
- ▶ German engineered up to 50 PSF snow loads
- ▶ Available in mill and dark finishes



Part Number	Description
4000019	CrossRail 44-X 166", Mill
4000020	CrossRail 44-X 166", Dark
4000051	RailConn Set, CR 44-X, Mill
4000052	RailConn Set, CR 44-X, Dark
4000067	End Cap, Black, CR 44-X





ASSEMBLY INSTRUCTIONS

CrossRail System

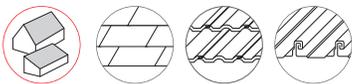


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QUALITY TESTED – SEVERAL CERTIFICATIONS

Everest Solar Systems stands for secure connections, highest quality and precision. Our customers and business partners have known that for a long time. Independent institutes have tested, confirmed and certified our capabilities and components.

Please find our quality and product certificates under:

www.everest-solarsystems.com/technical-information



Engineering strength is at our core



With sophisticated product innovations and a deep customer focus, Everest Solar is the engineering leader for all your mounting system needs. We are the US division of K2 Systems, one of Europe's market leaders with more than 10 GW installed.

We offer proven product solutions and innovative designs. Wind tunnel testing along with advanced structural and electrical validation to facilitate permitting, design and installation. Our designs result in cost competitive racking systems with dedicated support that will position you to win more projects.

We partner with our customers and suppliers for the long-term. High quality materials and cutting edge designs provide a durable, yet functional system. Our product line is comprised of a few, coordinated components that lower the cost of materials, and simplify installation, saving you time and money. All backed by German engineering, a long track record of quality and a company that is here to stay.

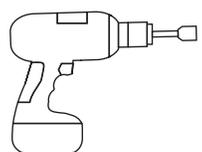
Thank you for choosing Everest Solar Systems for your Solar PV Project.

General safety information

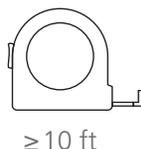
Please note that our general mounting instructions must be followed at all times and can be viewed online at www.everest-solarsystems.com/technical-information

- ▶ The equipment may only be installed and operated by qualified and adequately trained installers.
- ▶ Prior to installation, ensure that the product complies with on-site static loading requirements. For roof-mounted systems, the roof load-bearing capacity must always be checked.
- ▶ National and local building regulations and environmental requirements must be adhered to.
- ▶ Compliance with health and safety regulations, accident prevention guidelines and applicable standards is required.
 - Protective equipment such as safety helmet, boots and gloves must be worn.
 - Roofing works must be in accordance with roofing regulations utilising fall protection safeguards when eaves height exceeds 3 m.
 - At least two people must be present for the duration of the installation work in order to provide rapid assistance in the event of an emergency.
- ▶ Everest mounting systems are continuously developed and improved and the installation process may thereby change at any time. Prior to installation consult our website at www.everest-solarsystems.com/technical-information for up-to-date instructions. We can send you the latest version on request.
- ▶ The assembly instructions of the module manufacturer must be adhered to.
- ▶ Equipotential bonding/grounding/earthing between individual parts is to be performed according to country specific standards, as well as national laws and regulations.
- ▶ At least one copy of the assembly instructions should be available on site throughout the duration of the installation.
- ▶ Failure to adhere to our general safety and assembly instructions and not using all system components, Everest Solar Systems is not liable for any resulting defects or damages. We do not accept liability for any damage resulting in the use of competitor's parts. Warranty is excluded in such cases.
- ▶ If all safety instructions are adhered to and the system is correctly installed, there is a product warranty entitlement of 25 years! We strongly recommend reviewing our terms of guarantee, which can be viewed at www.everest-solarsystems.com/technical-information
We will also send this information on request.
- ▶ The VdS 3145:2011-07 applies to the proper technical maintenance, inspection and any necessary repair. This includes regular visual inspections and visual inspections in case of events. We recommend annual regular inspections including: inspection of all system components for damage by e.g. weather, animals, dirt, debris, build-up, growth, roof penetration, sealing, structural stability and corrosion. In addition, the tight fit of screws must be checked and if necessary, re-tightened in accordance with the torques mentioned in the assembly instructions.
- ▶ Dismantling of the system is performed in reverse order to the assembly.

Tools overview



10-50 ft-lb
(6-35 Nm)



Torque overview

- ▶ M10 T-Bolts: 25.8 ft-lb (35 Nm)
- ▶ WEEB Lug 10.3: 15 ft-lb (20.3 Nm)
- ▶ End Clamp UL2703+: M8 Allen Bolts 10.3 ft-lb (14 Nm)
- ▶ All other clamps: M8 Hex Bolts: 10.3 ft-lb (14 Nm)

Tools and materials for the installation of third party items such as roof attachment products, roof covering and sealing products or items used for bonding and grounding are not listed here. Please refer to the instructions of those third party products.

Materials Required

In order to assemble the Everest Solar Systems CrossRail system, the following listed system components are essential. The piece quantities are calculated on the basis of the respective requirements. The listed item numbers facilitate the comparison of items.

UL 2703 LISTED COMPONENTS

All components evaluated under UL 2703 and encompassed within Everest Solar System's UL 2703 Listing shown below. If you seek a UL Listed System, only the parts shown on this page are acceptable.



CrossRail 44-X/48-X/48-XL/80¹

| multiple

Material: aluminum
Finish: mill, dark anodized



Rail Connector CR 48-X/48-XL Set¹

| 4000385
4000386

CR 48-X/48-XL
Material: aluminum
Finish: mill, dark anodized
Hardware: stainless steel

OR



Rail Connector CR 44-X Set¹

| 4000051
4000052

CR 44-X
Material: aluminum
Finish: mill, dark anodized
Hardware: stainless steel



CrossRail Mid Clamp, 13 mm Hex

| 4000601-H
4000602-H

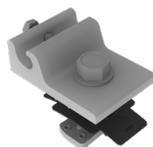
30-47 mm
Material: stainless steel
Finish: silver, dark



CrossRail End Clamp

| 4000429
4000430

30-50 mm
Material: stainless steel
Finish: silver, dark



Everest Ground Lug, 13 mm Hex

| 4000006-H

Material: aluminum
Hardware: stainless steel
Finish: tin-plated

OR



Burndy WEEB Lug 10.3 + Hardware⁴

| 4000622

WEEB Lug Material: tin plated copper
Hardware: stainless steel



Optional: Micro Inverter and Optimizer Mounting Kit^{1,3}

| 4000629-H

Material: stainless steel



L-Foot with Hardware^{1,2}

| 4000630
4000631

Material: aluminum
Finish: mill, dark anodized
Hardware: stainless steel

¹Dark anodized rail must use Bonding T-Bolt and Bonding MK3 hardware.

²Use standard L-foot with third-party roof attachments and EverFlash L-foot with EverFlash Comp Flashing.

³The inverter hardware kit is not intended to replace the micro inverter ground and has only been evaluated to attach to the rail.

⁴For certain jurisdictions, this item is regarded as a single-use item for a UL 2703 Listed System.

Materials Required

NON UL LISTED COMPONENTS



Yeti Clamp (Hidden End Clamp), 13 mm Hex

| 4000050-H

30-50 mm
Material: aluminum
Hardware: stainless steel
Finish: mill

OR



Aluminum End Clamp

| multiple

Material: stainless steel
Finish: silver, black
Hardware: stainless steel



EverFlash XP Comp Kit

| 4000060
4000061

Material: galvalume
Hardware: stainless steel
Finish: mill, dark anodized

OR



EverFlash eComp Kit

| 4000367
4000366

Material: aluminum
Hardware: stainless steel
Finish: mill, dark anodized



Optional: End Cap for CR44-X/48-X & 48-XL/80

| 4000067
4000433
4001221

CrossRail 48-X End Cap shown
Material: glass fiber reinforced polamide



Optional: CrossRail 3" Black Sleeve

| 4000583

Material: polyamide, black



Optional: 3S Tile Hook

| 4001294

Material: aluminum

OR



SingleHook

| 4000521

Material: aluminum

OR



Flat Tile Hook

| 4000034

Material: aluminum



Optional: TC Wire Clip

| 4000069

Material: polyamide, black

OR



Optional: External Omega Cable Clip

| 4005394

Material: polyamide, black

OR



Optional: HEY Clip SunRunner Cable Clip SS, S6404

| 4000382

Material: stainless steel

Bonding and Grounding

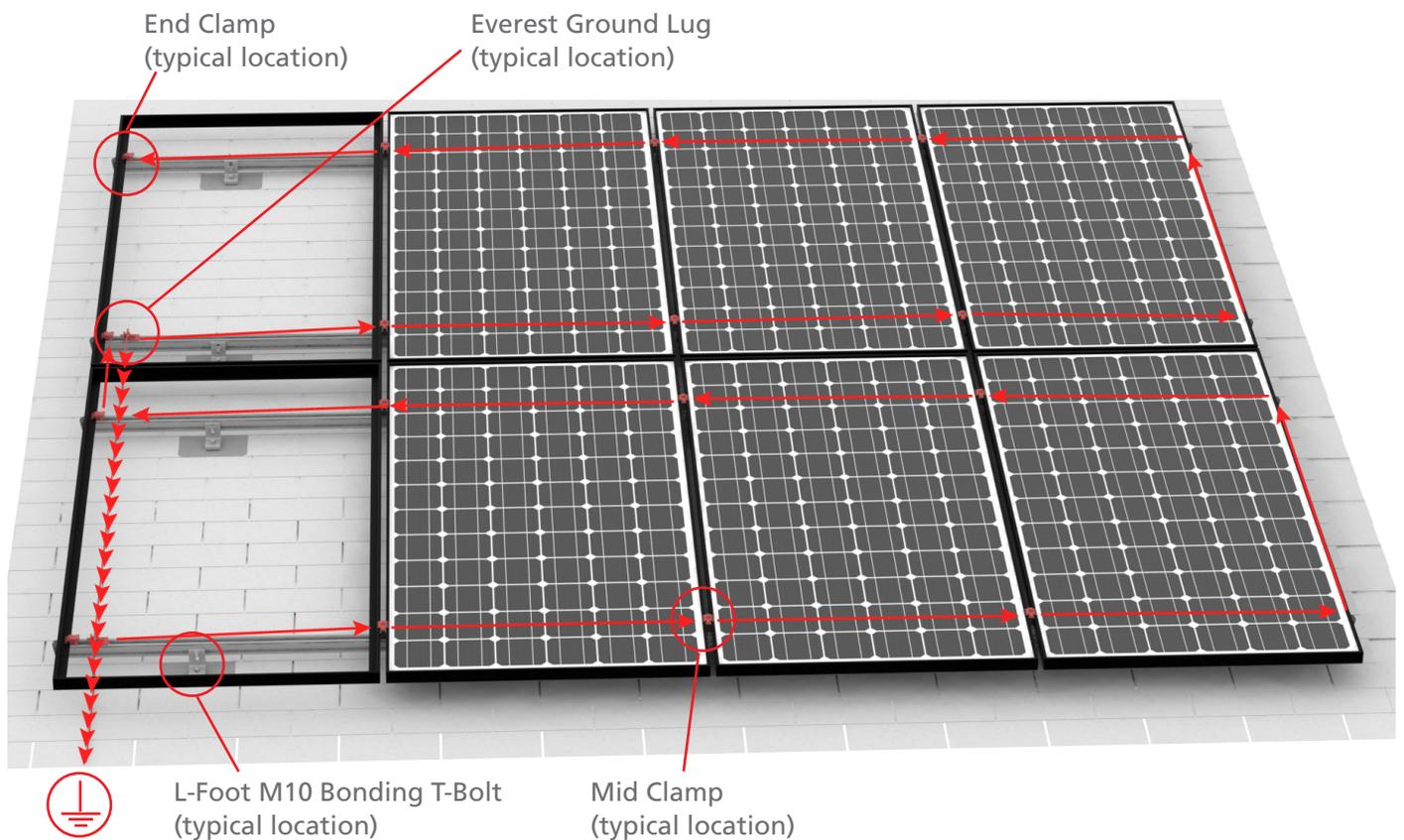
Appropriate means of bonding and grounding are required by regulation. The information provided in this manual shall always be verified with local and national building codes.

Everest Solar Systems has obtained a UL 2703 system listing from Underwriter's Laboratories (UL).

A sample bonding path diagram is shown in Figure 1 below. Your specific installation may vary, based upon site conditions and your AHJ's requirements.

Each electrical connection has been evaluated to a maximum fuse rating of 30A. At least one ground lug per row of modules must be used to ground all strings within each sub-array, although additional may be used for redundancy. When installed per these installation instructions, all connections meet the requirements of NEC 690.43.

This racking system may be used to ground and/or mount a PV module complying with UL 1703 only when the specific module has been evaluated for grounding and/or mounting in compliance with the included instructions.



Fire Rating



The CrossRail 48-X/48-XL System has undergone fire performance testing in accordance with UL 2703, Fire Performance. A System Class A fire rating is achieved when using CrossRail 48-X/48-XL under the following conditions:

- ▶ Roof slope of 2/12" rise per linear foot or greater
- ▶ Used in combination with a UL 1703 Listed module with a fire performance rating of Type 1, Type 2, or Type 3. Consult the module manufacturer for specific fire performance rating information.
- ▶ CrossRail may be mounted using any stand-off height to maintain the Class A fire rating. Always consult the module manufacturer's installation instructions to ensure your installation is in compliance with their UL 1703 Listing.
- ▶ The results of the racking system do not improve a roof covering Class rating.

All documentation can be found on UL's Online Database as well as Everest Solar Systems' website.

Compatible Modules

Everest's CrossRail system was tested with the following:

- ▶ NRTL Listed Jinko Solar Modules:
 - JKM xxxPP-72-DV
 - JKM xxxPP-60-DV
 - JKM xxx-P-60
 - JKMxxxM-60HBL
 - JKMxxxM-72HL-V
 - JKMxxxM-72HL-TV
- ▶ NRTL Listed Supreme Modules:
 - GxB-xxx
 - GxB-xxxSM
 - GxB-xxxSL
- ▶ NRTL Listed Soluxtec Modules:
 - FR xxx Wp
 - Power Slate 54 Mono Dark Series
 - Power Slate 54 Mono Series
- ▶ NRTL Listed V Energy Modules:
 - Series 200 PV
- ▶ NRTL Listed Phono Solar Modules:
 - PSxxxMG-20/U
 - PSxxxPG-20/U
- ▶ NRTL Listed JA Solar Modules:
 - JAP6(DG)
 - JAM6(K)-60-xxx/4BB
- ▶ UL Listed Kyocera Modules:
 - KUxxxMCA
- ▶ NRTL Listed Sunspark
 - SST-275-300M
 - SMX-250-265P
 - SST-xxxM 60 cell
 - SST-xxxM 72 cell
 - SST-xxxMB 60 cell
- ▶ NRTL Listed Prism Solar Modules:
 - Bi48 xxx Bifacial
 - Bi60 xxx Bifacial
- ▶ NRTL Listed Lumos Modules:
 - LSXxxx-60M-B/C
- ▶ UL Listed Luxor Solar Modules:
 - LX-xxxP
 - LX-xxxM
- ▶ UL Listed SunPower Modules:
 - SPR-E19-xxx
 - SPR-E20-xxx
- ▶ UL Listed Yingli Solar Modules:
 - YL-xxxP-29b
 - YL-xxx-35b
- ▶ UL Listed Sanyo Electric Co Ltd of Panasonic Group Modules:
 - VBHNxxxSA16
 - VBHNxxxSA17
 - VBHNxxxSA18
 - VBHNxxxKA01
 - VBHNxxxKA03
 - VBHNxxxKA04
- ▶ NRTL Listed ET Solar Modules:
 - ET-M660xxxBB
- ▶ NRTL Listed Axitec Solar Modules:
 - AC-xxxP/60S
 - AC-xxxM/60S
 - AC-xxxP/72S
- ▶ UL Listed Mission Solar Modules:
 - MSExxxSB1J
 - MSExxxSO5T
 - MSExxxSO4J
 - MSExxxSQ6S
 - MSExxxSO6J
 - MSExxxSQ4S
 - MSExxxSQ5T
 - MSExxxSQ5K
 - MSExxxSQ8T
 - MSExxxSQ8K
 - MSExxxSQ9J
 - MSExxxSQ9S
- ▶ NRTL Listed Silfab Modules:
 - SLAxxxM
 - SLG-M-xxx
 - SLA-X-xxx
 - SLG-X-xxx
- ▶ UL Listed Sharp Modules:
 - NU-SCxxx
 - NU-SAxxx
- ▶ UL Listed Trina Solar Modules:
 - TSM-xxxDE14A
 - TSM-xxxDD05A.08
- ▶ UL Listed Talesun Modules
 - Hipro TP660M-xxx
 - Hipro TP672M-xxx
- ▶ NRTL Listed Itek PV Modules:
 - IT-xxx-SE
 - Hipro TP672M-xxx
- ▶ NRTL Listed REC Solar PTE. LTD Modules:
 - RECxxxTP2 BLK2
- ▶ UL Listed Hansol:
 - UB-AN1 Black 270-300
 - UBAN1 Silver 270-300
 - UD-AN1 330-360
- ▶ NRTL Listed Solaria:
 - PowerXT®-XXXR-PD
 - PowerXT®-XXXR-BD
- ▶ NRTL Listed Longi Green Energy Technology PV Modules:
 - LR6-72-xxxM (xxx=320-350)
 - LR6-72HV-xxxM (xxx=320-350)
 - LR6-72BK-xxxM (xxx=320-350)
 - LR6-72PE-xxxM (xxx=340-380)
 - LR6-72PE-xxxM (xxx=340-380)
 - LR6-72PB-xxxM (xxx=340-380)
 - LR6-72PH-xxxM (xxx=340-380)
 - LR6-72HPB-xxxM (xxx=360-385)
 - LR6-60-xxxM (xxx=270-300)
 - LR6-60HV-xxxM (xxx=270-300)
 - LR6-60BK-xxxM (xxx=270-300)
 - LR6-60PE-xxxM (xxx=280-320)
 - LR6-60PB-xxxM (xxx=280-320)
 - LR6-60PH-xxxM (xxx=280-320)



▶ NRTL Listed LG Modules:

- LGxxxS1C-G4
- LGxxxN1C-G4
- LGxxxS2WG4
- LGxxxN1K-G4
- LGxxxN2W-G4
- LGxxxN1K-A5
- LGxxxS1C-A5
- LGxxxN1C-A5
- LGxxxE1C-A5
- LGxxxE1K-A5
- LGxxxN2W-A5
- LGxxxS2W-A5
- LGxxxQ1C-A5
- LGxxxN1W-V5
- LGxxxN2W-V5
- LGxxxN1C-V5
- LGxxxN1K-V5

▶ NRTL Listed Canadian Solar Modules:

- CS6U-xxx
- CS6K-xxx
- CS6X-xxx
- CS6P-xxx
- CS6K-P-FG DYMOND
- CS6K-270M
- CS6K-275M

▶ UL Listed Hyundai Solar Modules:

- HiS-MxxxMG
- HiS-MxxxMI
- HiS-MxxxTI
- HiS-MxxxRI
- HiS-SxxxRI
- HiS-MxxxRG

▶ NRTL Listed Solarworld Modules "Sunmodule":

- Plus SW XXX Mono
- Plus SW XXX Poly
- (all may be followed by "black")

▶ NRTL Listed Trina Solar Modules:

- DUOMAX SPECS 1. PEG14
- DUOMAX SPECS 2. PEG5
- DUOMAX SPECS 3. PEG5.07
- DUOMAX SPECS 4. PDG5

▶ UL Listed Q Cell Modules:

- Q.PEAK DUO-G8xxx
- Q.PEAK DUO BLK-G8xxx
- Q.PEAK DUO-G7xxx
- Q.PEAK DUO BLK-G7xxx
- Q.PEAK DUO G7.2xxx
- Q.PEAK DUO-G6xxx
- Q.PEAK DUO BLK-G6xxx
- Q.PEAK DUO BLK-G6+xxx
- Q.PEAK DUO-G6+xxx
- Q.PEAK DUO-G8+xxx
- Q.PEAK DUO BLK-G8+xxx
- Q.PEAK DUO L-G8.3xxx
- Q.PEAK DUO L-G8.2xxx
- Q.PEAK DUO L-G8.1xxx
- Q.PEAK DUO L-G8xxx
- Q.PEAK DUO L-G7.3xxx
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- Q.PEAK DUO L-G6.3xxx
- Q.PLUS DUO L-G5xxx
- Q.PLUS DUO L-G5.1xxx
- Q.PLUS DUO L-G5.2xxx
- Q.PLUS DUO L-G5.3xxx
- Q.PEAK DUO L-G5.2xxx
- Q.PEAK DUO L-G5.3xxx
- Q.Peak L-G4.2xxx
- Q.PEAK L-G4.1xxx
- Q.PLUS L-G4.2xxx
- Q.PLUS L-G4.1xxx
- Q.PLUS L-G4xxx

▶ NRTL Listed Q Cells Modules:

- Q.Plus BFR-G4.1xxx
- Q.Pro BFR-G4.1xxx
- Q.Pro-G4.1/SCxxx
- Q.PRO BFR G4xxx
- Q.PRO BFR G4.3xxx
- Q.PEAK-G4.1xxx
- Q.PEAK- G4.1/MAXxxx
- Q.PEAK BLK G4.1xxx
- Q.PRO G4xxx
- Q.PLUS G4xxx
- Q.PEAK-G4.1/TAAxxx
- Q.PEAK BLK G4.1/TAAxxx
- Q.PLUS BFR G4.1/TAAxxx
- Q.PLUS BFR G4.1/MAXxxx
- B.LINE PLUS BFR G4.1xxx
- B.LINE PRO BFR G4.1xxx
- Q.PEAK DUO-G5xxx
- Q.PEAK DUO BLK-G5xxx

Assembly

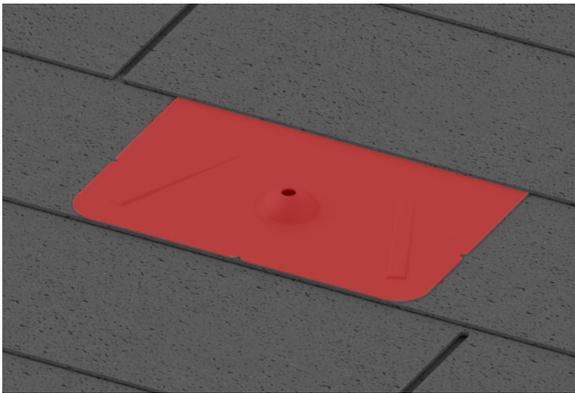
1 PREPARE ROOF



Locate the rafters and snap horizontal and vertical lines to mark the installation position for each EverFlash flashing. Drill a pilot hole (1/4" diameter) for the lag bolt. Backfill with appropriate sealant. Always consult a professional roofer to ensure integrity is maintained.

Materials required: Tape measure, string line, drill

2 INSERT EVERFLASH FLASHING

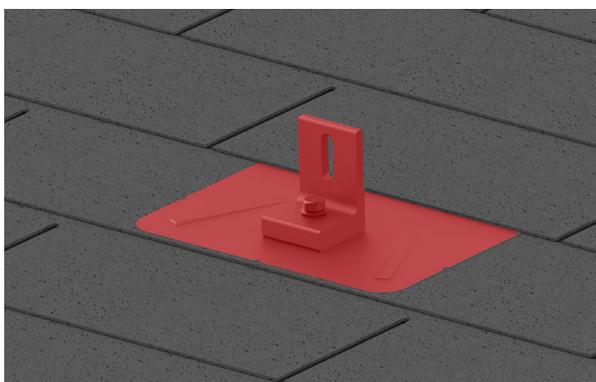


Insert the flashing so the top part is under the next row of shingles and pushed far enough up slope to prevent water infiltration through vertical joint in shingles. The leading edge of flashing must butt against upper row of nails to prevent turning when torqued.

Important: The flashing must not overhang the butt end of the shingle.

Materials required: EverFlash flashing

3 ATTACH EVERFLASH L-FOOT



Line up pilot hole with the EverFlash flashing hole.

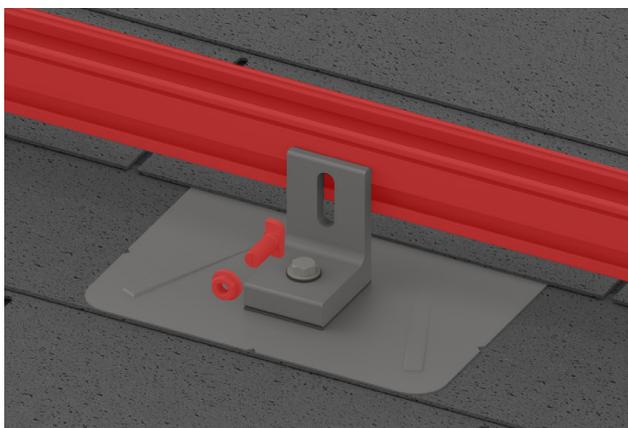
EverFlash XP Kit: Using the guide marks in the flashing, line up the pilot hole with the hole on the dome of the EverFlash XP flashing. Place L-Foot over dome on flashing and drill lag bolt with sealing washer into the pilot hole.

EverFlash eComp Kit: Insert the lag bolt through the EPDM bonded washer, the L-Foot, the gasketed hole in the flashing and into the rafter.

Torque: The range is between 8.3 - 11.6 ft-lb depending on the type of wood and time of year. The visual indicator for proper torque is when the EPDM on the underside of the bonded washer begins to push out the sides as the washer compresses. If using an impact wrench to install the fasteners, be careful not to over torque the fastener. You may need to stop and use a ratchet to finish the install.

Materials required: Lag bolt, EverFlash L-Foot and hardware, torque wrench with 13 mm socket.

4 INSTALL CROSSRAIL



Insert the T-Bolt through the L-foot slot and into the side channel of CrossRail. Turn the T-Bolt clockwise ensuring that the mark at the end of the shaft is vertical, indicating proper alignment. Tighten to 25.8 ft-lb (35 Nm). Make sure that the top of the CrossRail is located above the top of the L-Foot. Double check that the alignment marking on the end of the T-Bolt shaft is vertical, to ensure it is properly engaged.

Due to thermal expansion, we recommend placing a gap of 1.25-2.00" (3-5 cm) every 65 ft (20 m) between rails. Maximum allowable spacing between thermal expansion gaps shall not exceed 80 ft (24.4 m).

Note: Rail cantilevers may not exceed 1/3 of the maximum allowable span. Refer to the engineering letters on Everest's website (www.everest-solarsystems.com) for more detail on maximum spans and cantilevers.

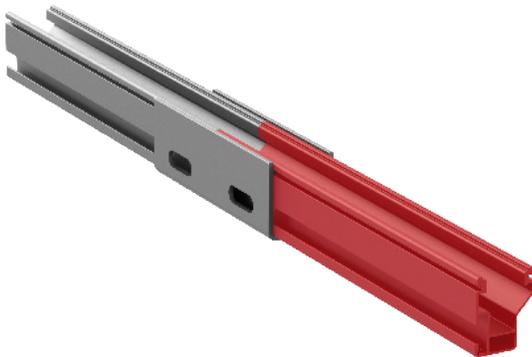
Materials required: CrossRail, M10 T-Bolt (use bonding T-Bolt with dark rail), Serrated Hex Nut

5 RAIL CONNECTOR INSTALLATION ALIGN RAILS



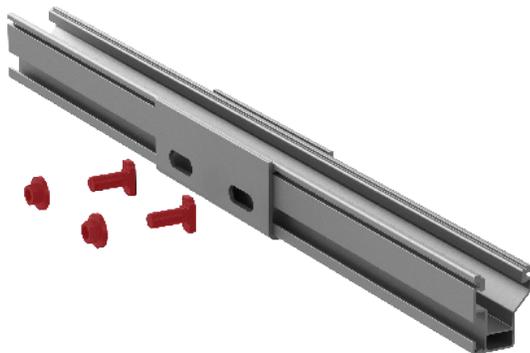
Align the two rail ends next to each other.

6 SLIDE RAIL CONNECTOR



Slide the rail connector from below the rails, centering the connector between the two rail ends. Ensure the rail connector does not interfere with an L-Foot or roof attachment.

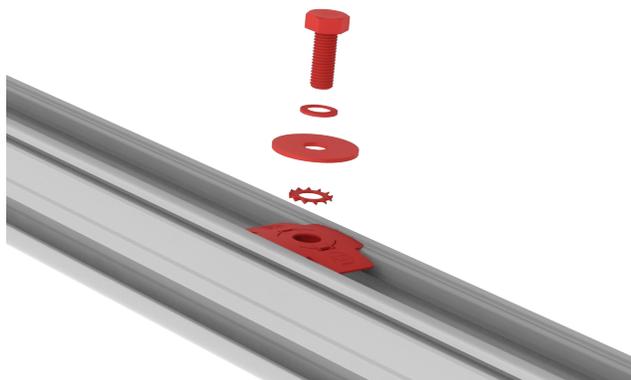
7 CONNECT RAILS



Attach the rail connector using two T-Bolts (use bonding T-Bolts with dark rail) and Serrated Hex Nuts per side (4 total). Ensure that the slot on the bottom of the T-Bolt is vertical, indicating that the T-Bolt head is properly engaged in the rail channel.

Torque: Serrated Hex Nuts to 25.8 ft-lb (35 Nm).

8 OPTIONAL: ATTACH MICRO INVERTERS



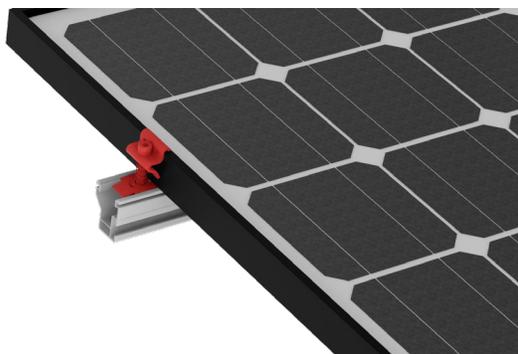
Using the Micro Inverter Mounting Kit Hardware from Everest Solar Systems, attach your chosen device to the top channel of CrossRail. Torque M8 13 mm hex bolt to 10.3 ft-lb (14 Nm).

Note: The inverter hardware kit is not intended to replace the micro inverter ground and has only been evaluated to attach to the rail.

Tightening torque: 10.3 ft-lb (14 Nm)

Materials required: Micro Inverter Mounting Kit includes: M8 13 mm hex head bolt, M8 lock washer, M8 flat washer, MK3.

9 ATTACH END CLAMPS



A OPTION 1

Insert the MK3 slot nut of the preassembled end clamps into the top channel on CrossRail. While slightly lifting the plastic tabs, rotate 90 degrees clockwise to engage the MK3 into the channel.

Attach the end clamps to the module at the specified locations per the PV module manufacturer's installation instructions. Torque the M8 bolt to 10.3 ft-lb. Ensure the clamp sits flush against the frame of the PV module.

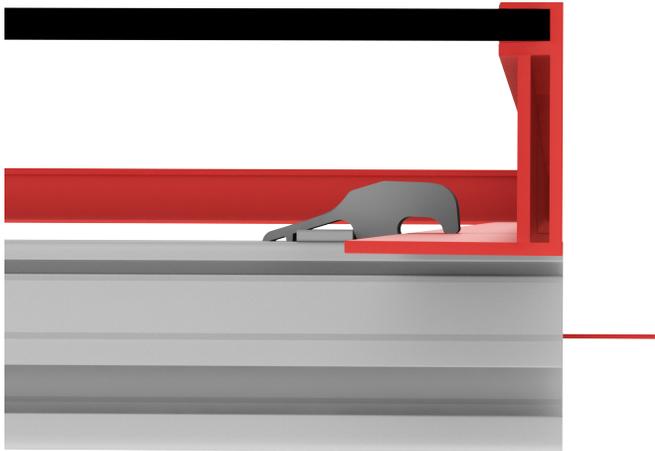
Never mount end clamps directly over a rail connector or at the end of the rail. Ensure a minimum gap of 1" (20mm) exists from the end of the rail to the clamp.

Tightening torque: 10.3 ft-lb (14 Nm).

Important: Verify module manufacturer's mounting requirements and specifications to ensure your selected clamping method is acceptable.

Note: For certain jurisdictions, if clamp tension is released, the clamps need to be relocated on panel to ensure bonding path.

Materials required: End Clamp

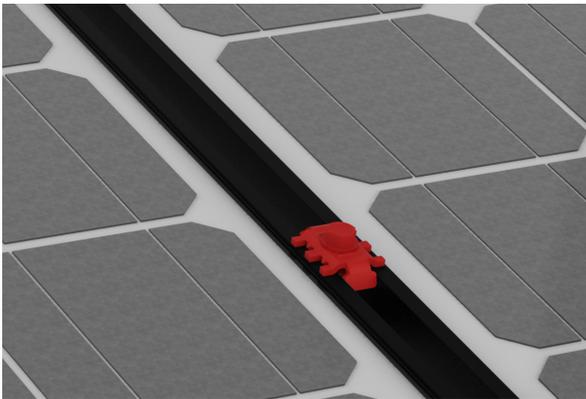


B OPTION 2

Push the zip tie up into the leash channel located at the bottom of the Yeti Clamp. With the leash installed, slide the clamp into the rail channel with the bolt facing outward. Leave enough room for the module to be placed. Place the module flush to the end of the rail. Pull the leash toward you so that the clamp slides over the module frame. Using a torque wrench or standard drill with a 13 mm socket, pull the clamp towards you and tighten the bolt.

Torque: 12 ft-lbs

10 ATTACH MID CLAMPS



Insert the MK3 slot nut of the preassembled mid clamps into the top channel on CrossRail. While slightly lifting the plastic tabs, rotate 90 degrees clockwise to engage the MK3 into the channel.

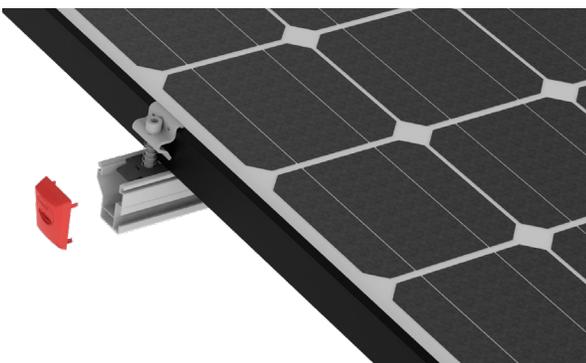
Attach the mid clamps to the module at the specified locations per the PV module manufacturer's installation instructions. Torque the M8 bolt to 12 ft-lbs. Ensure the modules are flush against the clamp, and torque.

Important: Verify module manufacturer's recommended clamping specifications are met.

Note: For certain jurisdictions, if clamp tension is released, the clamps need to be relocated on panel to ensure bonding path.

Materials required: Mid Clamp

11 OPTIONAL: ATTACH END CAPS



Push the pins of the appropriate end cap into end of the rail.

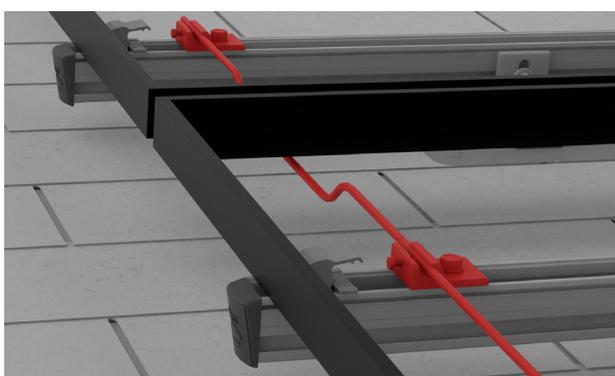
CrossRail 48-X/XL End Cap shown.

Materials required: End Cap

12 SYSTEM GROUNDING

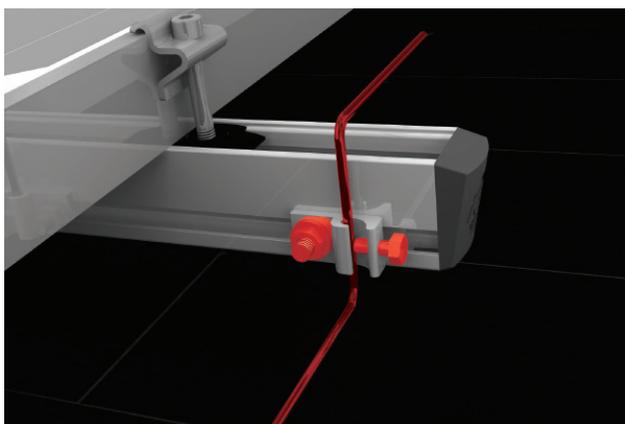
IMPORTANT NOTE

CrossRail components are required to be electrically bonded and grounded via the Everest Ground Lug or Burndy's WEEB Lug 10 and the use of #6 or #8 AWG solid copper wire. A minimum of one lug is required per each independent row of modules.



A OPTION 1

To attach the Everest Ground Lug, insert the MK3 slot nut of the preassembled ground lug into the top channel of the CrossRail. While slightly lifting the plastic tabs, rotate 90 degrees clockwise to engage the MK3 into the channel. Ensure the bonding teeth are perpendicular to the rail channel. Torque the M8 bolt to 10 ft-lbs using a 13 mm socket. Insert a #6 or #8 AWG solid copper wire and tighten terminal screw to 35 - 60 in-lb using a 7/16" socket.



B OPTION 2

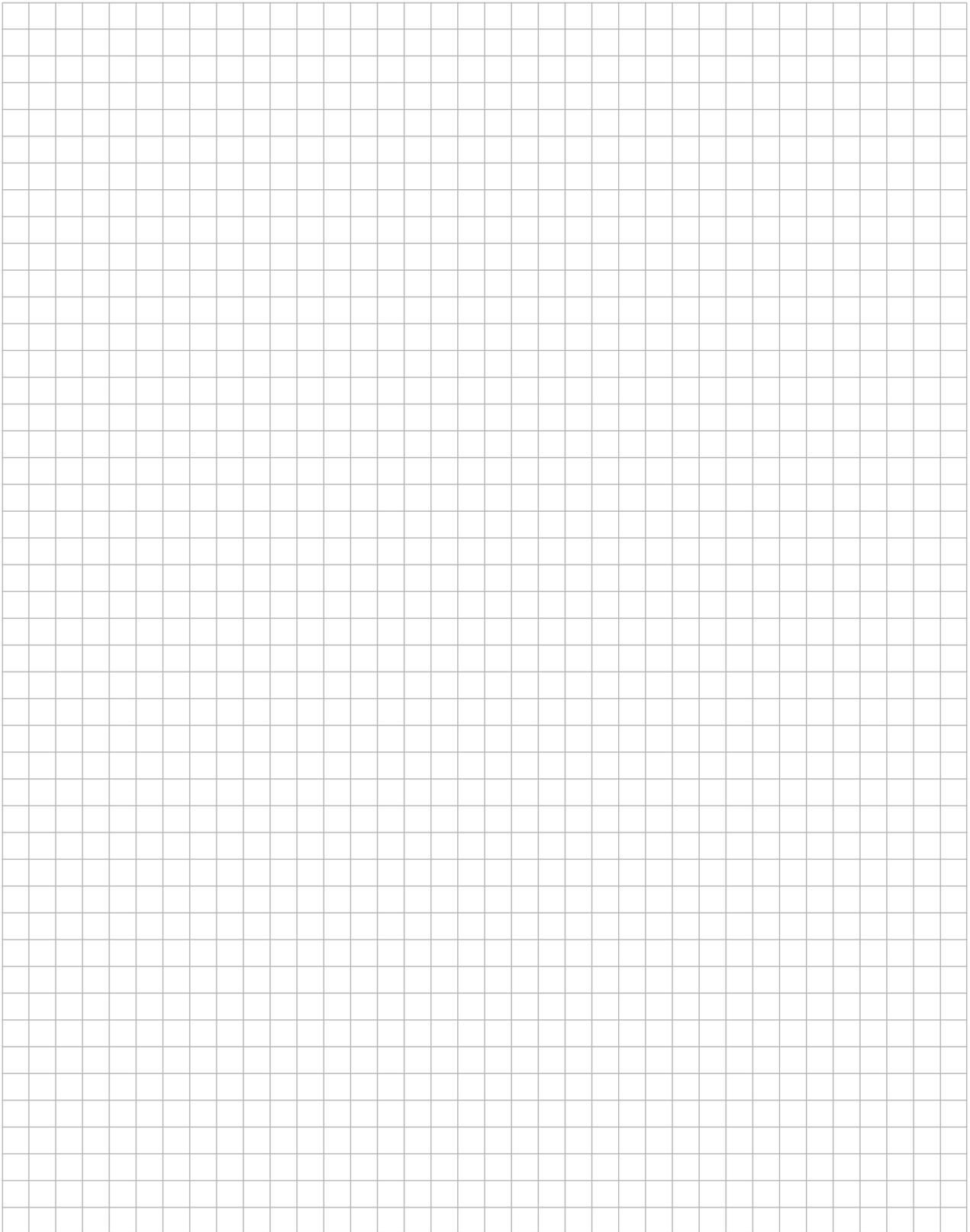
To attach the WEEB Lug 10.3, insert the M10 T-Bolt into the side slot on CrossRail and rotate clockwise 90 degrees. Attach the remaining components, as shown, tightening the Serrated Hex Nut to 15 ft-lb (20.3 Nm). Once the lug has been installed, a #6 or #8 AWG solid copper wire from a DC ground location external to the array must be inserted in the equipment ground conductor location on the lug. Torque the bolt to 5 ft-lb (6.7 Nm).

Note: Verify with your local jurisdiction that the WEEB Lug 10.3 is considered a single-use item in a UL 2703 Listed System.

Warning: Employ best industry practices to ensure that copper does not contact aluminum and galvanized steel.

Note: the WEEB Lug 10.3 utilizes a WEEB 11.5 as a bonding washer and thus carries the markings of a WEEB 11.5

Notes





THANK YOU FOR CHOOSING AN EVEREST MOUNTING SYSTEM.

Systems from Everest Solar Systems are quick and easy to install. We hope these instructions have helped. Please contact us with any questions or suggestions for improvement. Our contact information:

- ▶ www.everest-solarsystems.com/contact
- ▶ **Service Hotline: +1.760.301.5300**

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