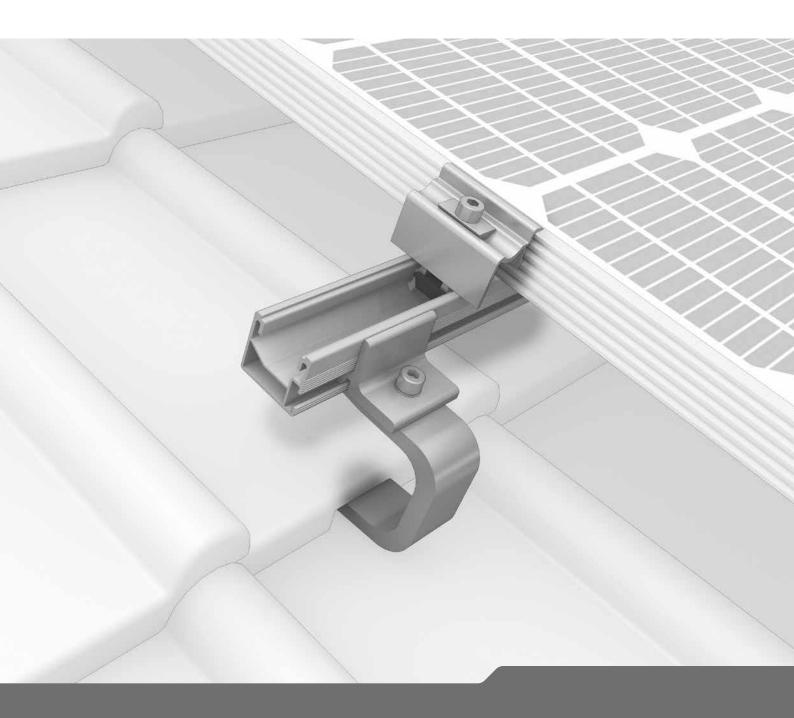
We support PV systems



MOUNTING SYSTEMS Pitched roof



Content



	Ŕ	n _{tiles}	Nain _{tilo}	ADELDICE SHEE	Senduic, *There	Priligared sheet	TUGALECI RELE	Stending sec	an room
			É						
 SingleRail System 	6	•	0	0	0	0	٠	•	•
 SolidRail System 	8	٠	٠	٠	٠	٠	٠	٠	•
 Insertion System 	10	٠	0	0	٠	٠	٠	٠	0
 MiniRail System 	12	0	0	0	٠	٠	0	0	0
 SpeedRail System 	14	0	0	0	٠	٠	0	0	0
 MultiRail System 	16	0	0	0	٠	٠	0	0	0
 MicroRail System 	18	0	0	0	٠	٠	٠	0	0
 S-Dome Small System 	20	0	0	0	٠	0	0	0	0
 Overview of roof fastenings 	22								
 Accessories 	26								
 Notes 	34								

Suitable

∘ Unsuitable

Warranty

We offer a 12-year warranty on all K2 system components. k2-systems.com/en/guarantee

Statics and design loads

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

Pallet delivery

Many mounting systems are delivered in pallets to save space and costs.





K2 Base and App

Easy Fast. **Safe.**

PLANNING IN THE DIGITAL WORKFLOW

Simply record the most important parameters directly on site or at the customer's premises using the K2 Roof Check App on your smartphone. The data is seamlessly transferred to K2 Base.

You can then start planning directly in K2 Base with the key data. The digital workflow provides you with many features, that make your everyday work easier and lead you quickly, easily and paperlessly to your goal.

In K2 Base you can find the appropriate mounting system for your project and verify it with a structural analysis and finally create an itemized bill of materials. In addition you can transfer the data to other software with the K2+ feature thus saving you even more time with your electrical planning.



- K2 ROOF CHECK APP
- / **Roof Check:** On the roof, record all data and important photos.
- / **Smart Pocket Function:** Access to all projects and Base reports including installation and ballasting plan.
- / System Price: Calculate reliable prices directly.
- / **Product Catalogue:** All systems including technical documentation, videos and references.
- / Free download in Google Play- and App-Store.

app.k2-systems.com ↔



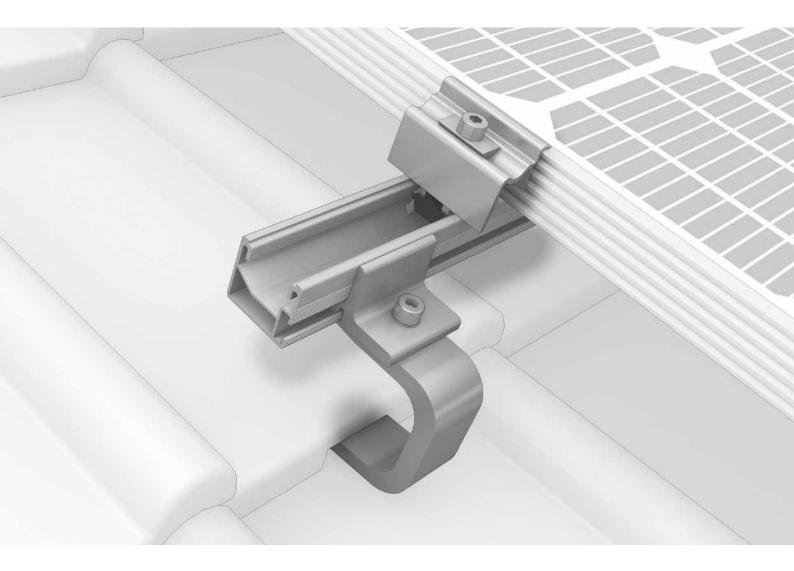


- / **Roof planning:** Satellite images as planning basis, graphic drawing tools, editing of obstacles.
- / **Module fields:** Drawing tools with dimension and angle information, multiple module fields possible, individual thermal separations and maintenance separations.
- / Wind and snow load can be determined automatically.
- / Ballasting: Automatic calculation of required ballast.
- / **Summary:** PDF-Report as output file including all project data, assembly and ballast plans, structural analysis and bill of materials.

K2+

- / K2+ feature with one-click data transfer to other planning tools from SolarEdge, SMA, Fronius, Kostal, Goodwe and Archelios Pro.
- / Shortened planning time, as multiple data entry is no longer necessary.
- / Reduced complexity.
- / Expert knowledge of the various manufacturers.

SingleRail System



- / Quick and low-cost with direct lateral connections to the rail including customised height adjustment
- / Secure snap-in assembly without needing to be screwed into the base plate
- / The SingleRail in combination with CrossHook roof hooks is very durable and versatile





Roof fastenings

Aluminium roof hooks

- / Optimum force transmission, can also be used on narrow rafters and direct connection to SingleRail
- / 80 % of all roof tiles and roofing stones covered
- / Simple height adjustment on base plate, extension arm or on slotted hole connection
- / CrossBoard/SingleBoard for rafter change
- / CrossHook 3S: With European construction approval ETA-16/0709



Stainless steel roof hooks

- / High-quality, thin stainless steel outriggers and partly direct connection to SingleRail
- / For roof tiles, flat and pantiles
- / Height adjustable or many precisely fitting roof hooks with adapter connection from the SolidHook range



Hanger bolts

- / For all corrugated fiber cement and corrugated sheet metal coverings with wooden substructure
- / Secure sealing at the roofing
- / With Climber connection
- / With German building authority approval (abZ)



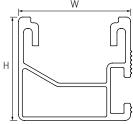
Sheet metal folding clamps

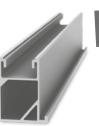
- / Many application possibilities: Double standing seam, angled seam, snap seam and round seam
- / Direct lateral rail connection
- / Penetration-free mounting



Technical data

SingleRail	Light 36	36	50
Figure	1		5
Material	Alur	ninium (EN AW-6063 1	[66]
W = width [mm]	39.4	39.4	39
H = height [mm]	36	36	50
Lengths [m]	4.40	2.10 / 2.25 / 3.30 /4.40 / 5.50	4.40
Weight [kg/m]	0.67	0.76	1.0
Second rail layer		SingleRail or SolidRail	
W		Sing	leRail 63: For heavy





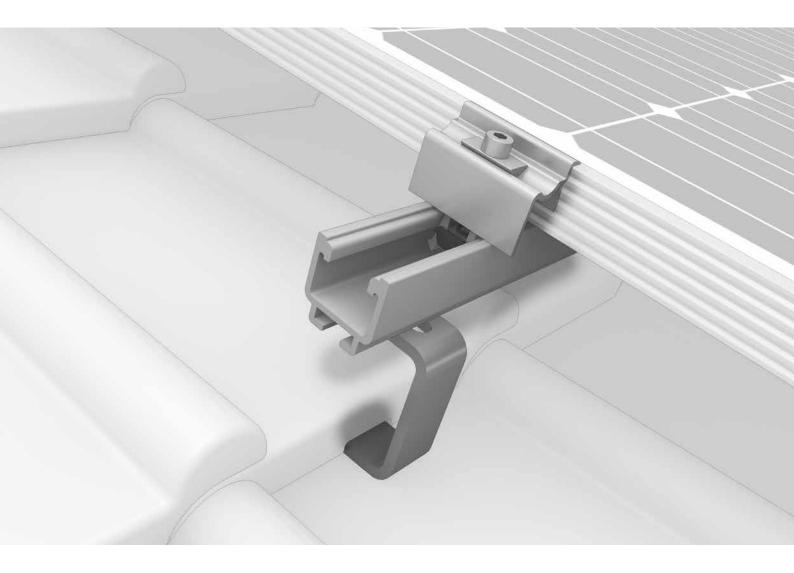
loads and large spans!

Roof fastenings



7

SolidRail System



- / Comprehensive range of mounting rails for varying load profiles
- / Robust and structurally proven
- / High flexibility for a diverse range of widths





Roof fastenings

Stainless steel roof hooks

- / High-quality, thin stainless steel brackets with flexible adjustable connection even for narrow rafters
- / For pantiles, flat tiles and roof tiles
- / Height adjustable and many precisely fitting roof hooks
- / Special roof hooks for plain tile or slate



CrossHook 4SL made of aluminium

- / Optimum force transmission, can also be used on narrow rafters and direct connection to SolidRail
- / 80 % of all roof tiles and roofing stones covered
- / Simple height adjustment on base plate, extension arm or on slotted hole connection



Hanger bolts and solar fasteners

- / For all corrugated fiber cement, corrugated sheet metal and trapezoidal sheet metal coverings as well as sandwich panels
- / Secure sealing at the roofing
- / Connection via adapter plate with adjustment option
- / Hanger bolts with german building authority approval (abZ)



Sheet metal folding clamps

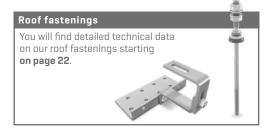
 Many application possibilities: Standing seam, angle seam, snap seam and round seam (e. g. Kalzip)
 Rib-Roof solutions for 465, Speed 500 and Evolution

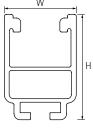
/ Penetration-free mounting



Technical data

SolidRail	UltraLight 32	Light 37	Medium 42	Alpin 60	
Figure	11		1 M	M	
Material		Aluminium (EN AW-6063 T66)			
W = width [mm]	39	39,5	41	41	
H = height [mm]	32	37	42	60	
Lengths [m]	2.10/2.25/3.	30 / 4.40 / 5.50	4.40	5.50	
Weight [kg/m]	0.7	0.85	1.3	1.7	
Second rail layer	SingleRail or SolidRail				

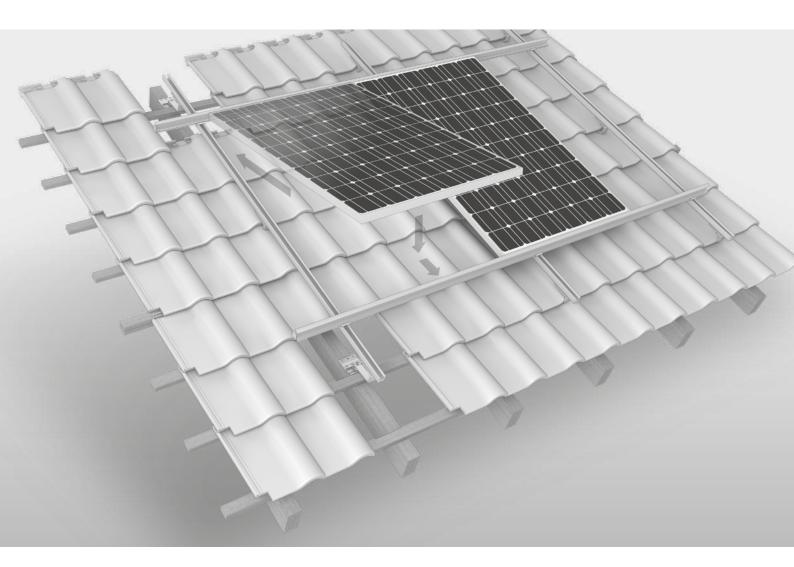






SolidRail L: For heavy loads across large widths!

Insertion System



- / Without having to apply clamps eliminates the need for assistance ensuring lightning-fast installation
- / Easy to assemble with few components and without special tools
- / Sleek design with continuous closed surface adds further robustness
- / Insertion profile provides additional frame reinforcement



In cooperation with solarteam • •



Components



Insertion rails

/ Intelligent solution for efficient module installation

- / Seals surface
- / Available in black



CrossHook 3S+/4S+

/ Height-adjustable and laterally adjustable

/ Also suitable for narrow rafters



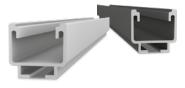
Cross connector

- / Fixation for insertion rail on SolidRail
 / Since la secondaria
- / Simple mounting



Hanger bolts

- / For corrugated fibre cement or corrugated sheet roofing with wooden substructure
- / Custom height adjustment



SolidRail

- / Robust mounting rail
- / Different load conditions
- / For large spans
- / Available in black



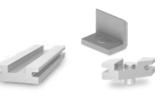
MultiRail

- / For trapezoidal sheet and sanwich panels
- / Roof attachment and supporting element



Cable management

- / Quick cable connection beneath the insertion rail
- / Up to 5 cables

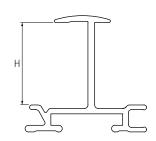


Accessories

- / Connector insertion rail
- / Side stopper
- / Horizontal end bracket

Technical data

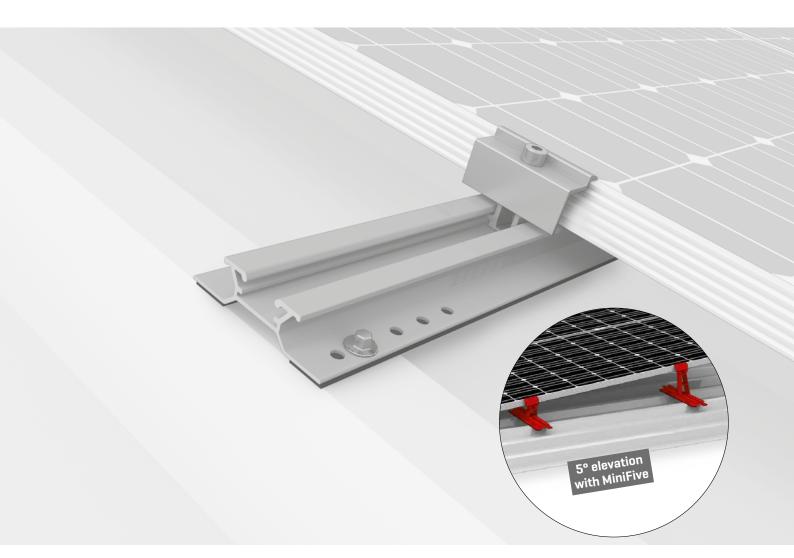
	Insertion system		
Scope of application	Pitched roofs with pan tiles, corrugated fibre cement, trapezoidal sheet or sandwich panels		
Fastening type / roof connection	Roof hooks, hanger bolts or MultiRail		
Module frame heights (H)	• 30 mm • 35 mm • 40 mm		
Requirements	7 mm spacing between insertion rails		
Module orientation	Landscape and portrait		
Material	 Mounting rails and cross connector: Aluminium EN AW-6063 T66 Components: stainless steel [1.4301] A2-70 		
SolidRail lengths [m]	Aluminium mill finish:4.30 and 5.40Black anodised:5.40		
Insertion rail lengths [m]	Aluminium mill finish:5.10Black anodised:5.10		



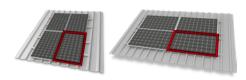
Roof fastenings



MiniRail System



- / Innovative and statically optimised short rail system that is quick and easy to mount
- / Universal module clamps and suitable for portrait and landscape orientation
- / 5° elevation with MiniFive: significantly more output thanks to improved ventilation and optimised module angle
- / Optimised for storage and transport



The MiniRail System allows portrait and landscape mounting in the form of grid mounting thanks to the universal module clamps, which are rotatable by 90°.



Components



MiniRail

/ Landscape and portrait mounting with MiniClamp MC/EC



MiniClamp MC/EC 30 - 50 mm

- / Universal module clamp
- / Clamp is rotatable



Self-tapping screws

- / Included in MiniRail MC/EC set
- / With sealing washers



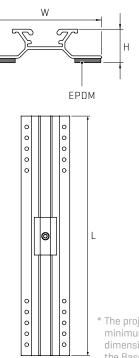


MiniFive front and end

- / Single-sided, easy elevation with insertable supporting element
- / Improved ventilation and higher yield
- / Optimised module angle
- / Portrait and landscape mounting possible

Technical data

	MiniRail System
Scope of application	Pitched roofs with trapezoidal sheet metal or sandwich panels Roof inclination: 5 - 75°
Fastening type / roof fixture	Screws in roofing with self-tapping thin sheet screws
Requirements	 Sheet thickness: ≥ 0.5 mm steel or aluminium Sandwich panel: Approval from manufacturer required Crest width: At least 22 mm * Crest spacing: 101 - 350 mm depending on crest width Flush area surrounding the bore hole: Ø ≥ 20 mm Module frame height: 30 - 50 mm
Module orientation	Vertical or horizontal
Material	Aluminium (EN AW-6063 T66 / EN AW-6082 T6); EPDM
Dimensions MiniRail W × H × L [mm]	78.2×23×385
Elevation with MiniFive	approx. 5°



* The project-specific minimum high crest width dimension can be found in the Base report.

SpeedRail System



- / The proven long rail system for trapezoidal sheet applications as well as floating suspension with controlled thermal linear expansion
- / Our most popular system over 3 GW installed worldwide
- / All-rounder with only 4 installation steps also suitable for high loads





Components



SpeedRail

- / Mounting rail with easy insertion mounting into SpeedClips
- / Various lengths available



SpeedClip

- / Mounting brackets for SpeedRail
- / Simple insertion feature
- / Glass fibre reinforced polyamide with EPDM seals
- / Fastened with self-drilling screws for trapezoidal sheet metal



SpeedLock

- / Mounting lock for SpeedRail in case of thermal expansion
- / In a set with MK2 slot nut and stainless steel screw



SpeedConnector

- / Rail connector for SpeedRail
- / Three boreholes for flexible mounting
- / In a set with countersunk screws



AddOn

- / For grid mounting with horizontal modules
- / Seamless module blocks and no second rail layer

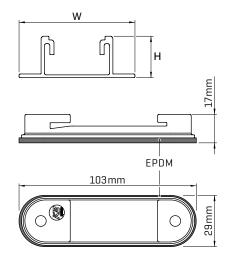


RailUp Set

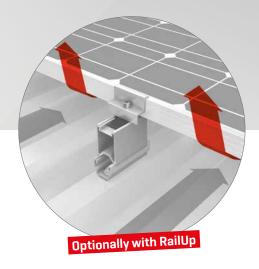
- / Improves rear ventilation of the modules
- / Easier installation of micro inverters

Technische Daten

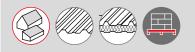
	SpeedRail / SpeedClip
Scope of application	Trapezoidal sheet roof
Fastening type / roof fixture	Insertion mounting into SpeedClips and screws in the roofing
Requirements	 Sheet thickness: ≥ 0.4 mm steel or ≥ 0.5 mm aluminium Sandwich panel: Approval from manufacturer required Crest width: At least 22 mm Flush area surrounding the bore hole: Ø ≥ 20 mm
Material	 SpeedRail: Aluminium (EN AW-6063 T66; 0.64 kg/m) SpeedClip: Glass fibre reinforced polyamide with EPDM
SpeedRail dimensions W = width [mm] H = height [mm] L = lengths [m]	63 22.5 1.15/2.10/3.25/4.30/5.40
SpeedClip dimensions	See drawing
Second rail layer	SingleRail or SolidRail



MultiRail System



- / Easy and proven as a short rail or a flexible component in various lengths
- / Quick planning with less material and greater effectiveness
- / Solid base rail for trapezoidal elevation S-Dome Small





Components



Self-tapping screws With sealing washers



RailUp Set/ Improves rear ventilation/ Easier installation of micro inverters

MultiRail versions



MultiRail 10 / Length 100 mm / Horizontal module orientation



MultiRail 25

- / Length 250 mm
- / For more flexibility and high load demands at horizontal module orientation

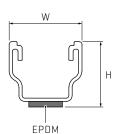


MultiRail 4.20

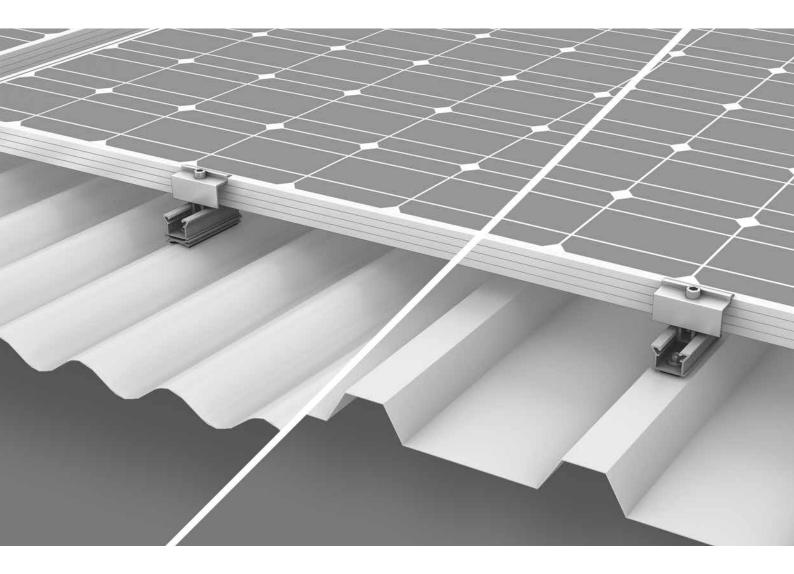
- / Length 4200 mm
- / Long rail for cutting to customised sizes
- / Without EPDM seal; to be fastened manually with adhesive

Technical data

	MultiRail 10, 25/4, 4.20	
Scope of application	Pitched roofs, 5 - 75°, with trapezoidal sheet metal or sandwich panel	
Fastening type / roof fixture	Fastened with self-tapping sheet screws	
Requirements	 Sheet thickness: ≥ 0.4 mm steel or ≥ 0.5 mm aluminium Sandwich panel: approval from manufacturer required Crest width: at least 22 mm Maximum crest width: independent of crest distance 	
Material	Aluminium (EN AW-6063 T66); EPDM	
W = width [mm]	39	
H = height [mm]	35	
L=rail length [mm]	• MultiRail 10: 100 • MultiRail 25/4: 250 • MultiRail 4.20: 4200	
Second rail layer	SingleRail	



MicroRail System



- / Fixes into sheet metal only, no need for fixings into substructure (e.g. purlins)
- / Quick and easy mounting on corrugated sheet metal using an adapter and directly on trapezoidal sheet metal
- / Only two rail lengths for all load cases





Components





MicroRail 10/25 CSM

- / Available as set with MicroRail and adapter
- / Corrugated sheet with radius 22-45mm





MicroRail 10/25 For trapezoidal sheet metal or sandwich panel



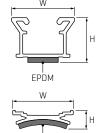
MiniClamp MC/EC 30 - 50 mm Universal module clamp



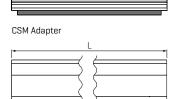
Self-tapping screws Self-sealing and thread forming

Technical data

	MicroRail System
Scope of application	Pitched roofs with corrugated/trapezoidal sheet metal or sandwich panels Roof inclina-tion: 5 - 75°
Fastening type / roof fixture	Screws in roofing with self-tapping thin sheet screws
Requirements	 Sheet thickness: ≥ 0.4 mm steel or ≥ 0.5 mm aluminium Sandwich panel: Approval from manufacturer required Trapezoidal sheet crest width: ≥ 22mm * Trapezoidal sheet flush area surrounding bore hole: Ø ≥ 20 mm Corrugated sheet radiuses: 22-45mm Module frame heigh: 30-50mm
Module orientation	Horizontal / landscape
Material	Aluminium (EN AW-6063 T66 / EN AW-6082 T6]; EPDM
Dimensions W×H×L [mm] • MicroRail 10/25 • MicroRail CSM	37×26×92/242 36×11×92



EPDM



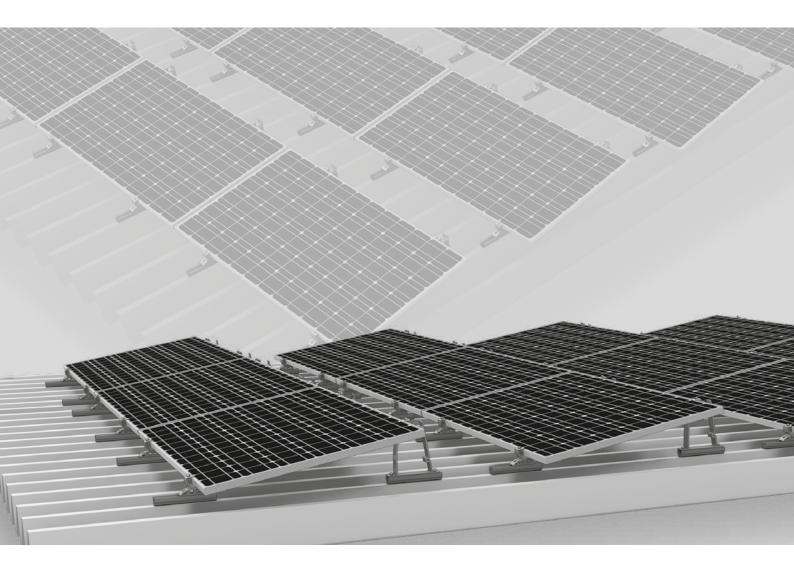
MicroRail 25

MicroRail 10

* The project-specific minimum high crest width dimension can be found in the Base report.

19

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 10° elevations





Components



Dome S1000 Small Narrow elevation module support element



Dome SD Small Narrow module support element



MultiRail 25

- / Length 250 mm
- / With four boreholes for roofs with up to 15° inclination

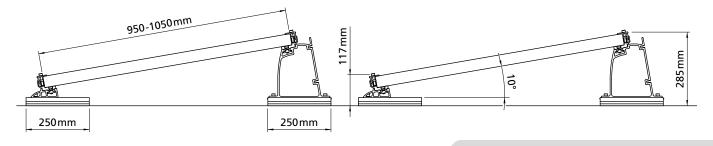


FlexClamp Small

/ For clamping on the long side of module/ Height adjustable

Technical data

	S-Dome Small
Scope of application	Flat or pitched roofs ≤ 15° with trapezoidal sheet metal roofing
Fastening type / roof fixture	Attached with drilling screws in trapezoidal sheets, parallel to raised crests
Requirements	 Sheet thickness: ≥ 0.4 mm steel or ≥ 0.5 mm aluminium 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

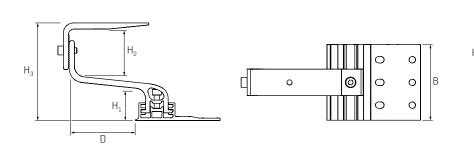


Overview of roof fastenings

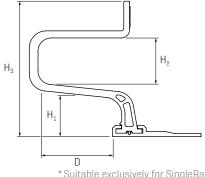
Roof hooks for SingleRail

Түре / image	Material	Base plate width [W]	Height under bracket [H1] Bracket height [H2] Total height [H3]	Bracket depth [D]	ltem no.
CrossHook 3S Set	Aluminium	100 mm	 40/47/54 mm 56 mm Approx. 123/130/137 mm 	83 mm	2001672
CrossHook 4S Set	Aluminium	100 mm	• 40/47/54 mm • 55 - 85 mm • 120,5 -165 mm	83 mm	2001821
SingleHook 1.1*	Aluminium	100 mm	• 47,1 mm • 56 mm • 162,9 mm	83 mm	2001928
SingleHook Alpin	Aluminium	100 mm	• 35 mm • 60 mm • 169 mm	110 mm	2003155
CrossBoard for CrossHook 3S/4S and SingleBoard for SingleHook 1.1	Aluminium	2100 mm	See CrossHook 3S/4S respectively SingleHook 1.1!		2001972/ 2002935
CrossHook 2 (BS EN 490)	Aluminium	150 mm	• 44 mm • 46 mm • 100 mm	116 mm	2003175
SingleHook Vario*	Stainless steel	100 mm	• 45 - 65 mm • 68 mm • 172 - 192 mm	110 mm	2002651

Dimension drawing for CrossHook



Dimension drawing for SingleHook



* Suitable exclusively for SingleRail

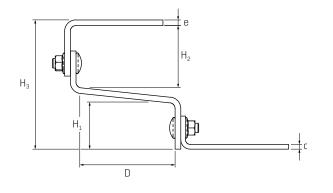


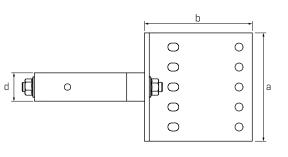
Roof hooks for SolidRail

Type /Figure	Base plate [a x b x c]	Bracket [d x e]	Bracket [H ₁]/[H ₂]	Total height approx. [H₃]	Bracket depth [D]	ltem no.
CrossHook 45L*1	100 × 124 × 3,5 - 6,0 mm	35 × 8,7 mm	40/47/54 / 55 - 85 mm	120,5 - 165 mm	83 mm	2003156
CrossHook 35+/4+*1	100 × 124 × 3,5 - 6,0 mm	35 × 8,5 mm	 3S+: 40/47/54 mm / 56 mm 4S+: 40/47/54 mm / 55 - 85 mm 	 3S+: Approx. 123/ 130/137 mm 4S+: 120,5 - 165 mm 	83 mm	2002390/ 2002402
Pan tile *2	150 × 60 × 5 mm	30 × 6 mm	47/65 mm	134 mm	98 mm	1000001
Alt I am	180 × 80 × 4 mm	35 × 6 mm	38/69 mm	124 mm	91mm	1000096
Hill	180×80×4mm	35 × 6 mm	47/68 mm	138 mm	127 mm	1001508
	180 × 80 × 5 mm	40 × 8 mm	47/55 mm	121 mm	87 mm	1000764
Vario 1*2	150 × 60 × 5 mm	30×6mm	43 / 41 - 71 mm	112 -145 mm	95 mm	1000125
Vario 2 *2	140 × 55 × 5 mm	30 × 6 mm	49 - 58 / 57 - 76 mm	128 -156 mm	94 mm	1000107
Plain tile, double roofing *3	75 × 52 × 4 mm	75×4mm	34/62 mm	119 mm	234 mm	2003073
Slate roofing *2	40 × 250 mm	40 × 65 mm	-/60 mm	72 mm	72 mm	1000373
Coppo *2	150×60×5mm	30×5mm	18/88-118mm	123-153 mm	120 mm	1001068

*1 Material: Aluminium · *2 Material: Stainless steel · *3 Material: Magnelis 1.0242 (S250GD+ZM310)

Dimension drawing



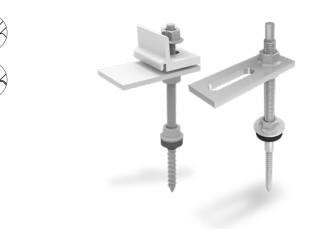


Overview of roof fastenings

Hanger bolts

For timber substructures

For fastening the K2 SolidRail and SingleRail mounting rails on roofs with corrugated fibre cement or sheet metal on timber substructures. The K2 hanger bolts are equipped with an extra-long metric thread for installation height adjustment. Hanger bolts are outfitted with a pre-mounted adapter plate.



SingleRail Hanger Bolts

Туре	ltem number
M10×180, hexagonal SW 7 mm	2003272
M10×200, hexagonal SW 7 mm	2003273
M10×250, hexagonal SW 7 mm	2003274
M12×200, hexagonal SW 9 mm	2003275
M12×250, hexagonal SW 9 mm	2003276
M12×300, hexagonal SW 9 mm	2003277

SolidRail Hanger Bolt

Туре	ltem number
M10×180, hexagonal SW 7 mm	2000120
M10×200, hexagonal SW 7 mm	2000121
M10×250, hexagonal SW 7 mm	2000122
M12×200, hexagonal SW 9 mm	2000123
M12×250, hexagonal SW 9 mm	2000124
M12×300, hexagonal SW 9 mm	2000125

Solar fastener

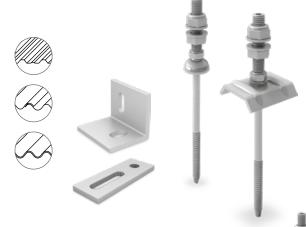
For steel, timber and concrete substructures

Solar fasteners (stainless steel) for attaching the K2 SolidRail or SingleRail on roofs with trapezoidal sheet metal, corrugated fibre cement or corrugated sheet metal. Matching M10/M12 adapter plates are available separately.

Steel: Solar fastener Ø 8.0 with M10x50 metric top thread, E16 dome

Туре	ltem number
8×85 / 50, length 135 mm	2003018
8×115 / 50, length 165 mm	2003019
8×155 / 50, length 205 mm	2003020
8×195 / 50, length 245 mm	2003021

Timber: Solar fastener Ø 8.0 mm M10×50/70 mm, metric thread E14 calotte or FZD sealing made of EPDM. On request!



Steel: Solar fastener Ø 8.0 with M10x50 metric top thread, FZD

Туре	ltem number
8×85 / 50, length 135 mm	2003013
8×115 / 50, length 165 mm	2003012
8×155 / 50, length 205 mm	2003016
8×195 / 50, length 245 mm	2003017





Standing seam and system clamps



Type / image		Standing seam type / roofing system	Opening dimension [mm]	Mounting rail	Material	ltem no.
Single Standing SeamClamp CF:x		Double-fold standing seam	7,0	SingleRail	Aluminium	2003024
Single Round SeamClamp CF:x		Round standing seam	25,0	SingleRail	Aluminium	2002859
Single Snap SeamClamp CF:x		Angeled and snap-lock standing seam	14,0	SingleRail	Aluminium	2003083
S-5! E-Mini-FL Standing SeamClamp		Double-fold standing seam	7,0	SolidRail	Aluminium	1001052
S-5! Z-Mini-FL Round SeamClamp		Round standing seam	22,0	SolidRail	Aluminium	1000888
Solid Snap SeamClamp CF:x	-	Angeled and snap-lock standing seam	14,0	SolidRail	Aluminium	2003082
Solid Standing SeamClamp	-	Double-fold standing seam	3,5	SolidRail	Stainless steel	2001712
Solid Round SeamClamp		Kalzip roofings with round seam	10,5	SolidRail	Stainless steel	2001853
Rib-Roof Evolution Clamp	70	Rib-Roof Evolution	23,0	SolidRail	Aluminium	2002226
Rib-Roof Speed 500 Clamp	Tour	Rib-Roof Speed 500	17,0	SolidRail	Aluminium	2002225
Rib-Roof 465 Clamp	Jack	Rib-Roof 465 trapezoidal profile	12,0	SolidRail	Aluminium	2002118
RibClamp KL		Klip-Lok classic 700 Klip-Lok 406 Klip-Tite 700	20,0	SolidRail or MiniClamp without basic rail	Aluminium	2002857

Accessories

Module clamps	27
 Self-drilling wood screw, flange head 	28
 Thread-forming tapping screw with EPDM supported washer 	29
 T-bolt and flange nuts with serration 	29
 MK2 slot nuts with assembly clip 	29
 Self-drilling wood screw, flange head, underhead secondary thread 	30
 Self-drilling wood screw, countersunk head 	30
 Screw anchor, Multi Monti 	30
Endcaps SingleRail 36	31
Endcaps SolidRail	31
 Lightning protection clamp Multi Sets 	31
TerraGrif equipotential bonding	31
▶ Pad spacer	32
 Height Compensator for aluminium roof hooks 	32
▶ L-Adapter SR Set	32
▶ Cable Manager	32
CrossConnectors	33
StairPlate Set	33
▶ RailUp Set	33

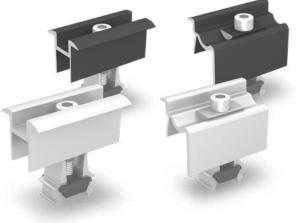


Module clamps

The module clamps cover the most common module frame heights of 30 – 42 mm. Compatible with SingleRail, SpeedRail, MultiRail and SolidRail.

Module middle clamps XS

Module frame height / description	ltem number
OneMid, middle clamp, aluminium mill finish	2003071
OneMid, middle clamp, black anodised	2003072
OneEnd, end clamp, aluminium mill finish	2002514
OneEnd, end clamp, black anodised	2002589

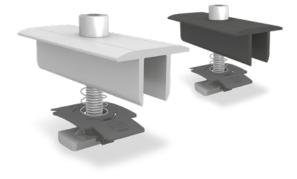


OneMid

OneEnd

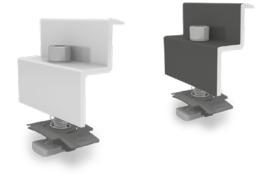
Module middle clamps XS

Module frame height / description	ltem number
30 - 33 mm / M8×50, aluminium mill finish	1005156
30 - 33 mm / M8×50, black anodised	1005157
39 - 44 mm / M8×60, aluminium mill finish	1004908
39 - 44 mm / M8×60, black anodised	1005159
45 - 48 mm / M8×65, aluminium mill finish	1005143
45 - 48 mm / M8×65, black anodised	1005160
49 - 50 mm / M8×70, black anodised	1004407
49 - 50 mm / M8×70, schwarz eloxiert	1005161



Module end clamps

Module frame height / description	ltem number
30 - 31 mm / M8×30, aluminium mill finish	1005345
30 - 31 mm / M8×30, black anodised	1005347
42 - 44 mm / M8×35, aluminium mill finish	1005291
42 - 44 mm / M8×35, black anodised	1005295
45 - 47 mm / M8×40, aluminium mill finish	1005171
45 - 47 mm / M8×40, black anodised	1005270
49 - 50 mm / M8×45, aluminium mill finish	1005172
49 - 50 mm / M8×45, black anodised	1005271



Accessories

Module clamps for laminate modules

Module middle clamps for fastening laminate modules; approved for First Solar and Calyxo thin-film modules; small module spacing. Material: Aluminium mill finish, EPDM

Please note: For additional anti-slip protection the K2 Slideguard is suitable for vertical mounting of laminate modules with a glass thickness of 6-9 mm. Material: Stainless steel 1.4016, EPDM

Type / accessory	ltem number
Module middle clamp	1003157
Module end clamp	1003158
Slideguard	1005828



Self-drilling wood screw, flange head

Self-drilling wood screw with flange head (Topix) and star socket (Torx) from Heco. With European Technical Assessment (ETA) approval. Material: Stainless steel A2, matches TX 25/40 screwdrivers

Туре	ltem number
6×80	1005837
6×100	1004978
8×80	1000642
8×100	1000656
8×120	1001525
8×160	1002366
8×180	1002367
8×200	2003052





Thread-forming tapping screw with EPDM supported washer

Approved for steel sheets with a minimum thickness of 0.4 mm and aluminium sheets with a minimum thickness of 0.5 mm. Thin sheet screw, virtually chip-free, SW 8, sealing washer Ø 16 mm.

Material: Stainless steel A2, EPDM

Туре	ltem number
6 × 25 mm	1005207
6×38mm	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

Туре	ltem number	42
M8×20/30	1000614/1000368	
M10×20/30	1000637/1000041	

The flanged nut with serration (similar to ISO 4161) prevents it from loosening.

Material: Stainless steel A2

Туре	ltem 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





Accessories

Self-drilling wood screw, flange head, underhead secondary thread

Self-drilling wood screw (Heco) with flange head (Topix) and star socket (Torx). With building approval. For mounting with over-rafter insulation. Fixes the counterbattens in place using a second screw thread under screw head. Material: Stainless steel A2; matches TX 40 screwdrivers Item number: 1003437



Self-drilling wood screw, countersunk head

Self-drilling wood screw with countersunk head (Heco). With building approval. Material: Stainless steel A2; matches TX 25 screwdrivers Item number: 1004443

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





Endcaps SingleRail 36

End caps for SingleRail 36. Material: Glass fibre reinforced polyamide Item number: 1004767



Endcaps SolidRail

End caps for K2 SolidRail. Material: Glass fibre reinforced polyamide

Туре	ltem number
Light	1004765
1edium	1004766
Alpin	1005053

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	Туре	Components	ltem 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 	2002473
	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 	2002474

TerraGrif equipotential bonding

Equipotential bonding between module and rail. Material: Stainless steel

Туре	ltem number
TerraGrif K2Mi Landscape/Portrait	2002649
TerraGrif K2PA 32 Landscape	2000055
TerraGrif U17 Portrait	2000056
TerraGrif K2SZ Landscape/Portrait	2001881
TerraGrif S	2002397





TerraGrif S

Accessories

Pad spacer

Shim to adjust height differences between rails and roof hooks of the K2 SingleHook and K2 CrossHook family. Any number of spacer shims can be stacked to provide customised height.

Material: Glass fibre reinforced PA, Material thickness: 2 mm Item no.: 1002361



Height Compensator for aluminium roof hooks

Shim to compensate for batten height differences and adjustment of height under bracket of the K2 SingleHook and K2 CrossHook family. Material: Aluminium, Material thickness: 4 mm Item no.: 2002332



L-Adapter SR Set

Connection set to attach the SingleRail to SolidHooks. Material: Aluminium + stainless steel Item no.: 2002683

Cable Manager

Solar Cable Manager with connecting possibility for outdoor-installation L×W: 200×4.6 mm Item no.: 2002870







CrossConnectors

Image	Туре	Components	item number
i start	SingleRail Climber 36/50 Set	 Suitable for K2 SingleRail Light, 36 & 50 Screws and nuts included Material: Aluminium EN AW-6063 T66, stainless steel A2 	2003145
	SolidRail CrossConnector Set	 Set of components for a perpendicular connection of rails Suitable for K2 SolidRail Light, Medium and Alpine. Screws and nuts included Material: Stainless steel and PA 	1004110

StairPlate Set

With the K2 StairPlate Set, Micro Inverters and Optimizers from Solar Edge and Enphase can be hooked into all K2 rails [except K2 MiniRail and MicroRail] without bolting them directly to the roof. The units can be connected to the K2 StairPlate in advance with the screws and nuts included in the set and then flexibly moved in the mounting rail. The height of the modules and the units to be used must be taken into account.

Material: Stainless steel Item number: 2004057





RailUp Set

Add-on for the K2 SpeedRail and K2 MultiRail System. The RailUp Set enables the modules to sit raised by 60 mm with a minimum of material. This facilitates the installation of the Micro Inverters. In addition, an optimal module rear ventilation and a higher module output on the trapezoidal sheet metal roof is achieved. RailUp is supplied as a set and requires no additional material for installation. Item number: 2003191



Notes

_		 			 		 	 		 	 	 	 	 	 				
-		 			 		 	 				 			 				
-		 	 		 														
-								 			 	 			 				
-								 				 			 				
-							 												
-		 	 		 	_													
_		 	 		 														
-		 			 			 											
_	 																		
																		_	
-												 			 				
		 						 								-	-	-	
-								 			 	 			 				
L																			

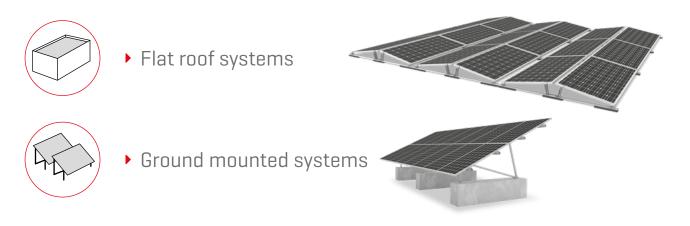


		 			 		 	 									 			_
																				_
						 			 					-					\rightarrow	_
						 								-					\rightarrow	_
											_			-	_			_	\rightarrow	
											_				_			_	\rightarrow	_
						 			 		_		 	_	_	 				
																			-	
																			-	
										-				\neg					\rightarrow	
														+					\rightarrow	
											-						 		\rightarrow	_
						 			 		_	_	 	_						_
									 		_	_			_				-+	
														_					\rightarrow	
		 								 			 	_					\rightarrow	
																			\rightarrow	
																			\neg	
 -																				

We support PV systems



Other K2 mounting systems



K2 Systems GmbH

Industriestraße 18 71272 Renningen Germany

+497159-42059-0 info@k2-systems.com www.k2-systems.com