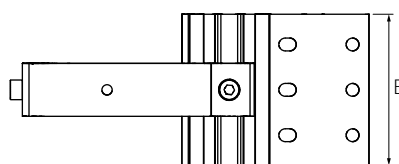
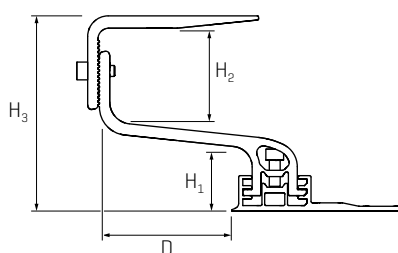


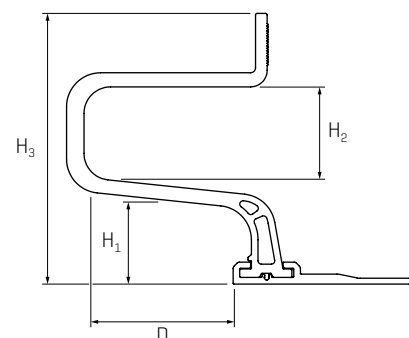
Roof hooks for SingleRail

Type / image	Material	Base plate width [W]	Height under bracket [H_1] Bracket height [H_2] Total height [H_3]	Bracket depth [D]	Item no.
CrossHook 3S Set 	Aluminium	100 mm	<ul style="list-style-type: none"> 40/47/54 mm 56 mm Approx. 123/130/137 mm 	83 mm	2003215
CrossHook 4S Set 	Aluminium	100 mm	<ul style="list-style-type: none"> 40/47/54 mm 55 - 85 mm 120,5 - 165 mm 	83 mm	2003144
SingleHook 1.1* 	Aluminium	100 mm	<ul style="list-style-type: none"> 47,1 mm 56 mm 162,9 mm 	83 mm	2001928
SingleHook Alpin 	Aluminium	100 mm	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 44 mm 46 mm 100 mm 	116 mm	2003175
SingleHook Vario* 	Stainless steel	100 mm	<ul style="list-style-type: none"> 45 - 65 mm 68 mm 172 - 192 mm 	110 mm	2002651

Dimension drawing for CrossHook



Dimension drawing for SingleHook



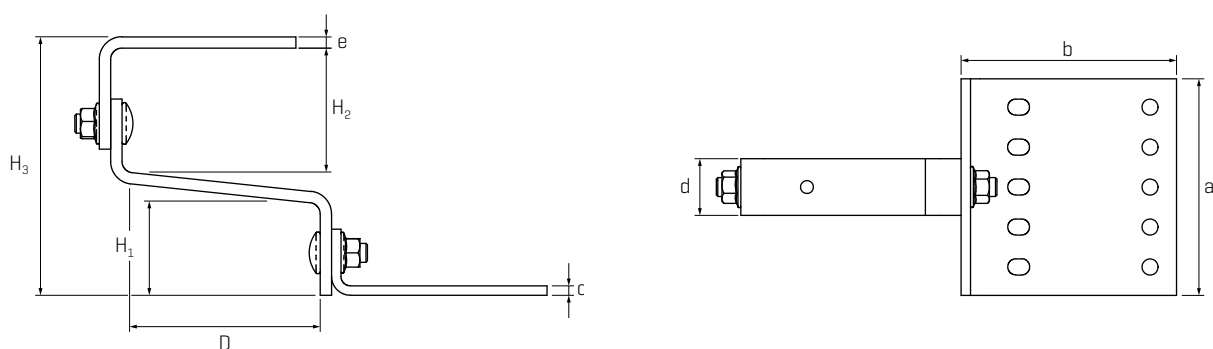
* Suitable exclusively for SingleRail

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. [H ₃]	Bracket depth [D]	Item no.
CrossHook 3S+/4+^{*1} 	100×124× 3,5 - 6,0 mm	35×8,5 mm	<ul style="list-style-type: none"> 3S+: 40/47/54 mm / 56 mm 4S+: 40/47/54 mm / 55 - 85 mm 	<ul style="list-style-type: none"> 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
	180×80×4 mm	35×6 mm	38/69 mm	124 mm	91 mm	1000096
	180×80×4 mm	35×6 mm	47/68 mm	138 mm	124 mm	1001508
	180×80×5 mm	40×8 mm	47/55 mm	121 mm	87 mm	1000764
Vario 1^{*2} 	150×60×5 mm	30×6 mm	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	75×4 mm	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} 	150×60×5 mm	30×5 mm	18 / 88 -118 mm	123 -153 mm	120 mm	1001068

*1 Material: Aluminium · *2 Material: Stainless steel · *3 Material: Magnelis 1.0242 [S250GD+ZM310]

Dimension drawing



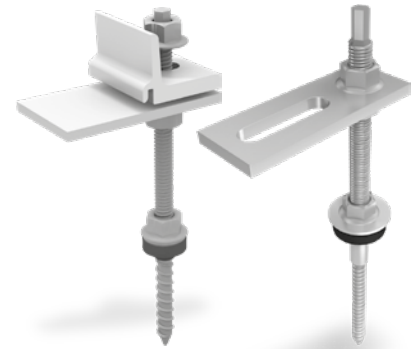


Overview of roof fastenings

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

Type	Item 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

Type	Item 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

Type	Item 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



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

Type	Item 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



Wood: Solar fastener Ø 8.0, M10 × 70 on request. With building authority approval [Z-14.4-532]. Material: A2 stainless steel, E16 calotte

Type	Item number
8×100 / 50, length 150 mm	1001770
8×130 / 50, length 180 mm	1001511
8×150 / 50, length 200 mm	1000807
8×180 / 50, length 230 mm	1001627
8×200 / 50, length 250 mm	1002749
8×80 / 50, length 130 mm	1002228








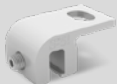









Wood: Solar fastener Ø 8.0, M10 × 70 on request. With building authority approval [Z-14.4-532]. Material: A2 stainless steel, with fibre cement seal.

Type	Item number
8×80 / 50, length 130 mm	1002130
8×100 / 50, length 150 mm	1003029
8×130 / 50, length 180 mm	1001759
8×150 / 50, length 200 mm	1002001
8×180 / 50, length 230 mm	1002533



Standing seam and system clamps



Type / image	Standing seam type / roofing system	Opening dimension [mm]	Mounting rail	Material	Item 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 	Rib-Roof Evolution 	23,0	SolidRail	Aluminium	2002226
Rib-Roof Speed 500 Clamp 	Rib-Roof Speed 500 	17,0	SolidRail	Aluminium	2002225
Rib-Roof 465 Clamp 	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