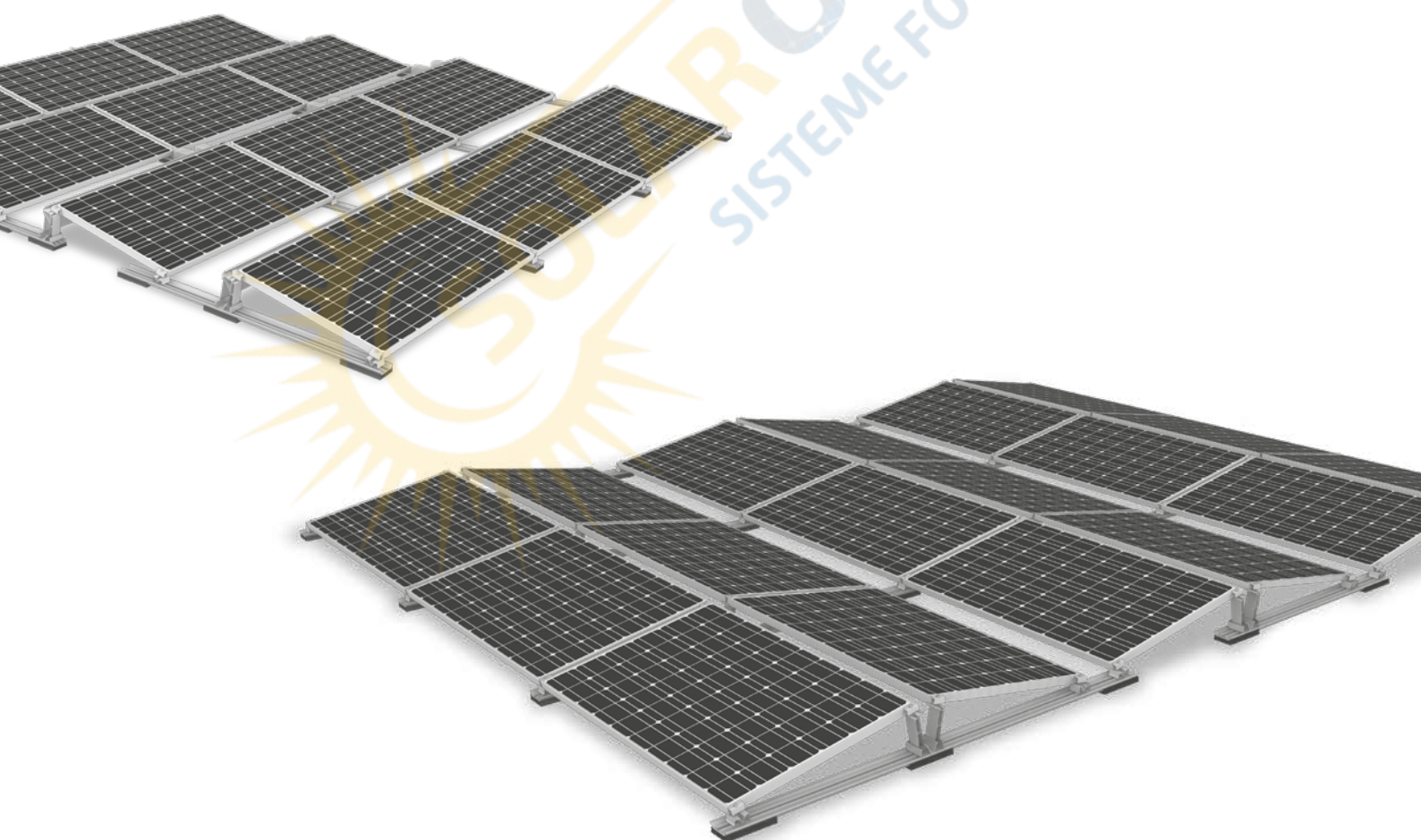
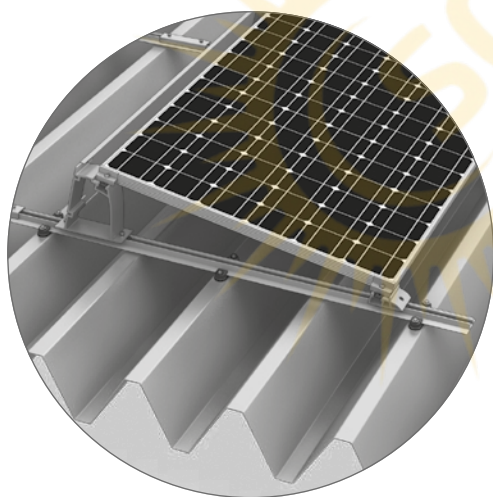


Flat roof systems





SOLARONE®.RO
SISTEME FOTOVOLTAICE

▶ Comparison of flat roof systems	4
▶ D-Dome V 10° System	6
▶ D-Dome 10° System	8
▶ S-Dome V 10° System	10
▶ S-Dome 10° System	12
▶ S-Rock 15° System	14
▶ S-Dome Small System	16
▶ Triangle/MultiAngle System 10-45°	18
▶ Accessories	20

Warranty

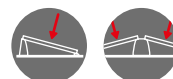
We offer a 12-year warranty on all K2 system components.

k2-systems.com/en/guarantee



Module orientation

We offer flat roof systems with one-sided or two-sided elevations.

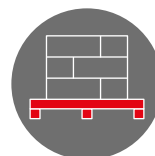


Statics and design loads

K2 mounting systems fulfil the calculation principles in accordance with Eurocode 1 and 9.

Pallet delivery

Many K2 mounting systems are shipped completely as palletised goods.

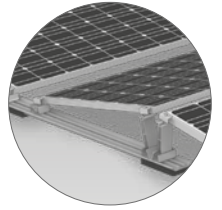


Comparison of flat roof systems

D-Dome V 10°:

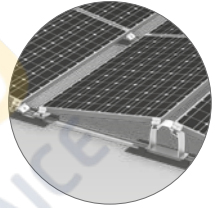
New

The double-sided elevation – generation V



D-Dome 10°:

The double-sided elevation



S-Dome V 10°:

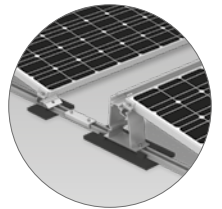
New

The single-sided elevation – generation V



S-Dome 10°:

The single-sided elevation



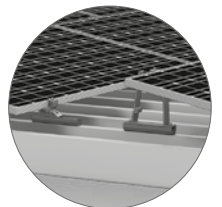
S-Rock 15°:

The solution for quick single-sided elevation



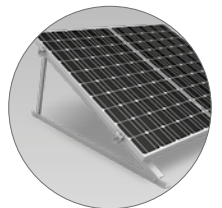
S-Dome Small 10°:

Single-sided elevation for trapezoidal sheet metal



Triangle / MultiAngle 10-45°:

Flexible single-sided elevation



Flat roofs

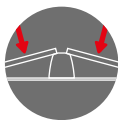
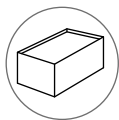
Trapezoidal sheet metal

One-sided

Two-sided

Mat V

Integrated ballast tray

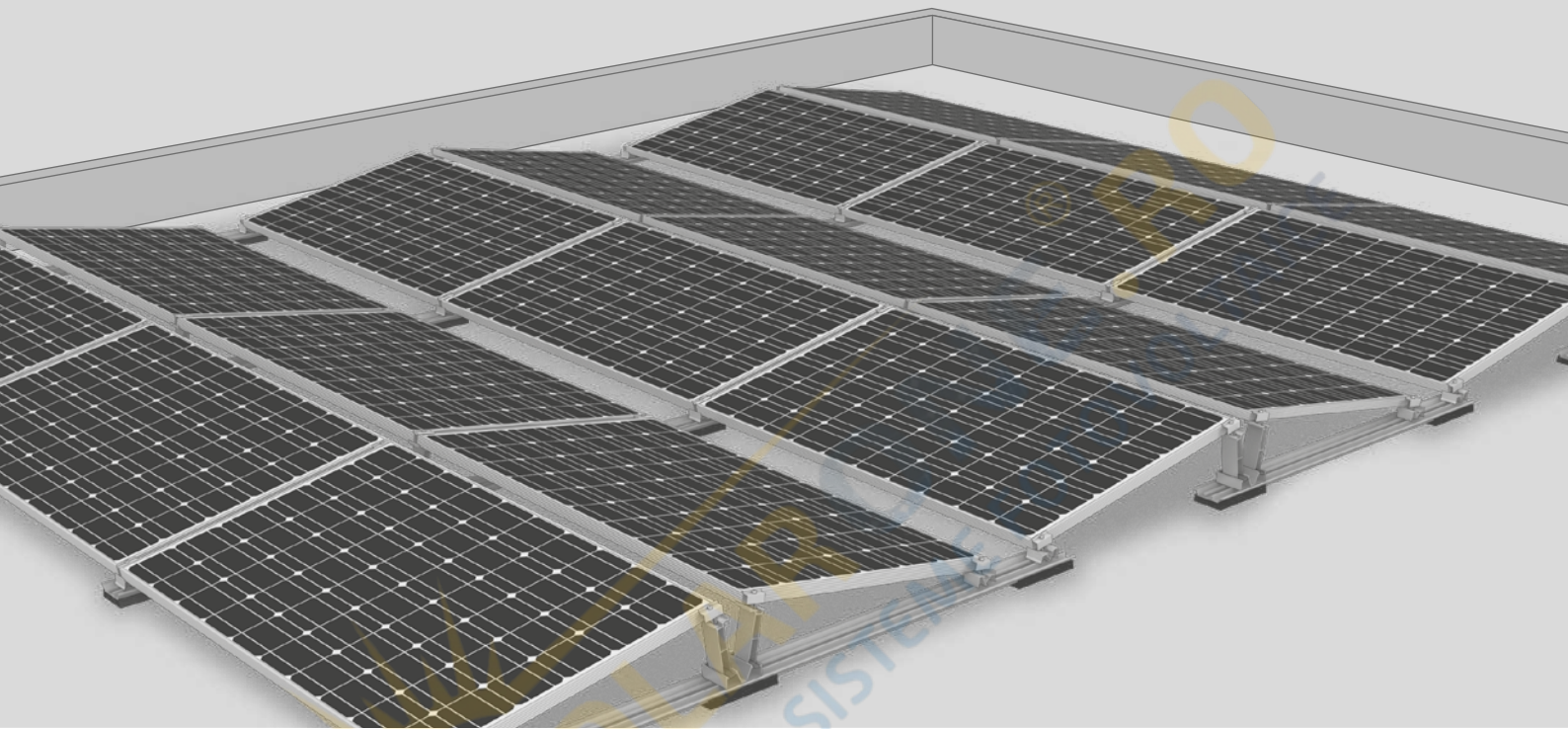


● Suitable/integrated

○ Unsuitable/not integrated

D-Dome V 10° System **New**

The double-sided elevation – generation V

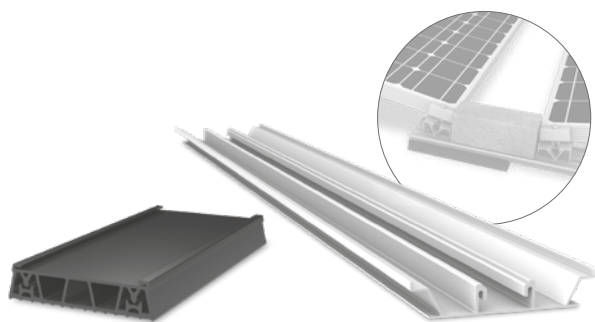


Now optimised and improved:

- ▶ D-Dome V with a modified geometry for the improved absorption of tolerances
- ▶ Short mounting rails with an integrated ballast tray
- ▶ Flexible EPDM support pad:
 - Compensates for tolerances
 - Better friction coefficient reduces ballasting
- ▶ Lower transport volume reduces logistics costs
- ▶ Aerodynamically optimised based on wind tunnel tests

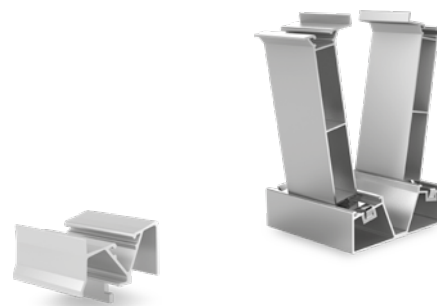


Components



Mat V + Rail

- ▶ The flexible Mat V EPDM support pad can absorb tolerances and protects the roof cover
- ▶ The mounting rail is connected to the Mat V with a simple sliding motion and has an integrated ballast tray.

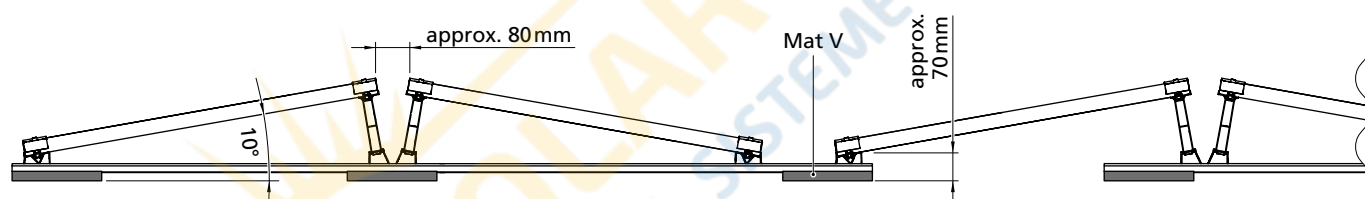
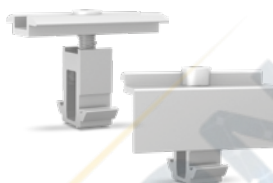


Dome V SD and Peaks with Basis

- ▶ Modified geometry to absorb tolerances and material-optimised
- ▶ Only one screw connection
- ▶ Lower volume and weight

Universal module clamp: MiniClamp MC/EC

- ▶ Clamping range 30- 50 mm
- ▶ Compatible with the S-Rock and MiniRail System

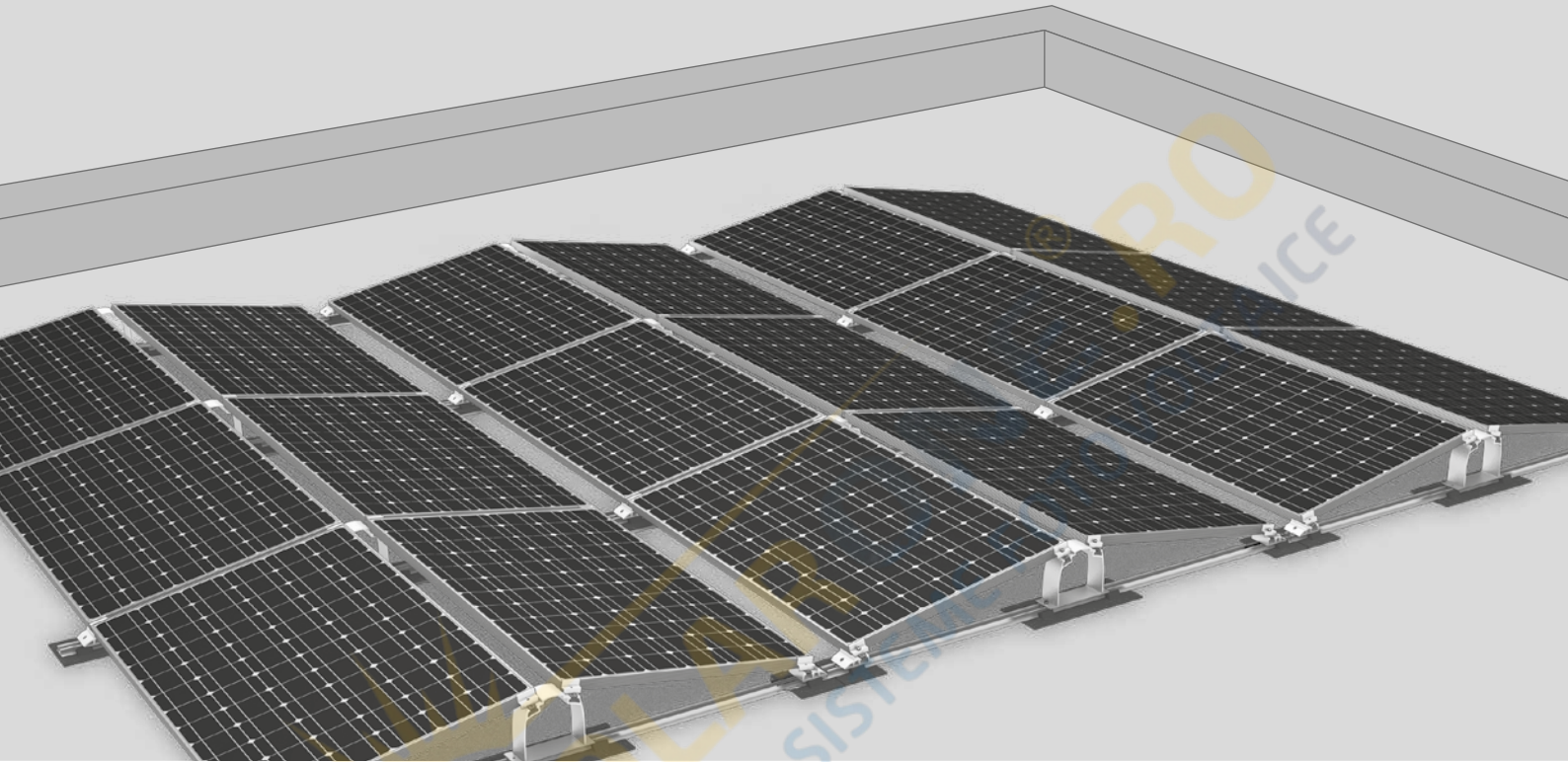


Technical data

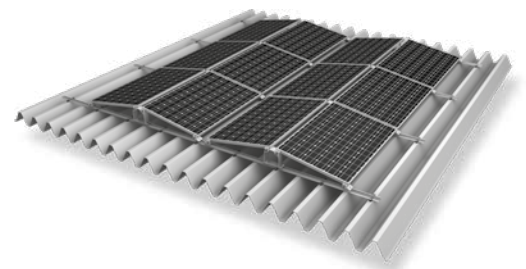
	D-Dome V
Scope of application	Flat roofs with a foil or bitumen roof cover and laid on concrete or gravel
Fastening type/roof fixture	Stable, if necessary with ballasting, no roof penetration
Requirements	▶ Permissible module dimensions (L x W x H): 1386 - 2080 x 990 - 1002 x 30 - 50 mm ▶ Minimum system size: 2 supports (4 modules)
Technical specifications	▶ Thermal separation after a maximum of 15.5 m (trapezoidal sheet 8.4 m) ▶ Minimum distance to the edge of the roof 600 mm
Inclination angle	10°
Material	▶ Mounting rails, Peak, Basis, SD and MiniClamps: Aluminium EN AW-6063 T66 ▶ Mat V protective mat: EPDM ▶ Small parts: stainless steel (1.4301) A2-70

D-Dome 10° System

The solution for
double-sided elevation

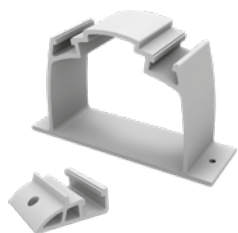


- ▶ A system which provides optimal surface utilisation and yields for roofs with limited ballasting options
- ▶ Aerodynamically optimised as a result of wind tunnel testing
- ▶ Quick and easy handling



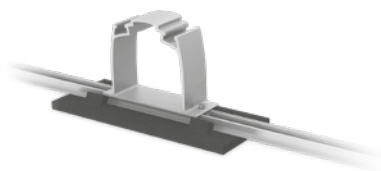
D-Dome can also be mounted on
trapezoidal sheet metal roofs.

Components



Dome D1000 and Dome SD

Narrow elevation module support element for two-sided elevations



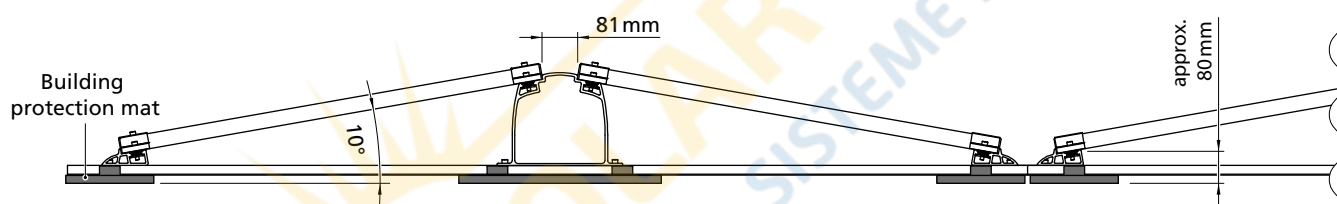
SpeedRail with building protection mats

- ▶ SpeedRail available as short or long rails
- ▶ Building protection mats also laminated with aluminium



Ballast Management

SpeedPorter: For quick and easy ballasting



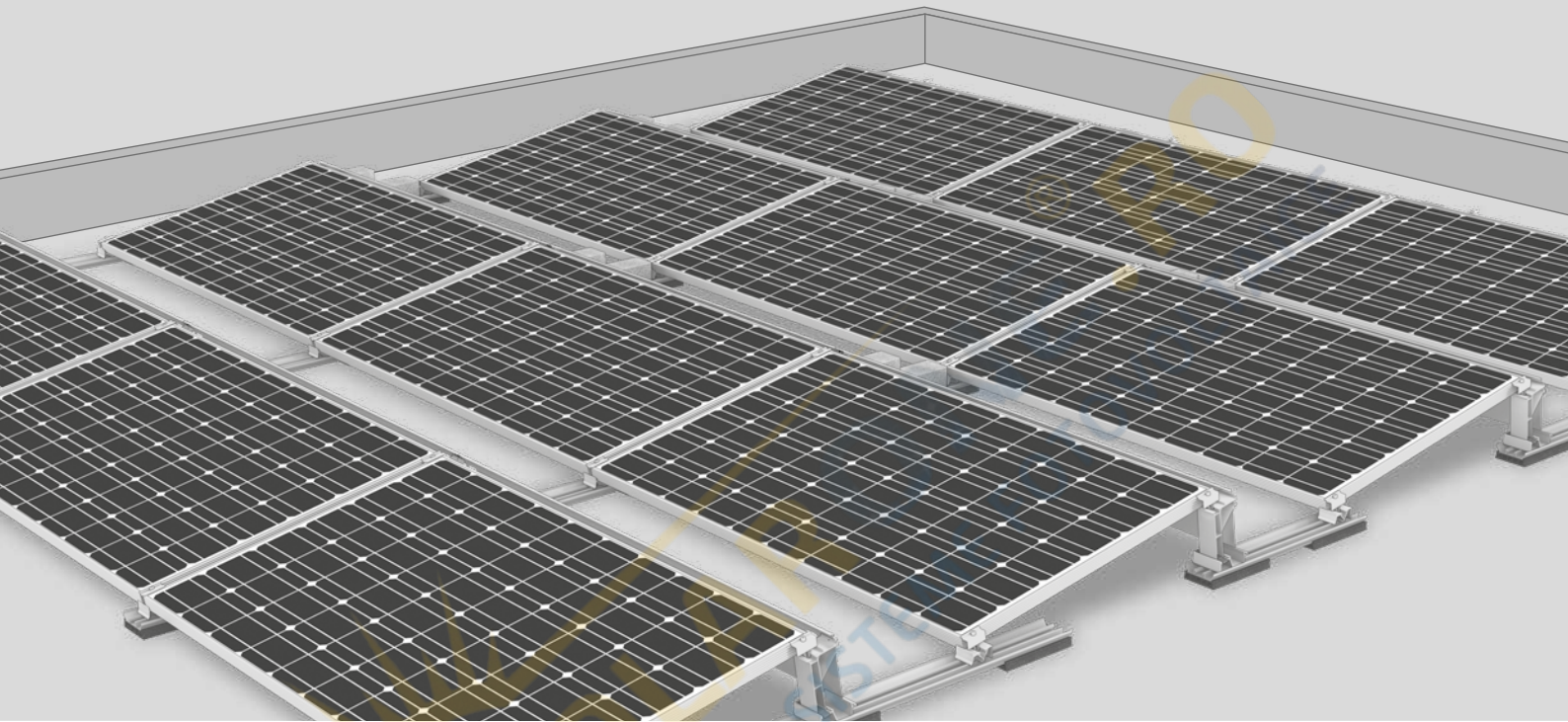
Technical data

	D-Dome
Scope of application	Flat roofs <5° with membrane, bitumen and concrete or gravel roofs; also trapezoidal sheet metal roofs with continuous mounting rails
Fastening type/roof fixture	Stable, with ballasting if necessary; no roof penetration up to 3°
Requirements	▶ Permissible module dimensions (L x W x H): 1386-2080 x 950-1100 x 30-50 mm ▶ Minimum system size: 2 supports (4 modules) ▶ Roof inclination of up to 5°
Technical specifications	▶ Thermal separation after max. 11 m (trapezoidal sheet metal 8.4 m) ▶ Minimum clearance to roof edge 600 mm
Inclination angle	10°
Material	▶ Mounting rails, D-Dome, Dome SD, Module Clamps, Rail Connectors: Aluminium EN AW-6063 T66 ▶ Building protection mat with or without aluminium lining (PUR-bound rubber granules) ▶ Small parts: Stainless steel (1.4301) A2-70

S-Dome V 10° System

New

The single-sided elevation – generation V

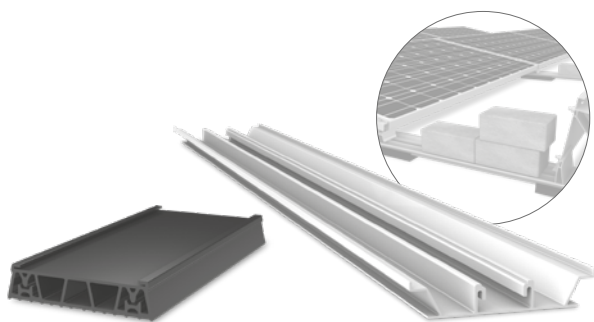


Now optimised and improved:

- ▶ S-Dome V with a modified geometry for the improved absorption of tolerances
- ▶ Short mounting rails with an integrated ballast tray
- ▶ Flexible EPDM support pad:
 - Compensates for tolerances
 - Better friction coefficient reduces ballasting
- ▶ Lower transport volume reduces logistics costs
- ▶ Aerodynamically optimised based on wind tunnel tests

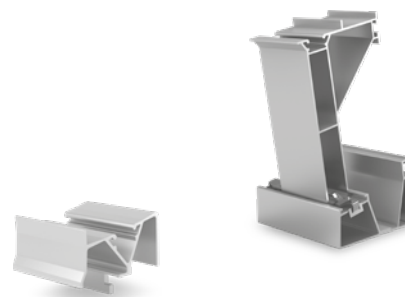


Components



Mat V + Rail

- ▶ The flexible Mat V EPDM support pad can absorb tolerances and protects the roof cover
- ▶ The mounting rail is connected to the Mat V with a simple sliding motion and has an integrated ballast tray.



Dome V SD and Peaks with Basis

- ▶ Modified geometry to absorb tolerances and material-optimised
- ▶ Only one screw connection
- ▶ Lower volume and weight

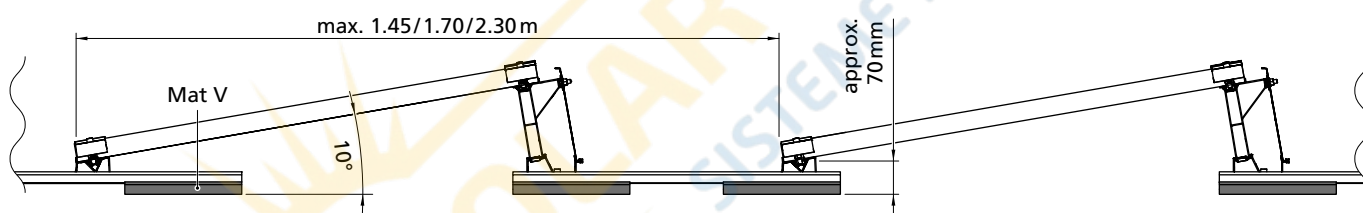
Universal module clamp: MiniClamp MC/EC

- ▶ Clamping range 30- 50 mm
- ▶ Compatible with the S-Rock and MiniRail System



Windbreaker

Wind deflection on the reverse side

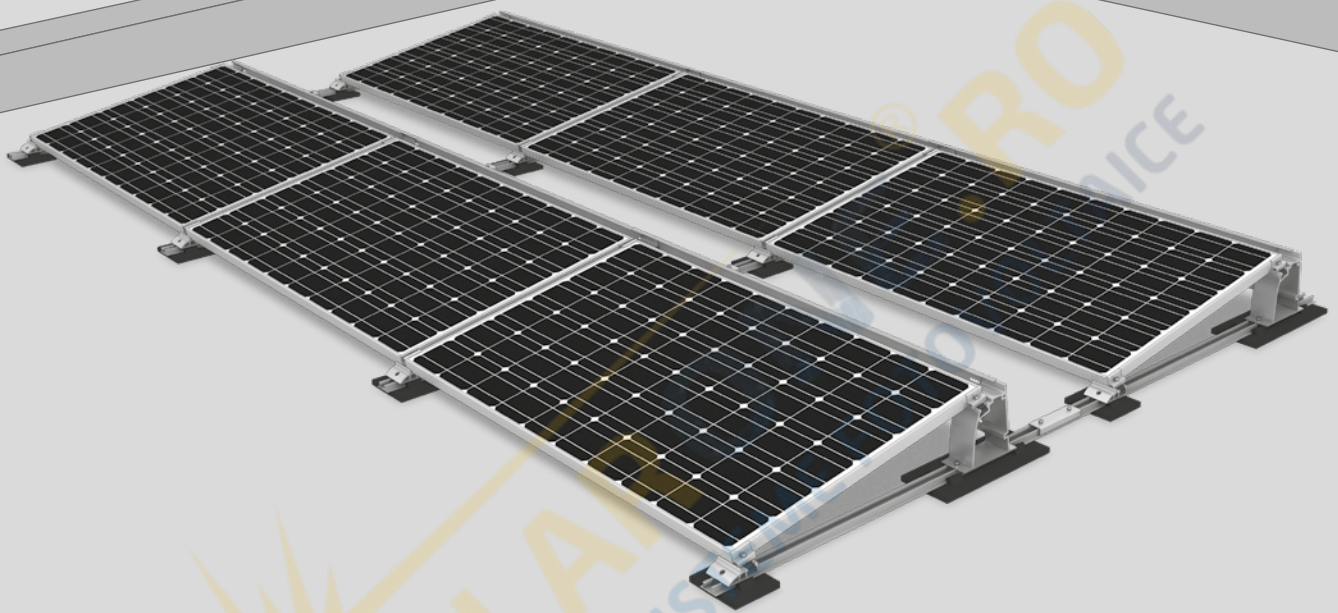


Technical data

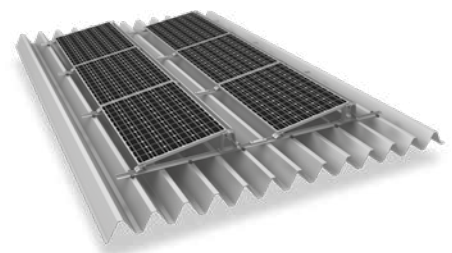
	S-Dome V
Scope of application	Flat roofs with a foil or bitumen roof cover and laid on concrete or gravel
Fastening type/roof fixture	Stable, if necessary with ballasting, no roof penetration
Requirements	▶ Permissible module dimensions (L x W x H): 1386 - 2067 x 990 - 1002 x 30 - 50 mm ▶ Minimum system size: 2 modules
Technical specifications	▶ Thermal separation after a maximum of 15.5 m ▶ Minimum distance to the edge of the roof 600 mm
Inclination angle	10°
Material	▶ Mounting rails, Peak, Basic, SD, Windbreaker and MiniClamps: Aluminium EN AW-6063 T66 ▶ Mat V protective mat: EPDM ▶ Small parts: stainless steel (1.4301) A2-70

S-Dome 10° System

The solution for
single-sided elevation

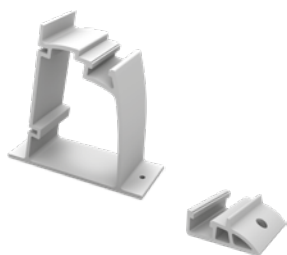


- ▶ A system for structurally challenging roofs with limited ballast options
- ▶ Aerodynamically optimised as a result of wind tunnel testing
- ▶ Quick and easy handling
- ▶ Also available as a short rail system



S-Dome can also be mounted on
trapezoidal sheet metal roofs.

Components



Dome S1000 and Dome SD

- ▶ Module support elements for one-sided elevations
- ▶ Suitable for module widths of up to approx. 1100 mm



SpeedRail with building protection mats

- ▶ SpeedRail available as short or long rails
- ▶ Laminated or unlaminated building protection mats, depending on roof covering material



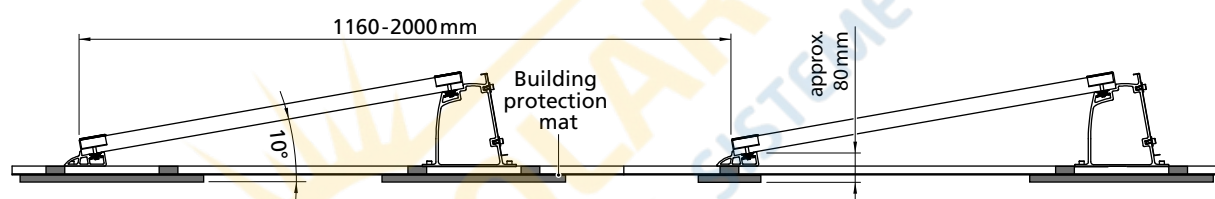
Windbreaker

- ▶ Wind deflection on the rear of Dome systems
- ▶ Various lengths available



Ballast Management

SpeedPorter: For quick and easy ballasting

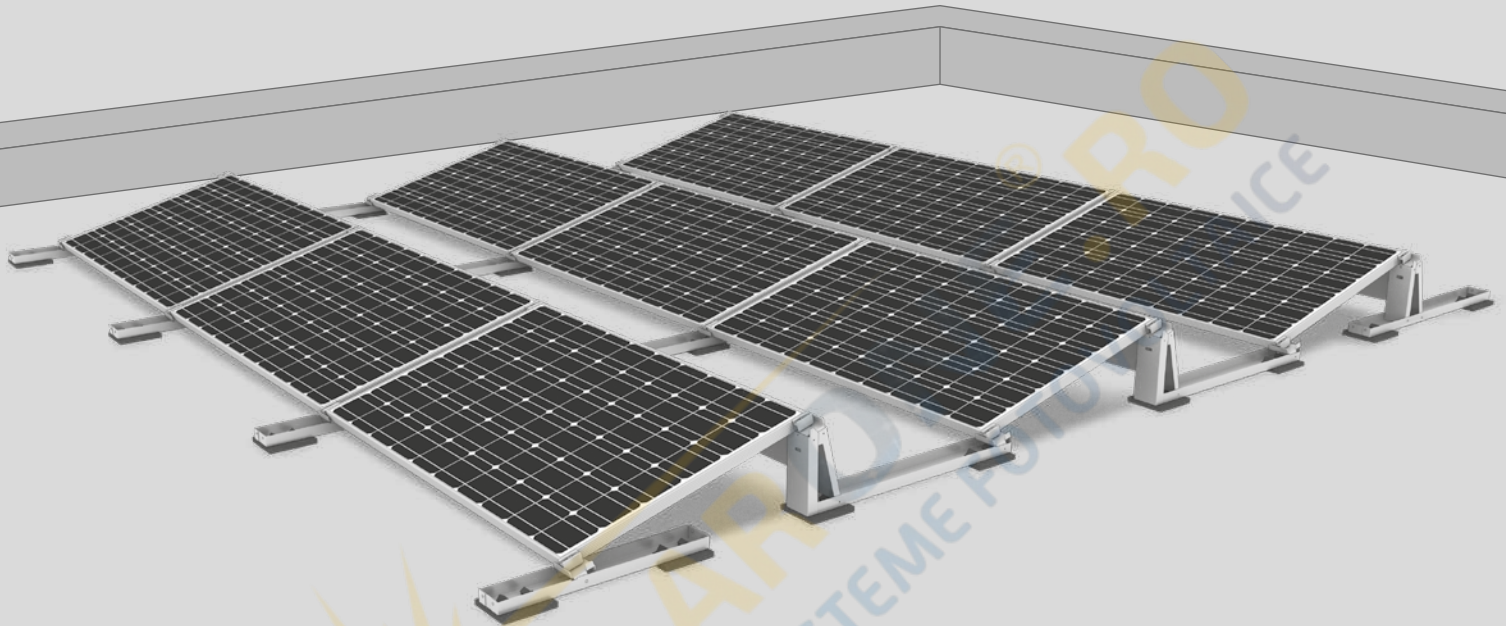


Technical data

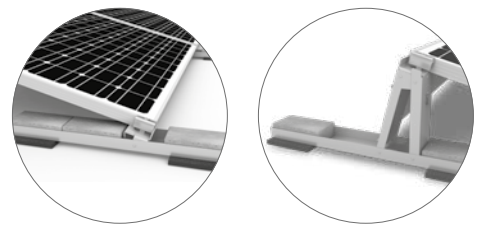
	S-Dome
Scope of application	Flat roofs < 5° with membrane, bitumen and concrete or gravel roofs; also trapezoidal sheet metal roofs with continuous mounting rails
Fastening type/roof fixture	Stable, with ballasting if necessary; no roof penetration up to 3°
Requirements	▶ Permissible module dimensions (L x W x H): 1386-2067 x 950-1100 x 30-50 mm ▶ Minimum system size: 2 modules ▶ Roof inclination of up to 5°
Technical specifications	▶ Thermal separation after max. 11 m (trapezoidal sheet metal 8.4 m) ▶ Minimum clearance to roof edge 600 mm
Inclination angle	10°
Material	▶ Mounting rails, S-Dome, Dome SD, Windbreaker, module clamps, rail connectors: Aluminium EN AW-6063 T66 ▶ Building protection mat with or without aluminium lining (PUR-bound rubber granules) ▶ Small parts: Stainless steel (1.4301) A2-70

S-Rock 15° System

The solution for quick
single-sided elevation

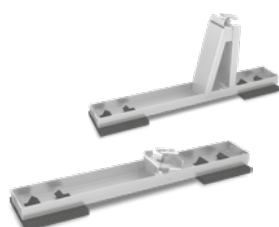


- ▶ Ultra quick and easy mounting
- ▶ One component with integrated ballast tray and cable management solution
- ▶ No additional pre-assembly
- ▶ One universal clamp for all modules
- ▶ Aerodynamically optimised as a result of wind tunnel testing

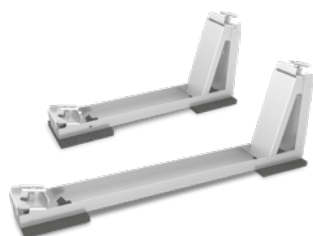


The integrated ballast tray eliminates additional components.

Components



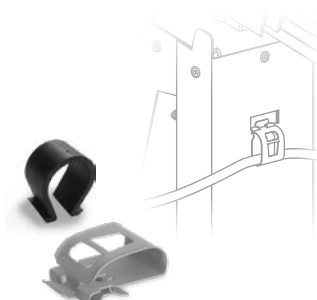
S-Rock 15° Front/End
First and last row module support element with ballast tray



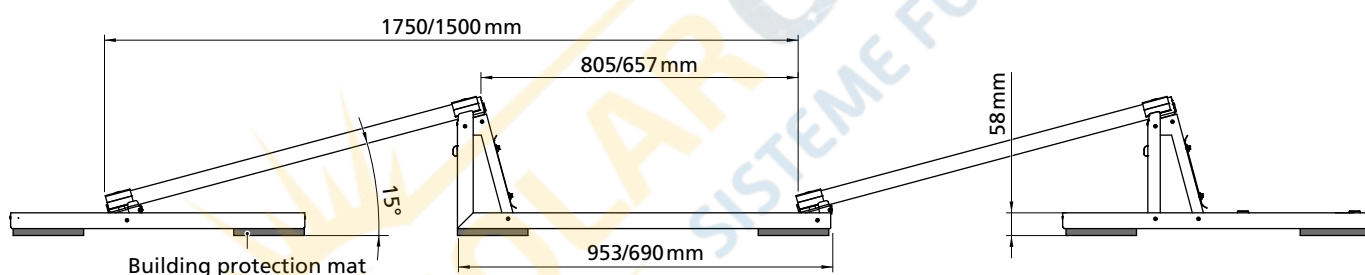
S-Rock 15°
Module support element for one-sided elevation with ballast tray in two lengths



Windbreaker 15°
Wind deflection on the rear of S-Rock 15° systems



Cable Management
S-Rock cable clips for fastening module cables

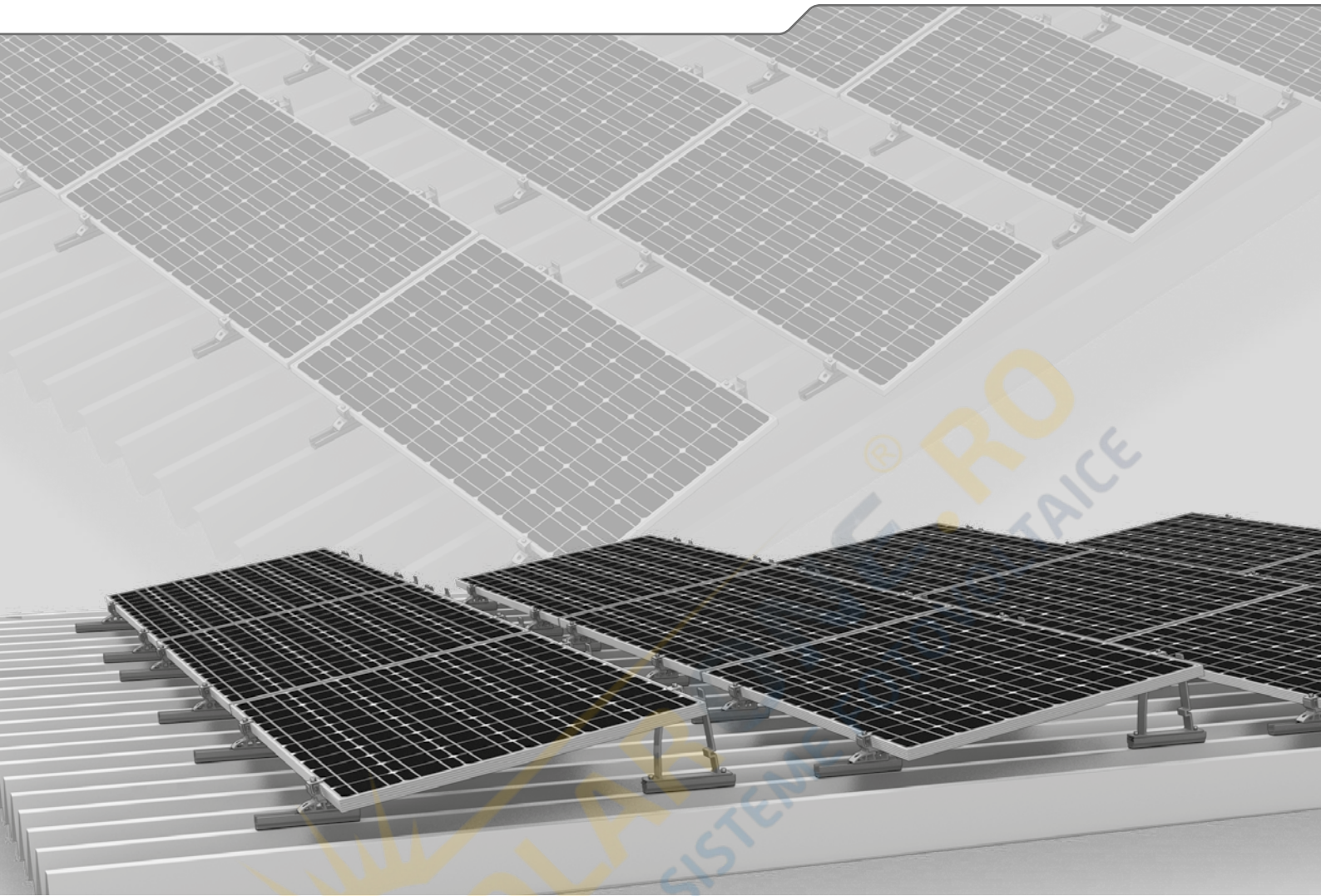


Technical data

	S-Rock
Scope of application	Flat roofs <5° with membrane, bitumen and concrete roofs
Fastening type/roof fixture	On-roof with potential ballast; no roof penetration
Requirements	Permissible module dimensions (L x W x H): 1638-1685 x 982-1001 x 30-50 mm
Technical specifications	- Thermal separation after 8 adjacent or consecutive modules - Minimum clearance to roof edge 700 mm - Row spacing, fixed: approx. 1.75/1.5 m (depending on module width)
Inclination angle	15°
Material	- Aluminium: - S-Rock, Windbreaker (EN AW-5754 H22/H32) - Module clamps (EN AW-6063 T66) - Building protection mat with or without aluminium lining (PUR-bound rubber granules) - Small parts: Stainless steel A2-70

Note: The illustration of the S-Rock 15° above (with a row spacing of 1.76 m) shows the dimensions for a shadow-free installation design at a latitude of ≤48.8 °N. This design ensures that the modules (with a module width of up to 1 000 mm) are shade free at noon (12 pm) on 21st December. Many best practice case examples have confirmed that in 80 % of customers surveyed, these dimensions achieve an optimum ratio between surface utilisation and yield. That is why we have the S-Rock System in these dimensions in stock for you and available for delivery at all times. Of course, upon request, we also provide all S-Rock 15° systems in your desired length for a row spacing of < 1.76 m. Larger row spacings are currently not available, as this would require a separate static design including an expert wind report.

S-Dome Small System



- ▶ For a roof inclination of up to 15° on trapezoidal sheet metal
- ▶ Economical in terms of materials and transportation; clever connections and strong holding power
- ▶ The perfect combination of the all-round MultiRail component and load-optimised, slim elevations



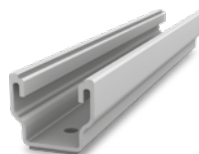
Components



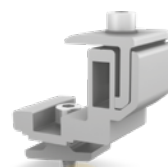
Dome S1000 Small
Narrow elevation module support element



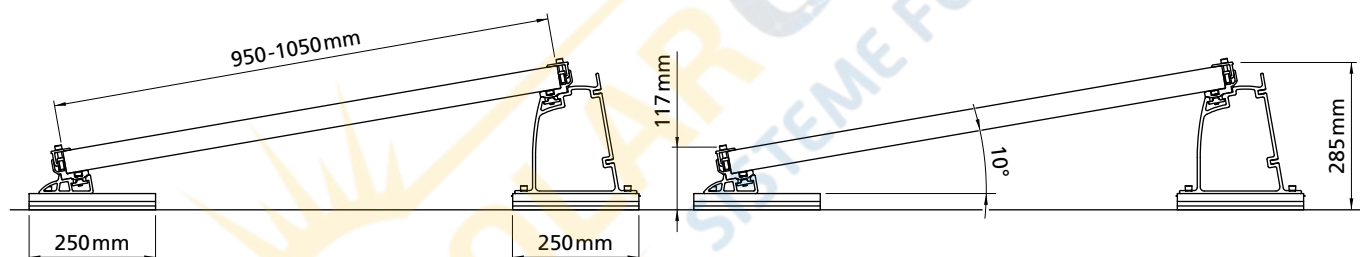
Dome SD Small
Narrow module support element



MultiRail 25/4
► Length 250 mm
► With four boreholes for roofs with up to 15° inclination



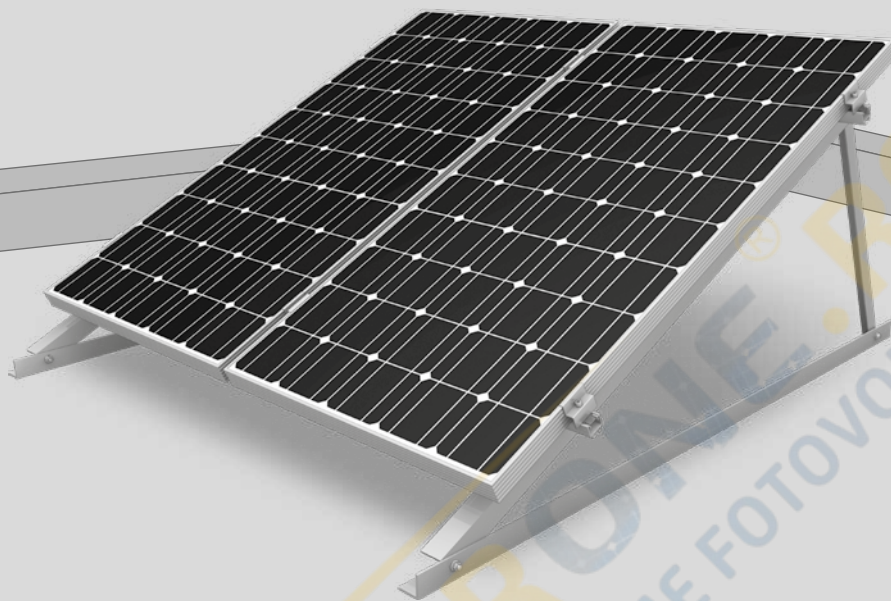
FlexClamp Small
► For clamping on the long side of module
► Height adjustable



Technical data

	S-Dome Small
Scope of application	Flat or pitched roofs $\leq 15^\circ$ with trapezoidal sheet metal roofing
Fastening type / roof fixture	Attached with drilling screws in trapezoidal sheets, parallel to raised crests
Requirements	► Sheet thickness for aluminium/steel: min. 0.5 mm ► Tensile strength for aluminium: 165 N/mm² ► Tensile strength for steel: acc. to approval min. S235 in acc. with DIN EN 10025-1 ► Crest width: min. 22 mm ► Crest spacing: independent of crest distance
Inclination angle	10°
Material	► Mounting rails, Dome SD Small, Dome S1000 Small, FlexClamp Small: Aluminium (EN AW-6063 T66/ EN AW-6082 T6); EPDM ► Small parts: Stainless steel (1.4301) A2

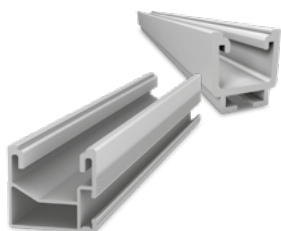
Triangle/MultiAngle System 10-45°



- ▶ Individually customisable elevation angle
- ▶ Universal module orientation
- ▶ High flexibility and customised solutions

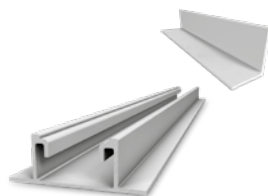


Components



Mounting rails

- ▶ Triangle: SolidRail
- ▶ MultiAngle: SingleRail



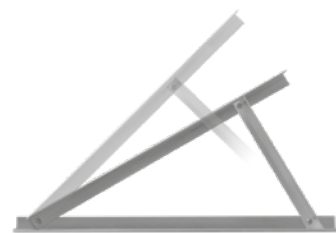
Base assembly

- ▶ Triangle: L-Profile
- ▶ MultiAngle: SpeedRail or L-Profile



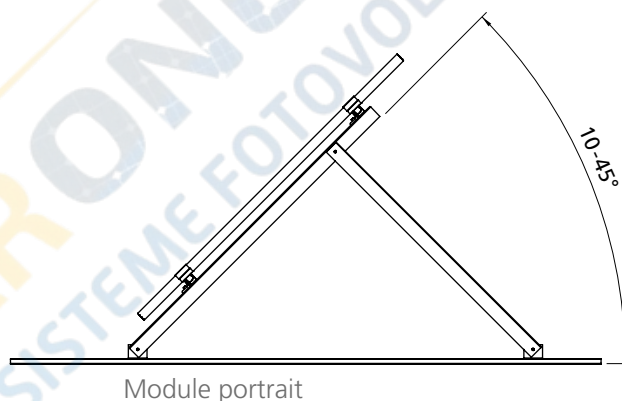
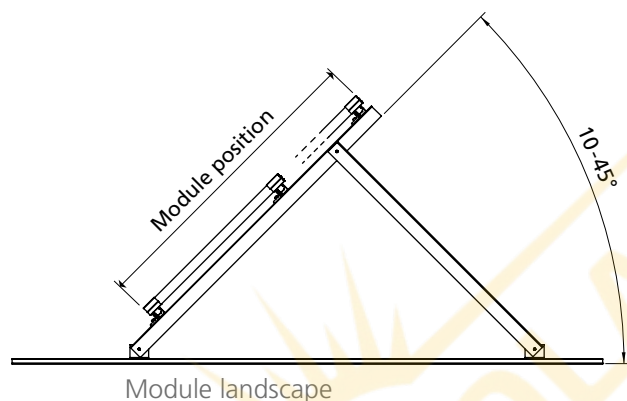
Module orientation

- ▶ Triangle: Landscape mounting with AddOn
- ▶ MultiAngle: Portrait mounting, 2 heights for landscape mounting (clamps at corners or with AddOn)



Elevation

- ▶ Triangle: Available with 10-45°
- ▶ MultiAngle: Individually customisable, 10-45°



Technical data

	Triangle / MultiAngle
Scope of application	Flat roofs, fields, or ground
Fastening type/roof fixture	Fastening or ballasting
Technical specifications	Thermal separation after max. 13.6 m
Inclination angle	10-45°, factory-default, or individually adjustable with MultiAngle
Material	▶ Mounting rails, module clamps: Aluminium (EN AW-6063 T66/EN AW-6082 T6) ▶ Also suitable for PE plates ▶ Small parts: Stainless steel (1.4301) A2

Accessories

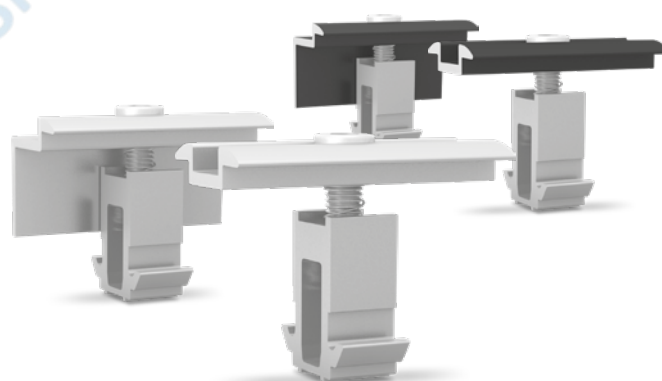
▶ Module clamps	16
▶ Self-tapping screw with sealing washer	18
▶ T-bolt and flange nuts with serration	18
▶ MK2 slot nuts with assembly clip	18
▶ Screw anchor, Multi Monti	18
▶ Washer	19
▶ Lightning protection clamp Multi Sets	19
▶ TerraGrif equipontential bonding	19
▶ Cable clips	19

Module clamps

MiniClamp MC and EC

For the S-Rock, D-Dome V and S-Dome V System we use the universal and rotatable MiniClamps MC/EC. MiniClamp MC and EC are universal clamps with a clamping range of 30 - 50 mm.

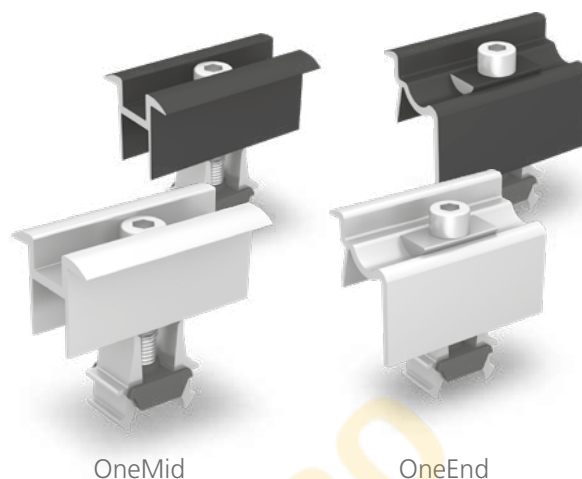
Description	Item number
MiniClamp MC, middle clamp, aluminium mill finish	2002558
MiniClamp MC, middle clamp, black anodised	2002609
MiniClamp EC, end clamp, aluminium mill finish	2002559
MiniClamp EC, end clamp, black anodised	2002610



Universal module clamps OneMid and OneEnd

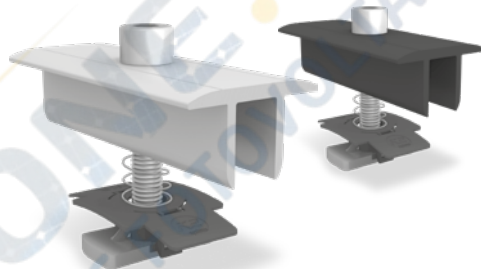
These module clamps are suitable for the most common module frame heights of 32-42 mm. Compatible with SingleRail, CrossRail, SpeedRail, MultiRail, SolidRail plus S- and D-Dome.

Description	Item number
OneMid, mid clamp, aluminium mill finish	2002515
OneMid, mid clamp, black anodised	2002588
OneEnd, end clamp, aluminium mill finish	2002514
OneEnd, end clamp, black anodised	2002589



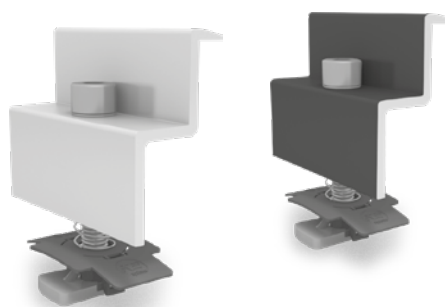
Module middle clamps XS

Module frame height / description	Item number
30-33 mm/M8x50, aluminium mill finish	1005156
30-33 mm/M8x50, black anodised	1005157
34-38 mm/M8x50, aluminium mill finish	1003586
34-38 mm/M8x50, schwarz eloxiert	1005158
39-44 mm/M8x60, aluminium mill finish	1004908
39-44 mm/M8x60, black anodised	1005159
45-48 mm/M8x65, aluminium mill finish	1005143
45-48 mm/M8x65, black anodised	1005160
49-50 mm/M8x70, aluminium mill finish	1004407
49-50 mm/M8x70, black anodised	1005161



Module end clamps

Module frame height / description	Item number
30-31 mm/M8x30, aluminium mill finish	1005345
30-31 mm/M8x30, black anodised	1005347
32-33 mm/M8x30, aluminium mill finish	1005344
32-33 mm/M8x30, black anodised	1005346
34-36 mm/M8x30, aluminium mill finish	1005169
34-36 mm/M8x30, black anodised	1005268
37-38 mm/M8x30, aluminium mill finish	1005290
37-38 mm/M8x30, black anodised	1005293
39-41 mm/M8x35, aluminium mill finish	1005170
39-41 mm/M8x35, black anodised	1005269
42-44 mm/M8x35, aluminium mill finish	1005291
42-44 mm/M8x35, black anodised	1005295
45-47 mm/M8x40, aluminium mill finish	1005171
45-47 mm/M8x40, black anodised	1005270
48 mm/M8x40, aluminium mill finish	1005292
48 mm/M8x40, black anodised	1005296
49-50 mm/M8x45, aluminium mill finish	1005172
49-50 mm/M8x45, black anodised	1005271



Accessories

Self-tapping screw with sealing washer

Thin sheet screw, chip-free; approved for steel/ aluminium sheets with a minimum thickness of 0.5/0.7 mm.

Material: Stainless steel A2, EPDM

Type	Item number
6×25 mm, SW 8, sealing washer Ø 16 mm	1005207
6×38 mm, SW 8, sealing washer Ø 16 mm	1005193



T-bolt and flange nuts with serration

T-bolt for use in the lower chamber of K2 SolidRail rails.

Head form: 28/15

Head dimensions: 22.5 × 10.5 × 4 mm

Material: Stainless steel A2 1.4301

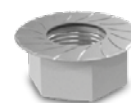
Type	Item number
M10×20	1000637
M10×30	1000041
M8×20	1000614
M8×30	1000368



The serrated nut (similar to ISO 4161) prevents it from loosening.

Material: Stainless steel A2

Type	Item number
M8	1000043
M10	1000042



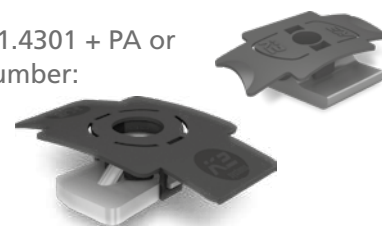
MK2 slot nuts with assembly clip

The MK2 slot nuts can be used at any point on the K2 rails. They automatically lock in place. Subsequently, they can easily be moved about in the rail by pressing them lightly.

Material: Stainless steel 1.4301 + PA or aluminium + PA; Item number:

1001643 (stainl. steel)

2000034 (aluminium)



Screw anchor, Multi Monti

Multi Monti screw anchor (Heco) for fastening to concrete; min. borehole depth 40 mm. Steel surface: galvanised and blue passivated, head diameter 17 mm, nominal bore diameter 6 mm

Material: galvanised steel

Drive: TX 30

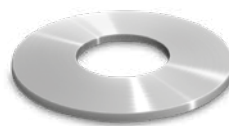


Washer

Safety mechanism for installing S-Dome Windbreakers.

Material: Stainless steel A2

Item number: 1000273



Lightning protection clamp Multi Sets

Lightning protection clamp for clamping lightning protection cables with Ø 8 mm.

For universal use as a T cross, parallel and impact clamps. Material: aluminium

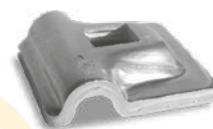
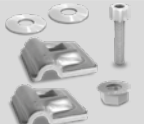


Image	Type	Components	Item number
	Lightning protection clamp Multi Alu 8 mm Set	- Lightning protection clamp Multi (1003151), aluminium - Slot nut (1001643), stainless steel, PA - Washer (8,4 × 20 × 1.2 mm), stainless steel A2 - Allen Bolt (M8×30), stainless steel A2	1004765
	Lightning protection clamp 8 mm Double Set	2× lightning protection clamps Multi (1003151), Aluminium - Hexagon flange nut with serration M8 (100043); stainless steel A2 2× washers (8.4 × 20 × 1.2 mm), stainl. steel A2 - Allen Bolt (M8×40), stainless steel A2	1004766

TerraGrif equipontential bonding

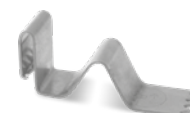
Potential equalisation between module and rail.

Material: Stainless steel

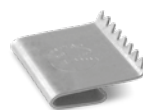
Type	Item number
TerraGrif K2MI Landscape/Portrait	2002649
TerraGrif K2PA 32 Landscape	2000055
TerraGrif U17 Portrait	2000056
TerraGrif K2SZ Landscape/Portrait	2001881



K2MI



K2PA



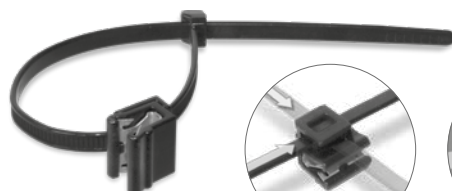
U17



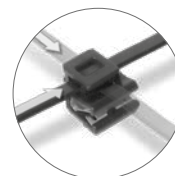
K2SZ

Cable clips

Type	Item number
Cable Manager Solar Cable Manager with connecting possibility for outdoor-installation L × W: 200 × 4.6 mm	2002870
Omega Cable Clip Suitable for CrossRail, SingleRail, SolidRail, S-Rock; 4 cables with Ø 6 mm Material: Polypropylene with UV stabiliser	1005394
Cable Routing Clip Suitable for clamping in module frames with a thickness of 1.5-2.5 mm and S-Rock 4 cables with Ø 6 mm; Material: Spring steel	2002322



Cable Manager

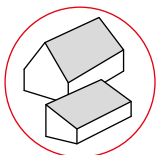


Omega Cable Clip

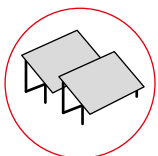


Cable Routing Clip

Other K2 systems



► Pitched roof systems



► Ground mounted systems



K2 Systems GmbH

Industriestraße 18
71272 Renningen
Germany

Tel. +49 (0) 7159-42059-0
Fax +49 (0) 7159-42059-177

info@k2-systems.com
www.k2-systems.com