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K2 SYSTEMS LLC
MIAMI-DADE TEST REPORT

SCOPE OF WORK
TAS 100(A) TESTING ON SPLICE FOOT, SOLAR MOUNT

REPORT NUMBER
M1453.01-109-18

TEST DATE
04/22/21

ISSUE DATE
05/18/21

MIAMI-DADE COUNTY NOTIFICATION NO.
ATI 21016

LABORATORY CERTIFICATION NO.
20-0831.14

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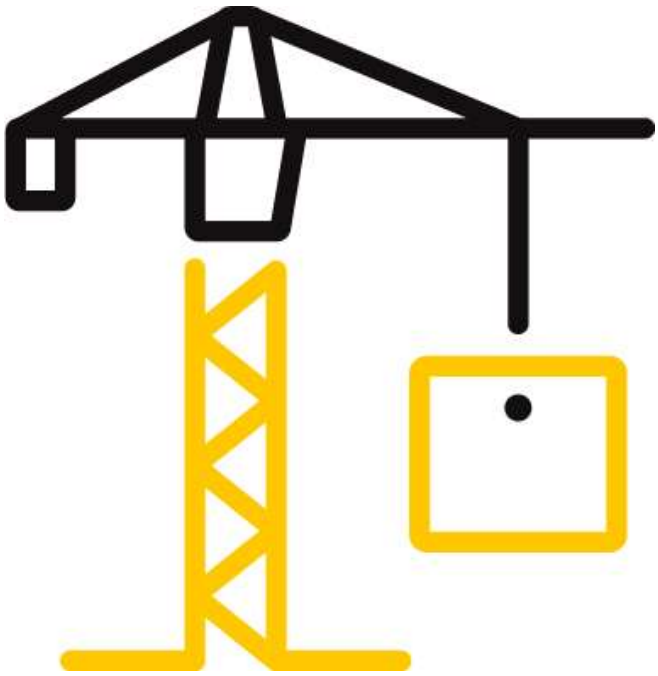

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TEST REPORT FOR K2 SYSTEMS LLC
Report No.: M1453.01-109-18
Date: 05/18/21

REPORT ISSUED TO

K2 SYSTEMS LLC
2835 La Mirada Drive, Suite A
Vista, California 92081

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by K2 Systems LLC to perform TAS 100(A) testing in accordance with Miami-Dade County requirements on their Splice Foot, solar mount. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at the Intertek B&C test facility in York, Pennsylvania.

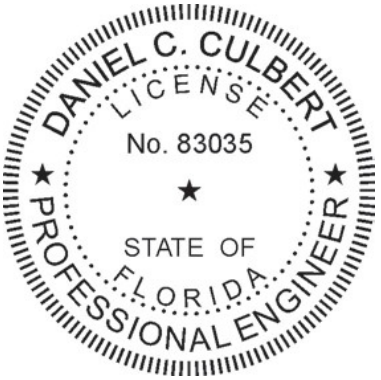
This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends ten years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for the entire test record retention period

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called “Shared Risk approach,” of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.

SECTION 2

SUMMARY OF TEST RESULTS

The specimen tested met the performance requirements set forth in the protocols.



For INTERTEK B&C:

COMPLETED BY:	Kyle W. Ruth	**REVIEWED BY:**	Daniel C. Culbert, P.E.
TITLE:	Technician – Product Testing	**TITLE:**	Senior Project Engineer
SIGNATURE:	Digitally Signed by: Kyle Ruth	**SIGNATURE:**	Digitally Signed by: Daniel Craig Culbert
DATE:	05/18/21	**DATE:**	05/18/21

KWR:nls

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SECTION 3
TEST METHOD(S)

The specimen was evaluated in accordance with the following:

> **TAS 100 (A)-95**, *Test Procedure for Wind and Wind Driven Rain Resistance and/or Increased Windspeed Resistance of Soffit Ventilation Strip and Continuous or Intermittent Ventilation System Installed at the Ridge Area*

SECTION 4
MATERIAL SOURCE

Test sample materials were provided by the client from K2 Systems LLC located in Vista, California. Representative samples of the test specimen will be retained by Intertek B&C for a minimum of ten years from the test completion date.

SECTION 5
EQUIPMENT/CALIBRATION

Vane Axial Fan – Y003346
Pressure Gauge – INT02030

Windstream, water supply, and water distribution calibration were performed prior to testing. Reference Intertek B&C Calibration Report No. M1448.01-109-18, dated 04/28/21, for descriptions and results.

SECTION 6
LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Robert J. Beatty	Intertek B&C
Timothy J. McGill	Intertek B&C
Daniel C. Culbert, P.E.	Intertek B&C
Kyle W. Ruth	Intertek B&C

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SECTION 7
TEST SPECIMEN DESCRIPTION

Manufacturer: K2 Systems LLC
Product Type: Solar Mount
Series/Model: Splice Foot

Roof Deck Description: An 8' 0" wide by 6' 0" long roof deck on a 2:12 slope was utilized. The roof deck consisted of #2 Spruce-Pine-Fir nominal 2x6 intermediate supports sheathed with APA 32/16 span rated 15/32" plywood sheathing. The intermediate supports were spaced 24" on center. The plywood was secured to the rafters with 8d common nails spaced 6" on center around the perimeter and 12" on center at the intermediate supports. 30# felt paper underlayment was utilized over the sheathing. Three-tab shingles were then installed on the roof deck.

Solar Mount Description/Installation: The mount was composed of 4" wide by 3-1/2" long by 2" high extruded aluminum. A 1/8" thick butyl pad was adhered to the underside of the base. The mount was installed over the shingles, 18" from the ridge. The mount was secured with two M 5.0 x 60mm hex head screws with washer and EPDM sealing washer. The fasteners were located through the mount and into the rafter.

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SECTION 8
TEST RESULTS

Protocol TAS 100(A)-95, *Test Procedure for Wind and Wind Driven Rain Resistance and/or Increased Windspeed Resistance of Soffit Ventilation Strip and Continuous or Intermittent Ventilation System Installed at the Ridge Area.*

Test Date(s): 04/22/21
The temperature during testing was 2°C (35°F). The results are tabulated as follows:

Test Procedure: The wind speed intervals were conducted as follows:

Interval No.	Wind Speed (mph)	Time (min)	Water Spray
1	35	15	On
2	0	5	Off
3	70	15	On
4	0	5	Off
5	90	15	On
6	0	5	Off
7	110	5	On
8	0	5	Off

Test Results: The TAS 100(A) test results are as follows:

Wind Speed	Results
35 mph	0.0 oz.
70 mph	0.0 oz.
90 mph	0.0 oz.
110 mph	0.0 oz.

Allowable Leakage: 13.34 oz.

Result(s): Pass

***Note**: Tested at a 2:12 roof pitch*

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TEST REPORT FOR K2 SYSTEMS LLC
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SECTION 9
PHOTOGRAPHS

Photo No. 1
Top Side Before Testing

Photo No. 2
Underside Before Testing

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TEST REPORT FOR K2 SYSTEMS LLC
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Photo No. 3
35 MPH Top Side

Photo No. 4
35 MPH Underside

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TEST REPORT FOR K2 SYSTEMS LLC
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Photo No. 5
70 MPH Top Side

Photo No. 6
70 MPH Underside

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Photo No. 7
90 MPH Top Side

Photo No. 8
90 MPH Underside

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TEST REPORT FOR K2 SYSTEMS LLC
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Photo No. 9
110 MPH Top Side

Photo No. 10
110 MPH Underside

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TEST REPORT FOR K2 SYSTEMS LLC
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Photo No. 11
Post Test Top Side

Photo No. 12
Post Test Underside

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SECTION 10
DRAWINGS

The test specimen drawings have been reviewed by Intertek B&C and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.

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SECTION 11
REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	05/18/21	N/A	Original Report Issue