BISOL EasyMount Structures

Premium mounting solutions designed for simplicity and ease of installation.













Smart solutions for every roof type



Installed in +50 MW of solar systems



Superior mechanical strength



Up to 15 years product warranty

www. bisol. com





BISOL EasyMount HDPE Base 200 Quick and easy mounting solution for flat roofs

BISOL EasyMount HDPE Base 200 is a premium mounting solution for PV installations on flat roofs or surfaces. It requires no roof penetration and allows for the PV modules to be positioned at a 20° angle. The cutting edge mounting solution has been developed in-house and combines superior design with durability for extreme ease of installation and long-term performance. BISOL EasyMount HDPE Base 200 is made of highest quality recyclable materials and will leave a positive mark on the environment.

Technical Specifications	
Application	Flat roofs
Roof incline	Up to 5°
Method of installation	No roof penetration
Module angle	20°
Module orientation	Landscape
Module frame tolerances	Length: any / Width: 991 mm ± 5 mm (39.02" ± 0.2") / Thickness: 40 mm ± 2 mm (1.575" ± 0.08") / Reverse side width: 27 - 32 mm (1.06" - 1.26")
Base colour	Carbon black
Base material	High-density polyethylene - HDPE, carbon black, UV-resistant (base) / Glass fibre reinforced polypropylene (screws)
Base weight	5.5 kg (12.1 lbs)
Additional stabilization	Ballast, Wind shields
Temperature range	-20 to 70°C
Snow load per system	0 - 2.40 kN/m²
Wind load (velocity)(1)	0 - 115 km/h (71 mph)

⁽¹⁾ With the use of ballast and wind shields according to the specifications.





required



cost



guarantee

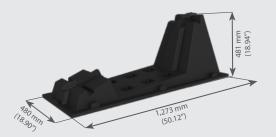
15-year UV and mechanical resistance

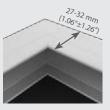


and stackable



Dimensions of HDPE Base 200:





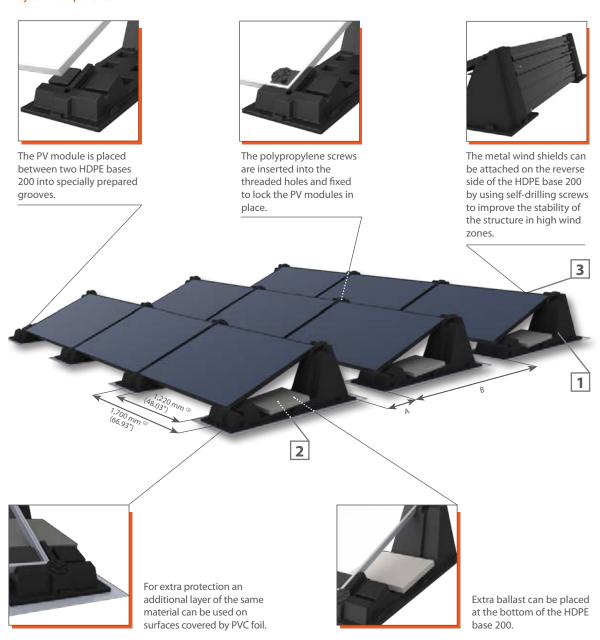
Allowed frame width on the reverse side of the module

Layout guidelines depending on incident angle of the sun in the winter:

Incident angle of the sun in the winter	A	В
17°	767 mm (30.20")	2,040 mm (80.31")
18°	701 mm (27.60")	1,974 mm (77.72")
19°	643 mm (25.31")	1,916 mm (75.43")
20°	589 mm (23.19")	1,862 mm (73.31")

Individual components:

		ID Code	Component description
1		SEKP-EMPB200_BK	EasyMount HDPE 200 Base Basic Kit
2		SEK-LOAD_CP15	Load Concrete plate 40/40/4cm (15kg)
3		SEK-EMPB_200_TWS	Trapezoidal Wind Shield HDPE 200 (anthracite / black)
4	()niiii-	SEK-JA3_65_25	Screw self-tapping 6,5 x 25 mm JA3



⁽²⁾ Dimensions specific for use with BISOL modules.



BISOL EasyMount HDPE Base 125 Lightweight mounting solution for flat roofs

BISOL EasyMount HDPE Base 125 is made of high-density UV-resistant polyethylene. It requires no roof penetration and can be installed in high wind zones with minimum extra ballast, sparing the roof from unnecessary loads. The innovative mounting solution has been developed in-house and allows an unobtrusive on-roof installation at a 12.5° angle. Its design reflects an expert understanding of the laws of thermodynamics, providing more efficient cooling of the photovoltaic modules.

Technical Specifications	
Application	Flat roofs
Roof incline	Up to 5°
Method of installation	No roof penetration
Module angle	12.5°
Module orientation	Landscape
Module frame tolerances	Width: $991 \text{ mm} \pm 5 \text{ mm} (39.02" \pm 0.20") /$ Length: $1,649 \pm 15 \text{ mm} (64.92" \pm 0.59")$
Holes on module frame	4 holes / Φ 6 mm (0.24") / Distance from the middle of the frame: 450 mm (17.72")
Base colour	Natural white
Base material	UV-resistant high-density polyethylene (HDPE base 125) / Aluminum EN-AW 6060 T5 (L- profile) / Stainless steel (fastening elements)
Base weight	10.9 kg (24 lbs)
Additional stabilization	Ballast / BISOL EasyMount L-profiles
Temperature range	-20 to 70°C
Snow load per system	0 – 2.40 kN/m² (with BISOL PV modules)
Wind load (velocity) (3)	0 – 140 km/h (87 mph)

⁽³⁾ With use of L- profiles and ballast according to specifications.









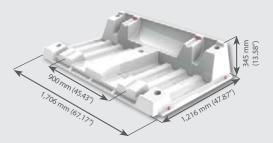
stability



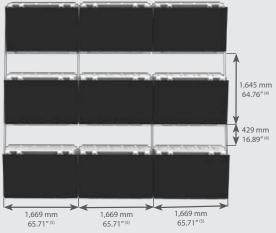


BISOL EasyMount HDPE Base 125

Dimensions of HDPE Base 125:



Layout guidelines:



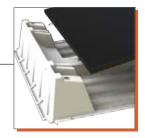
⁽⁴⁾ Layout example for optimal yield-to-installed power ratio in Central Europe. Adjustable upon request.

Individual components:

	ID Code	Component description
1	SEKP-EMPB_125_BK	EasyMount HDPE Base 125 Basic Kit
2	SEKP-EMPB_125_RC	EasyMount HDPE Base 125 Row Connecting Set
3	SEK-LOAD_CP15	Load Concrete plate 40/40/4cm (15kg)



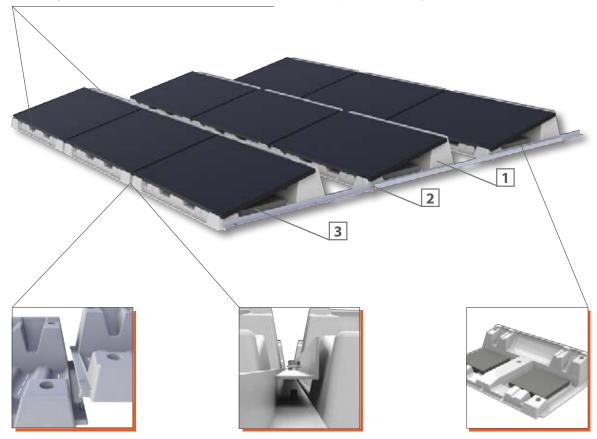






Top and bottom fixings are attached to the PV module via connecting elements.

PV module is attached to the HDPE Base 125 via slide-in top and bottom fixings.

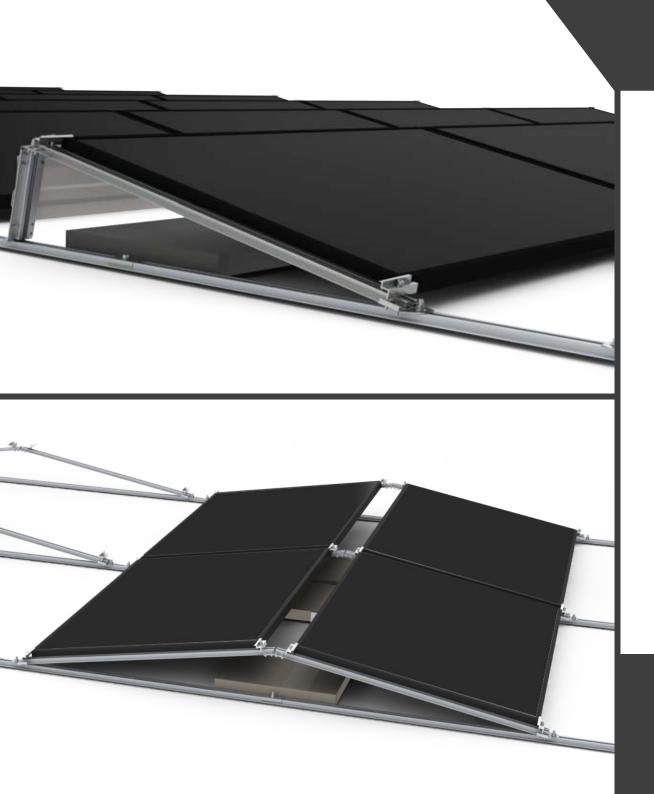


HDPE Bases 125 are horizontally connected, overlapped and attached to each other.

Rows of HDPE Bases 125 are vertically connected by L- profiles.

Extra ballast can be placed into the HDPE Base 125.

⁽⁵⁾ Dimensions specific for use with BISOL modules.



BISOL EasyMount ALU Base Cost effective lightweight solution for hassle-free installations

This lightweight, but sturdy mounting solution requires no roof penetration and is suitable for flat roofs covered with bitumen, gravel or synthetic membrane. The ALU Base is available in south-facing or east-west orientation at various inclinations and with adjustable spacing between rows. The entirely free-standing structure is delivered preassembled to simplify mounting and reduce the installation time.

Technical Specifications	BISOL EasyMount ALU Base 125/200/300	BISOL EasyMount ALU Twin Base 100
Application	Flat	roofs
Roof incline	Upt	to 5°
Method of installation	Direct laying witho	ut roof penetration
Module incline	12.5°, 20° and 30° (other angles available upon request)	10 °
Module orientation	Land	scape
Module frame tolerances	Width: 200 - 1050 mm (7.87" - 41.33") / Frame thickness: 35, 40 or 45 mm (1.38", 1.57" or 1.77") applicable to different clamp types	
Material	Aluminum EN-AW 6060 T5 (L-profile) / Sta	ainless steel A2-70 (fastening elements)
System weight without ballast	0.015 kN/m² (without PV module)	0.01 kN/m² (without PV module)
Snow load per system	0 – 2.40 kN/m² (with BISOL PV modules)	
Wind load (velocity)	0 – 115 km/h (71 mph)	
Additional stabilization	Ballast / Windshields	Ballast





distance between rows





components for quick installation



or east-west orientation



warranty

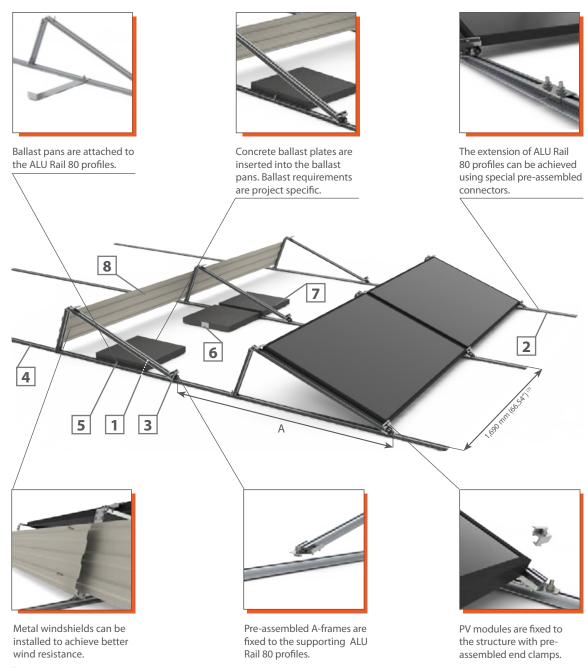
Layout guidelines:

Product type	Module incline (°)	Distance between rows - A (6)
BISOL EasyMount ALU Base 125	12.5°	150 cm (4′ 11″)
BISOL EasyMount ALU Base 200	20°	170 cm (5′7″)
BISOL EasyMount ALU Base 300	30°	230 cm (7′7″)

⁽⁶⁾ Layout example for optimal yield-to-installed power ratio in Central Europe. Adjustable upon request.

Individual components:

		ID Code	Component description
1		SEKP-EMTAB_125 SEKP-EMTAB_200 SEKP-EMTAB_300	EasyMount ALU Base 125 EasyMount ALU Base 200 EasyMount ALU Base 300
2		SEKP-EMRL80_5850	EasyMount ALU Rail 80 x 5850 mm set
3		SEKP-EMEC25	Clamp end EasyMount 25 mm, preassembled
4	11	SEKP-EMCRL80	Connector set for EasyMount Rail 80
5	W.	SEKP-EMT_BPN	Ballast pan for ballast set for ALU Rail 80
6	/	SEK-EMT_BPNRL	Ballast pan EasyMount for ALU Rail 80, double-sided
7		SEK-LOAD_CP15	Load Concrete plate 40/40/4 cm (15kg)
8	T	SEK-TWS125_1720W SEK-TWS200_1734W SEK-TWS300_1750W	Windshield 12.5 1700x200mm, white Windshield 20 1700x340mm, white Windshield 30 1700x500mm, white
9	1 mmm	SEK-DIN7504_5525	Screw self-drilling 5,5x25 with washer



⁽⁷⁾ Dimensions specific for use with BISOL modules.

BISOL EasyMount ALU Twin Base 100

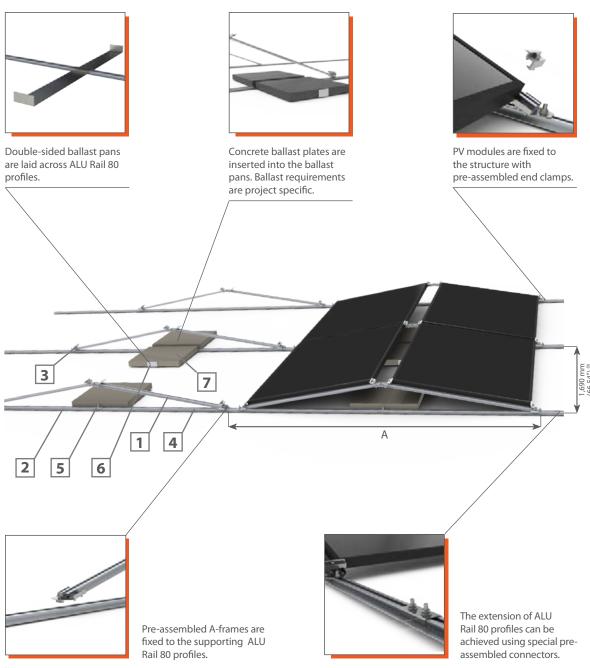
Layout guidelines:

ı	Product type	Module incline (°)	Distance between rows - A (8)
	BISOL EasyMount ALU Twin Base 100	10°	240 cm (7′11″)

⁽⁸⁾ Layout example for optimal yield-to-installed power ratio in Central Europe. Adjustable upon request.

Individual components:

		ID Code	Component description
1		SEKP-EMTW_100	EasyMount ALU Twin Base 100
2		SEKP-EMRL80_5850	EasyMount ALU Rail 80 x 5850 mm set
3		SEKP-EMEC25	Clamp end EasyMount 25 mm, preassembled
4	11	SEKP-EMCRL80	Connector set for EasyMount Rail 80
5	No.	SEKP-EMT_BPN	Ballast pan for ballast set for ALU Rail 80
6	/	SEK-EMT_BPNRL	Ballast pan EasyMount for ALU Rail 80, double-sided
7		SEK-LOAD_CP15	Load Concrete plate 40/40/4 cm (15kg)



⁽⁹⁾ Dimensions specific for use with BISOL modules.



BISOL EasyMount ALU Triangular Versatile and resistant solution for flat roofs

BISOL EasyMount ALU Triangular mounting system is suitable for use on flat or pitched roofs with larger spans of the roof bearing structure, or roofs requiring higher wind and snow load resistance. The structure is available in several different incline angles and can be simply laid out without drilling into the roof. For pitched roofs, or if extra stability required, the ALU Triangular structure is mounted into the roof structure using hanger bolts. The pre-assembled bolt connections on the A-frame reduce the on-site installation

Technical Specifications	Solution with EasyMount ALU Rail 80	Solution with EasyMount Profile 80 and Hanger bolts
Application	Flat roofs covered with bitumen, gravel or synthetic membrane	Pitched roofs with trapezoidal or corrugated metal sheet
Roof incline	Up to 5°	Any roof inclination
Method of installation	Laying without roof penetration	Fixing with hanger bolts into the roof structure
Module incline	12.5°, 20° and 30° (other and	gles available upon request)
Module orientation	Landscape / Portrait upon request	
Module frame tolerances	Suitable for all framed module dimensions with frame thickness of 35, 40 or 45 mm (1.38", 1.57" or 1.77") / Applicable to different clamp types	
Material	Aluminum EN-AW 6060 T5 (A-frame, Profiles 50 and 80) / Stainless steel A2-70 (fastening elements)	
System weight without ballast	0.02 kN/m² (without PV module) 0.035 kN/m² (without PV m	
Snow load per system	0 – 2.40 kN/m ² (with BISOL PV modules)	
Wind load (velocity)	Up to 170 km/h (106 mph)	
Additional stabilization	Ballast (concrete slabs) / Windshields	Windshields







wind zones



without roof penetration





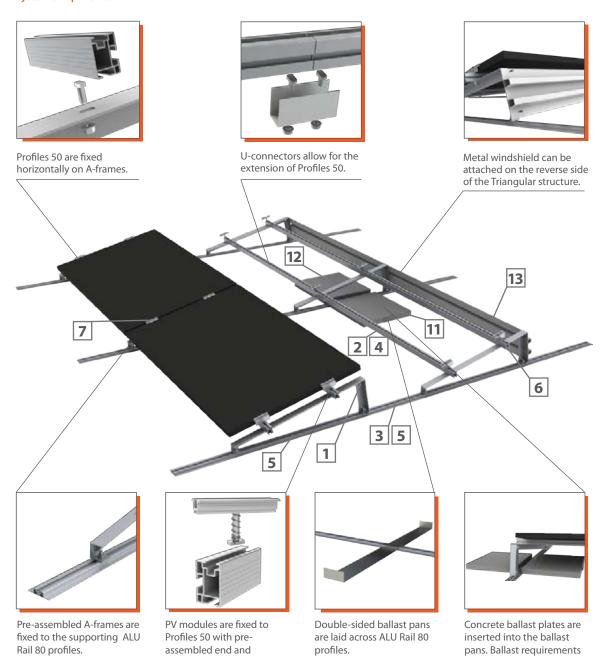
layout option



Individual components:

		ID Code	Component description
1		SEKP-EMTAL_125 SEKP-EMTAL_200 SEKP-EMTAL_300	EasyMount ALU Triangular 125 EasyMount ALU Triangular 200 EasyMount ALU Triangular 300
2		SEK-EM50_33	Easy Mount 50 x 33 x 6200mm
3		SEK-EMRL80	EasyMount ALU Rail 80 x 5850 mm
4	T.	SEKP-EMC50	Connector set for EasyMount 50 x 33
5	11	SEKP-EMCRL80	Connector set for EasyMount Rail 80
6		SEKP-EMEC	Clamp end EasyMount, preassembled
7		SEKP-EMMC	Clamp middle EasyMount, preassembled
8	100	SEK-HHS_10_25	Screw hammerhead M10x25 A2-70
9	8	SEK-DIN6923_10	Hexagon flange nut with serration M10 A2-70
10	No.	SEKP-EMT_BPN	Ballast pan for ballast set for ALU Rail 80
11	/	SEK-EMT_BPNRL	Ballast pan EasyMount for ALU Rail 80, double-sided
12		SEK-LOAD_CP15	Load Concrete plate 40/40/4cm (15kg)
13		SEK-TWS125_1720W SEK-TWS200_1734W SEK-TWS300_1750W	Windshield 12.5 1700x200mm, white Windshield 20 1700x340mm, white Windshield 30 1700x500mm, white
14	1	SEK-DIN7504_5525	Screw self-drilling 5.5 x 25 mm with washer

System components:



middle clamps.

are project specific.

Individual components:

		ID Code	Component description
1		SEKP-EMTAL_125 SEKP-EMTAL_200 SEKP-EMTAL_300	EasyMount ALU Triangular 125 EasyMount ALU Triangular 200 EasyMount ALU Triangular 300
2		SEK-EM50_33	Easy Mount Profile 50 x 33 x 6200mm
3		SEK-EM80_40	EasyMount Profile 80 x 40 x 6200mm
4		SEKP-EMC50	Connector set for EasyMount 50 x 33
5		SEK-EMC80	Connector for EasyMount 80 x 40
6		SEKP-EMEC	Clamp end EasyMount, preassembled
7		SEKP-EMMC	Clamp middle EasyMount, preassembled
8	100	SEK-HHS_10_25	Hammerhead screw M10x25
9	<u></u>	SEK-DIN6923_10	Hexagon flange nut with serration M10 A2-70
10	-	SEK-HW100_200	Hanger bolt, wood, fi10 x 200 mm
11	——	SEK-HST80_15650	Hanger bolt, steel, fi8.0 x 100/50 mm, trapezoid
12	-0	SEK-P82405_11 SEK-P82405_13	Adapter sheet 82 x 40 x 5, fi11 Adapter sheet 82 x 40 x 5, fi13
14	(1)	SEK-DIN7504_5525	Screw self-drilling 5,5 x 25 with washer
15		SEK-DIN975_10 SEK-DIN975_12	Rod M10 threaded Rod M12 threaded
16		SEK-HY150/330	Fixing injection mass 330 ml
17	0	SEK-EPDMSW_10 SEK-EPDMSW_12	Sealing washer EPDM M10 Sealing washer EPDM M12

System components:



watertight connection.

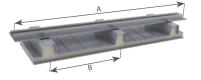


BISOL EasyMount ALU Rail 80 Universal solution for all types of trapezoidal roof

BISOL EasyMount ALU Rail 80 is a versatile solution suitable for all types of trapezoidal metal sheet roofs, designed to fit all wave angles and dimensions. This system is compatible with all module sizes and allows portrait and landscape module orientation with no additional material required. BISOL EasyMount ALU Rail 80 is made to withstand high wind and snow loads and provides high shear and pull-out resistance. Its simplicity and modularity allows for a quick and easy installation.

Technical Specifications					
Application	Pitched roofs with trapezoidal metal sheet (minimal thickness 0.6 mm)				
Trapezoidal wave type	All trapezoidal wave dimensions and angles				
Method of installation	Directly into the metal sheet				
Module orientation	Portrait or landscape				
Module frame tolerances	Suitable for all framed module dimensions				
Material	Aluminum EN-AW 6060 T5 (ALU Rail 80) / Stainless steel (fastening elements)				
System weight	0.005 kN/m² (without PV module)				
Dimensions	Width: 80 mm / Height: 15 mm / Length: 450 mm or 530 mm or 730 mm				

Length of ALU Rail 80 - A	Distance between two waves - B
450 mm (1′5.7″)	up to 21 cm (8.3")
530 mm (1'8.9")	21 (8.3") - 25 cm (9.8")
730 mm (2′4.7″)	25 (9.8") - 35 cm (1'1.8")













basic tools



and easy installation



warranty

BISOL EasyMount ALU Rail 80

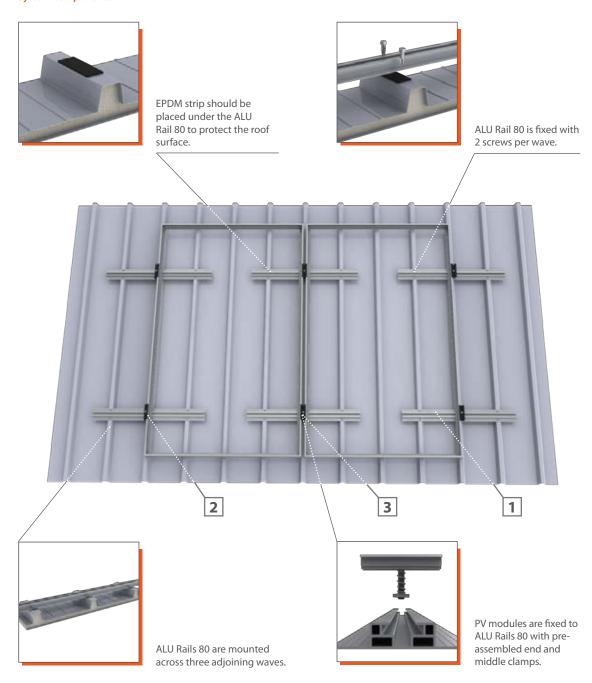
Cross section of ALU Rail 80:



Individual components:

	ID Code	Component description
1	SEKP-EMRL80_450 SEKP-EMRL80_530 SEKP-EMRL80_730	EasyMount ALU Rail 80 x 450 mm set EasyMount ALU Rail 80 x 530 mm set EasyMount ALU Rail 80 x 730 mm set
2	SEKP-EMEC	Clamp end EasyMount, preassembled
3	SEKP-EMMC	Clamp middle EasyMount, preassembled
4	SEK-EMGP	Grounding plate EasyMount (10)

 $^{^{\}mbox{\scriptsize (10)}}$ For grounding refer to the national regulatory requirements.



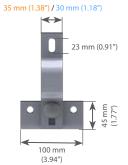




BISOL EasyMount Hook Double-adjustable solution for various types of tiled roofs

BISOL EasyMount Hook is a perfect solution for pitched roofs covered by any type of tile with the exception of barrel tiles. The double adjustability of the hook permits use on roofs with large wave tiles, enables levelling out the uneven roof surfaces and provides more efficient cooling of the modules by lifting them further away from the roof surface. The system allows for portrait or landscape module orientation by mounting the profiles horizontally or vertically without the use of the grid.

Technical Specifications					
Application	Any type of tiled roof (except for barrel tiles)				
Roof incline	From 10°				
Method of installation	Attached to rafters				
Module orientation	Portrait or landscape				
Module frame tolerances	Suitable for all framed module dimensions				
Maximum load on hook	BISOL EasyMount Hook 6-35: 120 kg (265 lbs) BISOL EasyMount Hook 8-30: 200 kg (441 lbs)				
Snow load per system	0 – 5.40 kN/m² (with BISOL PV modules)				
Material	Stainless steel 1.4301 (hook) / Stainless steel A2-70 (fastening elements) / Aluminum EN-AW 6060 T5 (Profile 50)				
Height adjustability	162 – 194 mm (6.36"-7.64") from the rafter				







most tiled roofs



roof surfaces





grid

orientation without use of





Hook 6-35

Hook 8-30

Layout guidelines installation with BISOL PV modules

	Distance		
A (11)	<40 cm (15.75")		
B (11)	80 - 150 cm (31.50"-59.06")		

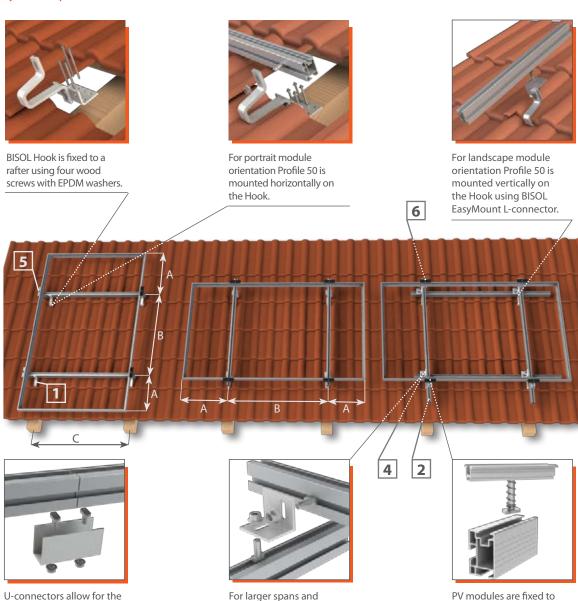
	Spans between rafters				
С	Any		85 cm ± 6.5 cm (33.5" ± 2.6")		
Module orientation	Landscape	Portrait	Landscape		
Solution	Profile 50 (12) / Grid (Profile 50 + Profile 50)	Profile 50	Profile 50 + L-connector		

Individual components:

		ID Code	Component description
1		SEK-2HS_6 SEK-2HS_8	Hook double adjustable 6-35 Hook double adjustable 8-30
2		SEK-EM50_33	Easy Mount 50 x 33 x 6200mm
3	I.	SEKP-EMC50	Connector set for EasyMount 50 x 33
4	I	SEK-EMLC	Connector L EasyMount
5		SEKP-EMEC	Clamp end EasyMount, preassembled
6	Accept to	SEKP-EMMC	Clamp middle EasyMount, preassembled
7		SEK-W65_115	Wood screw with EPDM washer 6,5 x 115 mm
8	P	SEK-HHS_10_25	Hammerhead screw M10x25 A2-70
9	3	SEK-DIN6923_10	Hexagon flange nut with serration M10 A2-70

System components:

extension of Profiles 50.

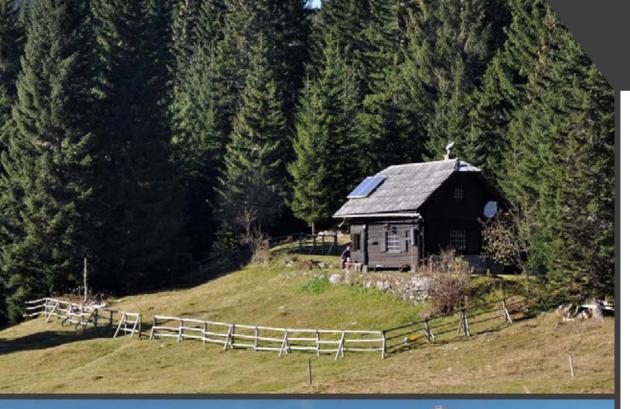


landscape module orientation a grid can be built by connecting two intersecting Profiles 50

with the L-connector.

Profiles 50 with preassembled end and middle clamps.

 $^{^{(1)}}$ Dimensions specific for use with BISOL modules. $^{(12)}$ For modules that can be mounted on the short side of the frame.





BISOL EasyMount Hanger Bolt All-round solution for wind resistant applications

BISOL EasyMount Hanger Bolt is an effective all-round solution for installations on trapezoidal and corrugated pitched roofs. Whilst light-weight, it is made from top quality rigid materials to withstand extreme wind loads. Various options are available for different spans and materials of the roof carrying structure.

Technical Specifications	
Application	Pitched roofs with trapezoidal metal sheet or corrugated roofs
Roof incline	Any roof inclination
Method of installation	Directly through the metal sheet into the steel, wooden or concrete roof structure
Module orientation	Portrait or landscape
Module frame tolerances	Suitable for most framed module dimensions
Material	Stainless steel (Hanger Bolt, Threaded Rod and fastening elements) / Aluminum EN-AW 6060 T5 (Profiles 50 and 80)
System weight	0.015 kN/m ²







Hanger Bolt for wooden structures



Hanger Bolt for steel structures





and wind resistance





connection



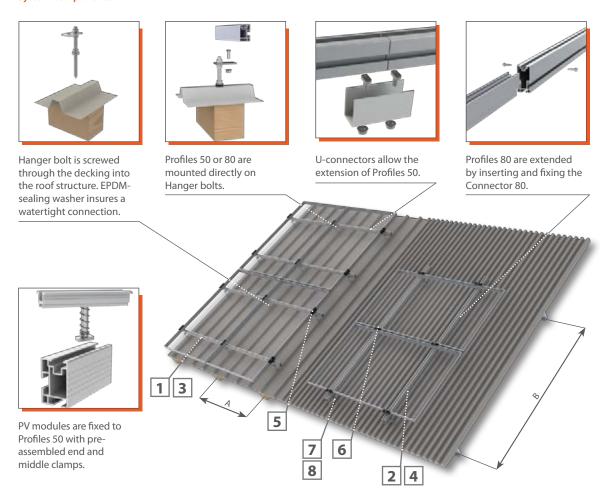


warranty

BISOL EasyMount Hanger Bolt

Individual components:

		ID Code	Component description
1		SEK-EM50_33	Easy Mount Profile 50 x 33 x 6200mm
2		SEK-EM80_40	EasyMount Profile 80 x 40 x 6200mm
3		SEKP-EMC50	Connector set for EasyMount 50 x 33
4		SEK-EMC80	Connector for EasyMount 80 x 40
5		SEKP-EMEC	Clamp end EasyMount, preassembled
6		SEKP-EMMC	Clamp middle EasyMount, preassembled
7	1	SEK-HW100_200	Hanger bolt, wood, fi10 x 200 mm
8	1	SEK-HST80_15650	Hanger bolt, steel, fi8.0 x 100/50 mm, trapezoid
9	100	SEK-HHS_10_25	Hammerhead screw M10x25
10	3	SEK-DIN6923_10	Hexagon flange nut with serration M10
11	1)	SEK-DIN7504_5525	Screw self-drilling 5.5 x 25 mm with washer
12		SEK-EMLC	Connector L EasyMount
13	0	SEK-P82405_11 SEK-P82405_13	Adapter sheet 82 x 40 x 5, fi11 Adapter sheet 82 x 40 x 5, fi13
14		SEK-DIN975_10 SEK-DIN975_12	Rod M10 threaded Rod M12 threaded
15		SEK-HY150/330	Fixing injection mass 330 ml
16	0	SEK-EPDMSW_10 SEK-EPDMSW_12	Sealing washer EPDM M10 Sealing washer EPDM M12



	Horizontal roof supporting structure - A			Vertical roof supporting structure - B					
Span	≤250 cm	n (98.43")	>250 cm	n (98.43")	≤200 cm	n (78.74")	>200 cm	(78.74"")	85 cm ± 6.5 cm (33.5" ± 2.6")
Module orientation	Landscape	Portrait	Landscape	Portrait	Landscape	Portrait	Landscape	Portrait	Landscape
Solution	Profile 50	Profile 50 ⁽¹³⁾ / Grid (Profile 50 + Profile 50)	Profile 80	Profile 80 ⁽¹³⁾ / Grid (Profile 80 + Profile 50)	Profile 50 ⁽¹³⁾ / Grid (Profile 50 + Profile 50)	Profile 50	Profile 80 ⁽¹³⁾ / Grid (Profile 80 + Profile 50)	Profile 80	Profile 50

 $^{^{(13)}}$ For modules that can be mounted on the short side of the frame.

Accesories Individual components...

		ID Code	Component description
1		SEK-EM50_33_B	EasyMount 50 x 33 x 6200mm Black
2		SEK-EMEC	Clamp end EasyMount
3		SEK-EMMC	Clamp middle EasyMount
4	1	SEK-EMLC	Connector L EasyMount
5		SEK-EMMC_B	Clamp end EasyMount, preassembled
6	1	SEK-EMEC_B	Clamp end EasyMount Black
7	4	SEK-EMMC_B	Clamp middle EasyMount Black











RAL 6009

0 RAL 7011

0 RAL 4007

RAL 4004

Marble Grey Pine Green Marble Green Charming Purple Marble Pink Olive Green

Charcoal Grey

Marble Gold

Rustic Red

Solar Cells	Frames, BIPV Flashings, Middle and End Clamps	Solar Cells	Frames, BIPV Flashings, Middle and End Clamps
- 2		35	
a c			

The a may a



BISOL Group

Latkova vas 59a 3312 Prebold SLOVENIA

T: +386 (0)3 703 22 50 F: +386 (0) 3 703 22 63 E: info@bisol.si

BISOL Benelux Wingepark 47

3110 Rotselaar BELGIUM

T: +32 (0)484 08 80 78 E: info@bisol.com

BISOL Solar Ltd. UK

Capital Business Centre Unit 11J, 22 Carlton Road South Croydon, CR2 0BS UNITED KINGDOM

T: +44 (0)208 916 2404 F: +44 (0)208 916 2001 E: uk@bisol.com

BISOL Italy

Via Bonazzi, 5 40013 Castel Maggiore (BO) ITALY

T: +39 051 705 697 F: +39 051 705 697 E: italia@bisol.com

Dealer information:

© BISOL Production Ltd., November 2015. All rights reserved. All information presented in this document is subject to change without prior notice.