Tender Specification

Low ballast double-sided mounting for flat roofs

Product: 
Location: 
Customer: 

K2 Systems - low ballast double-sided mounting system for flat roof installations.

K2 D-Dome System
Double-sided roof system for all orientations with 10° inclination.

For concrete, membrane and bitumen roofs with low ballast, as well as gravel roofs, green roofs and trapezoidal sheet metal roofs.

Ensure a thermal gap (distance between module blocks) after a maximum of 11 meter in the direction of the module rows and the base rail.

The flow of rainwater must not be hindered.

A minimum distance of 600 mm from roof edges must be maintained.

For framed modules and horizontal module orientation use the following dimensions:
Frame height:  30 mm - 50 mm
Module length:  1386 – 2080 mm
Module width:  950 -1100 mm

For corner clamping approved modules must be used; for a list of approved modules see the following link http://www.k2-systems.uk.com/downloads/approved-module-list.html

Statistically verified solution using the K2 Base planning software according to Eurocode 9.
Load assumptions according to EUROCODE 1. Wind tunnel tested.
The D-Dome System includes the following materials:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item Description</th>
<th>Product Code</th>
<th>Quantity</th>
<th>Price/Unit in €</th>
<th>Total price in €</th>
</tr>
</thead>
</table>
| 1   | **K2 SpeedRail 22**  
Base rail  
Height: 22.5 mm  
Width: 36 mm  
Material: EN AW-6063 T66 | Depending on length |          |                 |                  |
| 2   | **K2 Flat Connector Set**  
Mounting rail connector for connecting two K2 SpeedRails.  
Components:  
- FlatConnector, Material: EN AW-6063 T66  
- 2 Bolt with serrated underhead M8 similar DIN 912 / EN ISO 4762, Material: stainless steel A2  
- MK2 Slot nut with clip  
  Material: stainless steel A2 (1.4301) and PA | 1006039 |          |                 |                  |
| 3   | **Dome building protection mat**  
For roof cladding protection for bituminous flat roof covering or use with membrane roofs. For protection against punctual load entry and mechanical damage caused by the mounting system stand.  
Dimensions: 470x180x18 mm,  
Material: PUR-bonded rubber granules; optionally laminated with a triplex aluminium foil on the underside | 2001696  
2001695 (laminated with a triplex aluminium foil on the underside) |          |                 |                  |
| 4   | **Dome SD building protection mats**  
For roof cladding protection for bituminous flat roof covering or use with membrane roofs. For protection against punctual load entry and mechanical damage caused by the mounting system stand.  
Dimensions: 160x180x18 mm,  
Material: PUR-bonded rubber granules; optionally laminated | 2001740  
2001739 (laminated with a triplex aluminium foil on the underside) |          |                 |                  |
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<p>| | | |</p>
<table>
<thead>
<tr>
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<td><strong>Product:</strong></td>
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</table>

### K2 Dome D1000 2.0
- Module supporting element for crests
- Width: 65 mm
- Material: EN AW-6063 T66 (aluminium mill finish)

### K2 Dome SD 2.0
- Module supporting element for valleys
- Width: 65 mm
- Material: EN AW-6063 T66

### K2 Universal-module end clamp OneEnd
- For fastening module on mounting rails.
- Module frame height: 30-42 mm.

- Consisting of:
  - 1 Module end clamp, Material: aluminium mill finish/ black anodised
  - 1 AluStance 15, Material: aluminium EN AW-6063 T66
  - 1 K2 Allen bolt with serrated under head M8x45, Material: stainless steel A2 (1.4301)
  - 1 square nut M8x15, Material: stainless steel A2 (1.4301)
  - 1 plastic cage, Material: POM / black

### Alternative to Universal Module Middle Clamp OneMid:
- K2 Module end clamp standard Set

- Consisting of:
  - 1 Module end clamp standard, Material: EN AW-6063 T66 (aluminium mill finish/ black anodised)
  - 1 Allen bolt with serrated under head M8, similar

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Supplier:
K2 Systems GmbH, Industriestraße 18, 71272 Renningen
Phone: +49 7159-42059 - 0
E-Mail: info@k2-systems.de – Web: www.k2-systems.com
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<table>
<thead>
<tr>
<th>Product: K2 Modulemiddleclamp XS Set</th>
<th>For fastening the modules to supporting elements</th>
<th>Depending on module frame height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consisting of:</td>
<td></td>
<td></td>
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<tr>
<td>1 Middle clamp XS,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material: EN AW-6063 T66</td>
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<td></td>
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<tr>
<td>(aluminium mill finish/ black anodised)</td>
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</tr>
<tr>
<td>1 K2 Allen bolt with serrated under head M8, similar DIN 912/EN ISO 4762, Material: stainless steel A2 (1.4301)</td>
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<td></td>
</tr>
<tr>
<td>1 MK2 slot nut with clip,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material: stainless steel A2 (1.4301) and PA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Stainless steel spring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product: MK2 Slot nut with clip</th>
<th>Nut for mounting the module support elements in the base rail.</th>
<th>1001643</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material: stainless steel A2 (1.4301) and PA</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Product: Bolt with serrated underhead</th>
<th>M8x20 similar DIN 912 / EN ISO 4762 for mounting the module support elements in the base rail.</th>
<th>2001729</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material: stainless steel A2 (1.4301)</td>
<td></td>
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</table>

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<tr>
<th>Additional components may be needed for ballast use</th>
</tr>
</thead>
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<tr>
<th>Product: K2 SpeedPorter</th>
<th>Bent aluminium plate for ballast use</th>
<th>2002300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material: aluminium (EN AW-5754 H111)</td>
<td></td>
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</table>

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<tr>
<th>Product: K2 Dome Porter</th>
<th>L-angle for ballast use, BxH: 30x30 mm</th>
<th>2000081 (1750mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material: Aluminium EN AW-6063 T66</td>
<td></td>
<td>2001140 (2050mm)</td>
</tr>
</tbody>
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### 13 MK2 Slot nut with clip
- Nut for mounting the module support elements in the base rail.
- Material: stainless steel A2 (1.4301) and PA
- Code: 1001643

### 14 Bolt with serrated underhead
- M8x20 similar DIN 912 / EN ISO 4762 for mounting the module support elements in the base rail.
- Material: stainless steel A2 (1.4301)
- Code: 2001729

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**Additional material may be needed for mounting trapezoidal sheet metal roofs**

### 15 K2 SpeedClip
- Module supporting element for mounting K2 SpeedRails on trapezoidal sheet metal roofs, Material: glass fibre reinforced polyamide, EPDM
- Code: 1001164

### 16 K2 self-tapping screw
- For installing the SpeedClip bracket, Dimensions: 6x38 mm
- Sealing washer: Ø 16 mm, Material: stainless steel A2 (1.4301) and EPDM (Z-14.4-426)
- Code: 1005193

### 17 K2 SpeedConnector Set
- Rail connector for connecting two K2 SpeedRails with three drilled holes for flexible assembly.
- Consisting of:
  - 1 SpeedConnector, Material: Aluminium EN AW-6063 T66
  - 2 countersunk-head drilling screws, 4.8x16 mm, Material: stainless steel A2 (1.4301) with TX 25 drive
- Code: 1003571

### 18 K2 SpeedLock Set
- Locking device to install K2 SpeedRail and regulate thermal expansion.
- 1 SpeedLock Material: Aluminium EN AW-6063 T66
- Code: 1003558
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**Product:**

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<th>Description</th>
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<tbody>
<tr>
<td>1 Hexagon socket countersunk-head screw M8x20 DIN 7991, Material:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>stainless steel A2 (1.4301)</td>
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</tr>
<tr>
<td>1 MK2 slot nut with clip, Material: stainless steel A2 (1.4301) and PA</td>
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</tbody>
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**Total**