



دیتاشیت

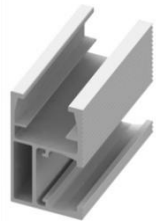

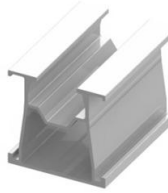
استراکچر پنل خورشیدی

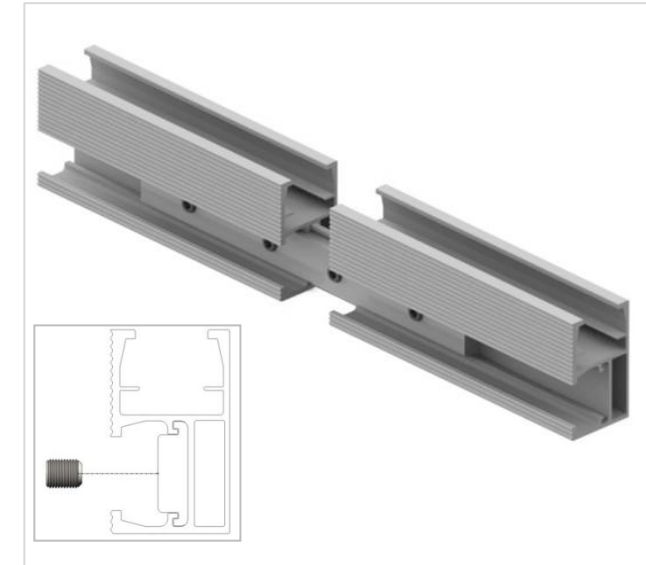
جهت سقف های شیب دار (شیروانی)





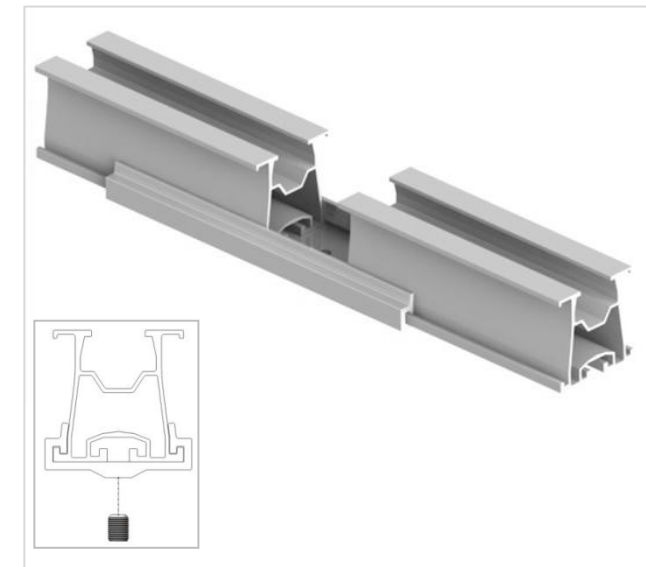
Tehran Office: No 5, 2nd Floor, 1 Building, Sadeqian Alley, Shariati Ave, Tehran, Iran
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1. RAIL SYSTEM


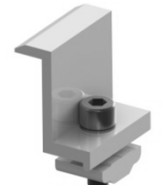
1.1 Mounting Rail				
Item No.	Figure	Item	Comments	Length
BE10-01		I rail 34*56mm	Fixings with U-nut & M8 bolt Material: AL6005-T5 Aluminum anodized Color: Silver	Standard: 1700mm 2560mm 3405mm 4200mm Customized length allowed
BE10-07		Base rail I 50*50mm	Top fixings: U-nut & M8 bolt Bottom fixings: M8 Cup square bolt & hexagon nut Side fixing with mounting plate(BE-MP01) Material: AL6005-T5 Aluminum anodized Color: Silver	
BE10-08		Base rail II 50*50mm	Top fixings with U-nut & M8 bolt Side fixing with mounting plate(BE-MP01) Material: AL6005-T5 Aluminum anodized Color: Silver	

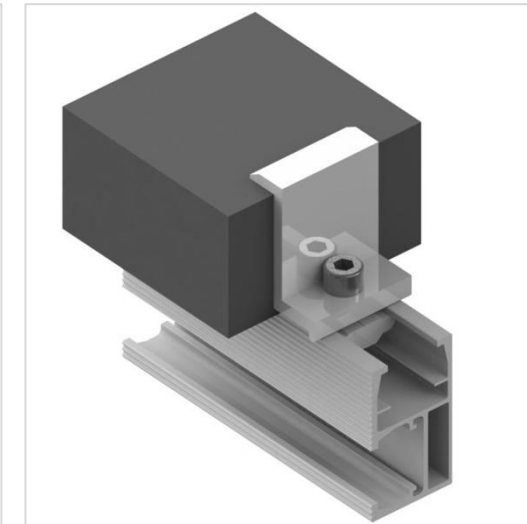
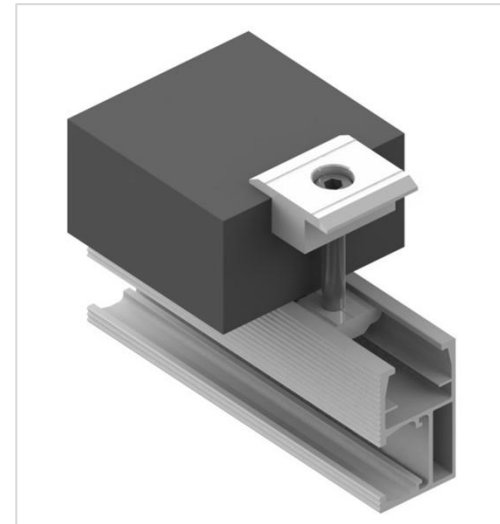


1.2 Rail Connectors				
Item No.	Figure	Item	Comments	Length
BE10-05200		Rail splice kit	Extend I Rail to any length, fixing with M8 set screw Material: AL6005-T5 Aluminum anodized Color: Silver	200mm
BE10-09		Base Rail splice kit	Connector for Base rail I / II, fixing with M8 set screw Material: AL6005-T5 Aluminum anodized Color: Silver	

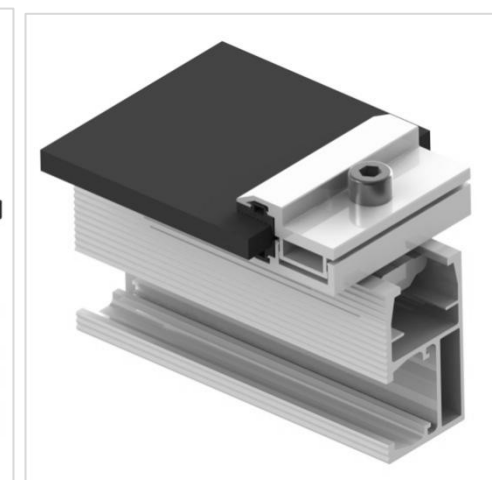
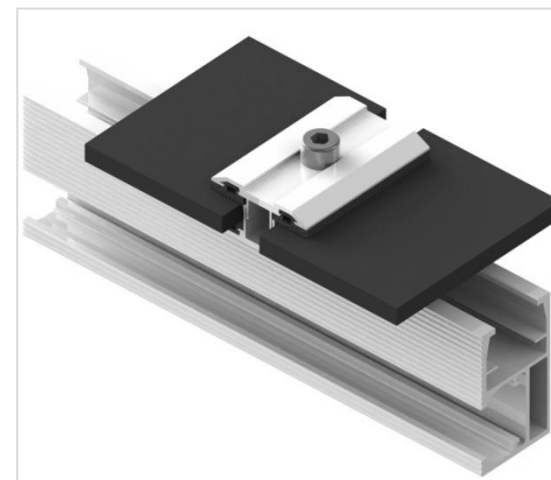


2. MODULE ASSEMBLY COMPONENTS

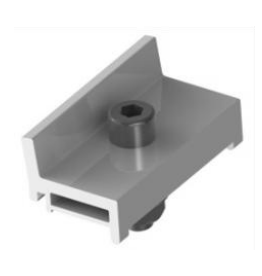



2.1 Module Connecting Clamp				
Item no.	Figure	Item	Comments	Dimension
BE10-02		Mid clamp	Hold every neighboring framed panel onto the rails by U-nut & M8 bolt Material: AL6005-T5	Accommodate solar panels of thickness: 35mm,37mm,40mm, 42mm,45mm,46mm, 50mm
BE10-03		End clamp	Hold the edge of each 'end' framed panel by U-nut & M8 bolt. Material: AL6005-T5	

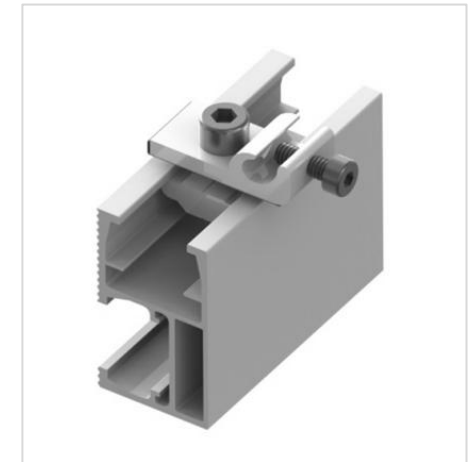
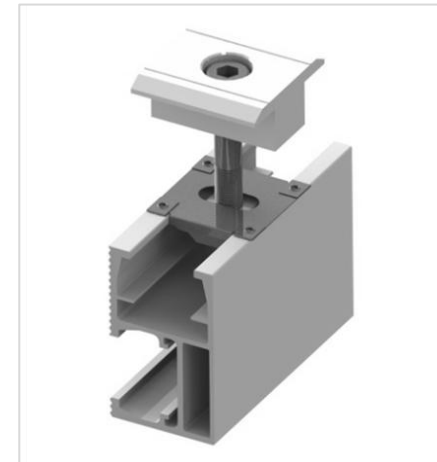
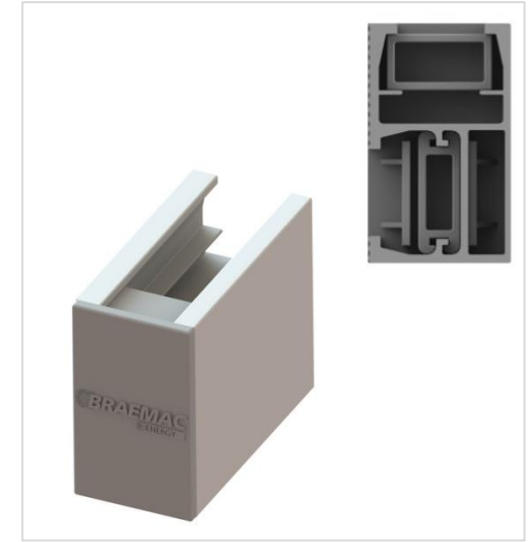
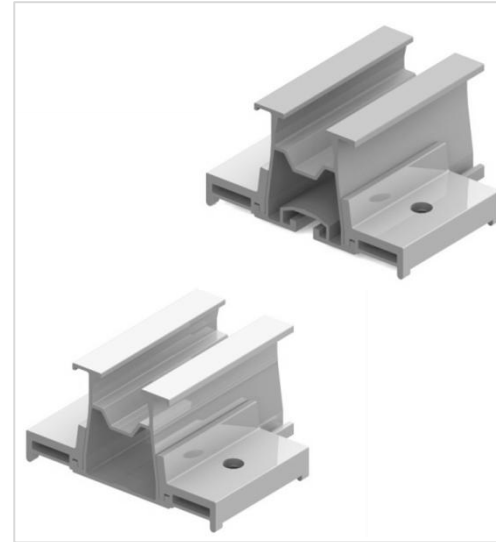


2.2 Connecting Clamp for Glass module				
Item no.	Figure	Item	Comments	Dimension
BE10-10		Mid clamp for glass module	Hold every neighboring frameless panel onto the rails by U-nut & M8 bolt Material: AL6005-T5	Accommodate solar panels of thickness: 7mm, 8mm, 9mm, 10mm
BE10-11		End clamp for glass module	Hold the edge of each 'end' frameless panel by U-nut & M8 bolt. Material: AL6005-T5	

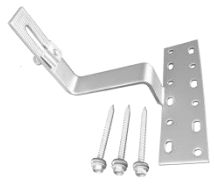






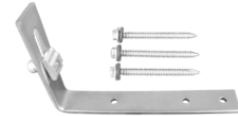
2.3 Components connecting with rail

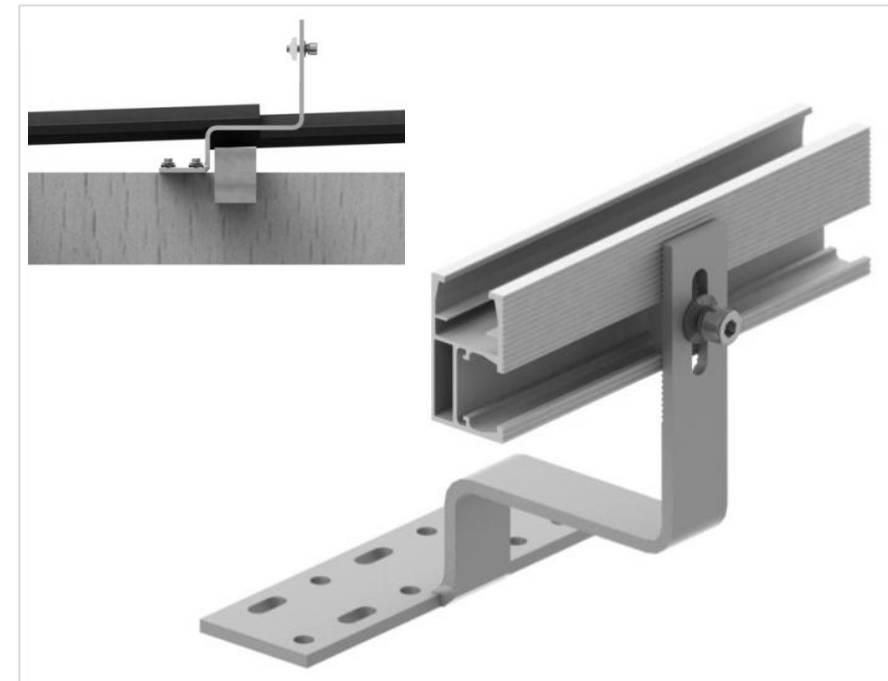
Item no.	Figure	Item	Comments	Dimension
BE-MP01		Mounting plate	Mounting plate for the fastening of the mounting Base Rails	60mm
BE-EC01		Rail End cap	Connecting with I rail Material: PP	56.5*33.8*3mm
BE-GC01		Grounding clip	To be combined with standard mid clamp Material: SUS304	34*34mm
BE-GL01		Grounding lug	To ensure the entire system grounded and safe Material: AL6005-T5 & SUS304	20mm






3. TILE ROOF MOUNTS

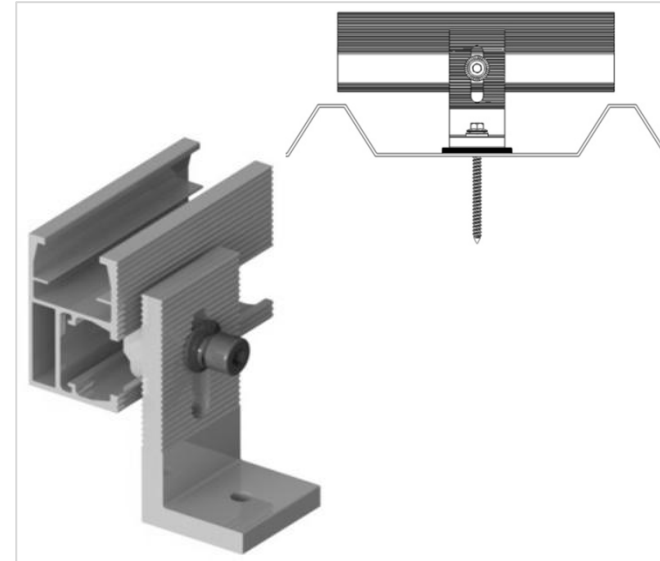
1.5 Tile roof Mounts				
Item no.	Figure	Item	Comments	Dimension
BE10-0401		Tile Hook 1#		180*165 mm
BE10-0402		Tile Hook 2#	For tiled roofing. Fix the railing to the beams below a tile roof and ensure a waterproof finish	180*165 mm
BE10-0403		Tile Hook 3#	Use with 6.3*80 wood screw & M8 bolt Material: SUS304	186*236 mm
BE10-0404		Tile Hook 4#		Base plate: 45*100*5mm 55*100*5mm Hook: 116*155*6mm
BE10-0405		Tile Hook 5#	For asphalt roofing	286*152 mm

1.5 Tile roof Mounts				
Item no.	Figure	Item	Comments	Dimension
BE10-0406		Tile Hook 6#	For asphalt roofing	200*120 mm




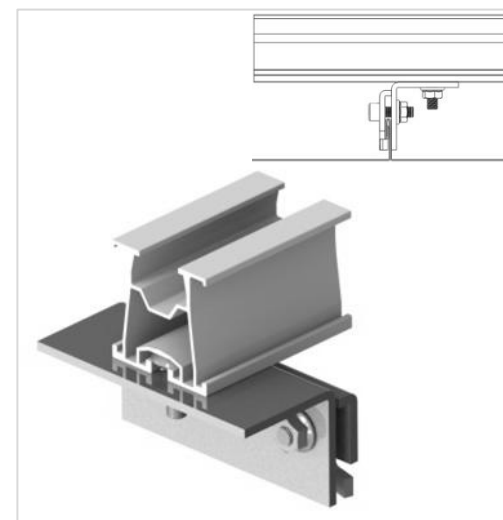
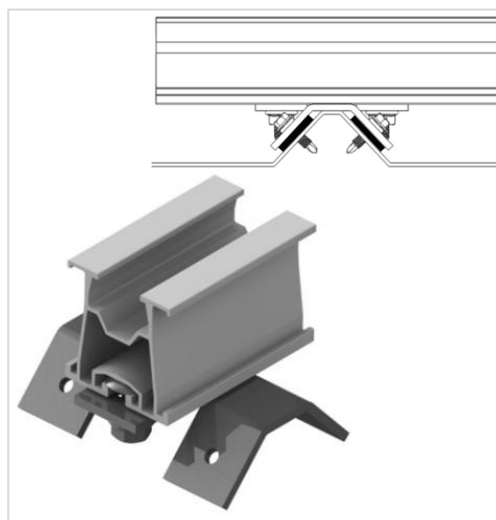
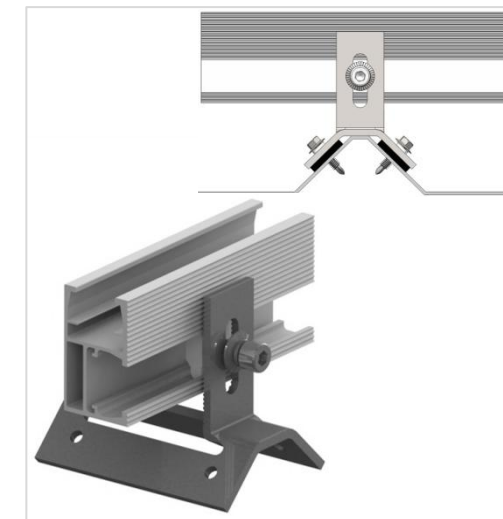
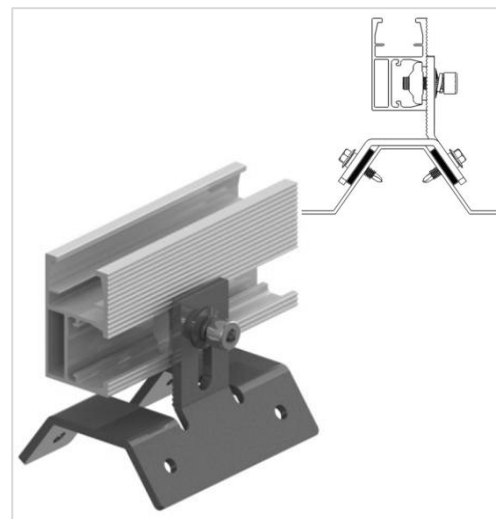
4. METAL ROOF MOUNTS

1.6 Metal Roof Mounts				
Item no.	Figure	Item	Comments	Dimension
BE10-0601		L foot	Secure the railing on the roof, and must be used with the supplied EPDM pad to prevent galvanic corrosion to the roof material. Material: AL6005-T5	L foot 1# 40*84mm Wood screw 6.3*80mm EPDM pad 25*50mm U-nut & Bolt
BE10-0602		Hanger bolt with L-bracket	Connecting I Rail For corrugated roofs, comprising a special hanger bolt with EPDM sealing and a L-bracket Material: AL6005-T5 & SUS304	L foot 2#: 60*60*6mm M10*200 hanger bolts U-nut & Bolt
BE10-0603		Hanger bolt with adapter plate	Connecting Base Rail I and II, for corrugated roofs, comprising a special hanger bolt with EPDM-sealing and a mounting plate. Material: AL6005-T5 & SUS304	M10*200 hanger bolts Aluminum adapter plate 130*50*8mm



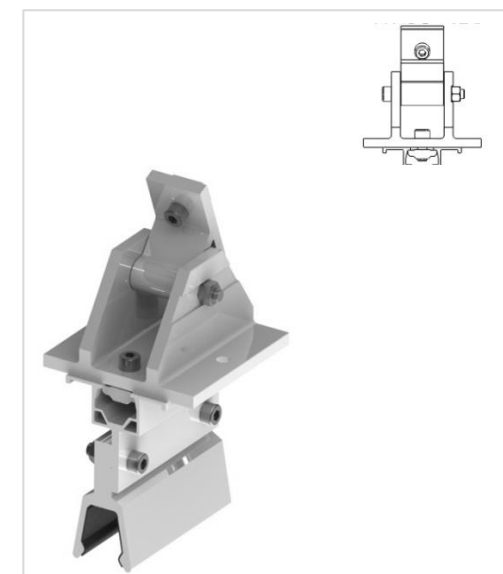
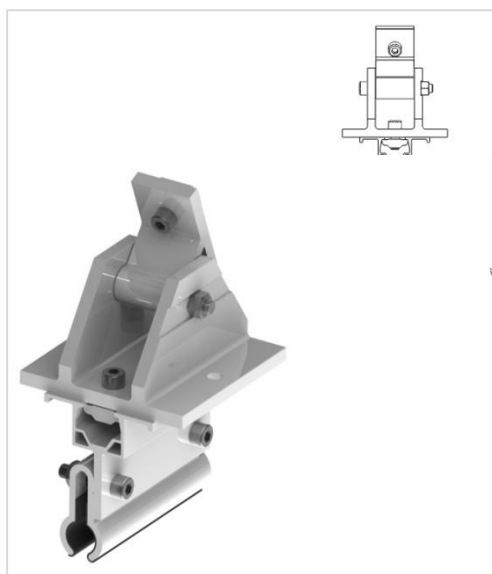
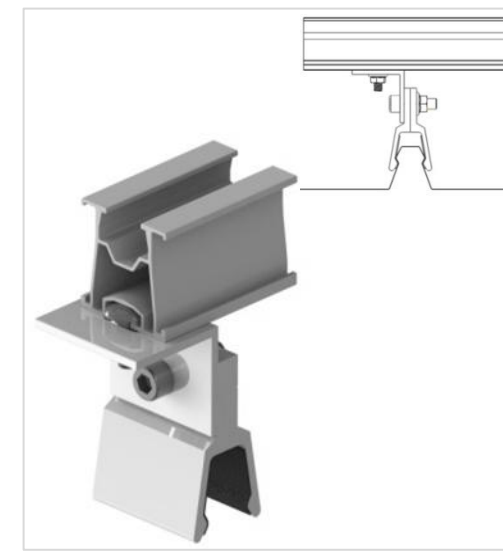
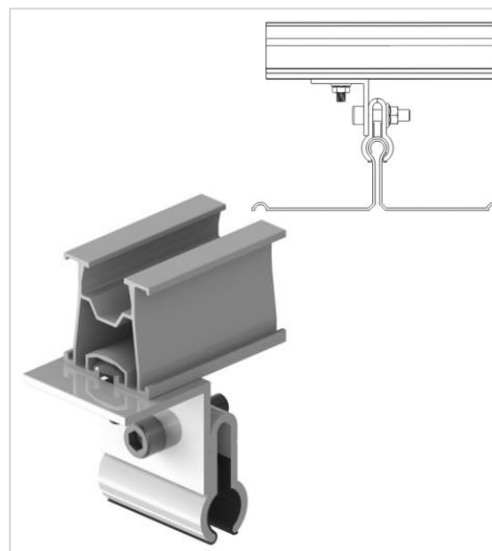
1.6 Metal Roof Mounts

Item no.	Figure	Item	Comments	Dimension
BE10-0604		Trapezoidal clamp 1#	For trapezoidal corrugated metal, 4 holes, for direct fastening to the trapezoidal corrugated metal roof with the supplied EPDM pad to prevent galvanic corrosion to the roof material. Material: SUS304	Trapezoidal clamp 1# 100 mm
BE10-0605		Trapezoidal clamp 2#		Trapezoidal clamp 2# 100 mm
BE10-0606		Trapezoidal clamp 3#		Self tapping screw 5.5*25
BE10-0607		Standing seam clamp 1#		EPDM pad 25*50 U-nut & Bolt
BE10-0604				Trapezoidal clamp 3# 100 mm
BE10-0605				Self tapping screw 5.5*25
BE10-0606				Cup square bolt EPDM pad 25*50
BE10-0607			With elongated hole, for connecting Base rails II with M8 flanged hexagon nut /bolt Material: SUS304	Standing seam clamp 1# 110 mm M8 hex socket screw Flanged hexagon nut

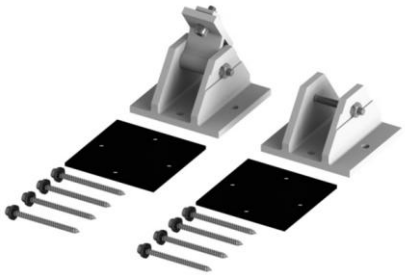
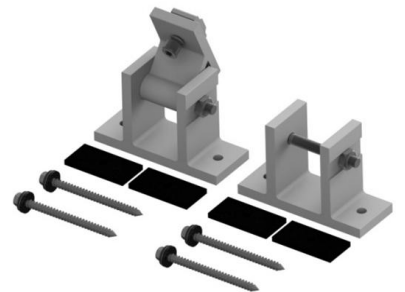



1.6 Metal Roof Mounts

Item no.	Figure	Item	Comments	Dimension
BE10-0608		Standing seam clamp 2#	For KalZip or BEMO roof. Made up with M10 bolt/ flange hexagon nut, EPDM pad Material: AL6005-T5	Standing seam clamp 2# 60mm L-foot 3# 60*50mm Bolt M10*35
BE10-0609		Standing seam clamp 3#	For Zambelli RibRoof Made up with M10 bolt/ flange hexagon nut, EPDM pad Material: AL6005-T5	Standing seam clamp 3# 60mm L-foot 3# 60*50mm Bolt M10*30
BE10-0610		Standing seam clamp 4#	For KalZip or BEMO roof, connecting with adjustable tilt system. Made up with M10 bolt/ flange hexagon nut, EPDM pad Material: AL6005-T5	Standing seam clamp 2# 110mm T-support 110mm Bolt M10*40
BE10-0611		Standing seam clamp 5#	For Zambelli RibRoof, connecting with adjustable tilt system. Made up with M10 bolt/ flange hexagon nut, EPDM pad Material: AL6005-T5	Standing seam clamp 3# 110mm T-support 110mm Bolt M10*35



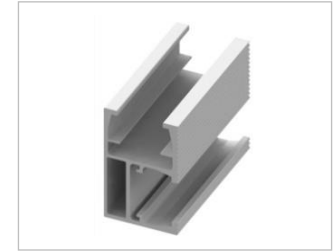
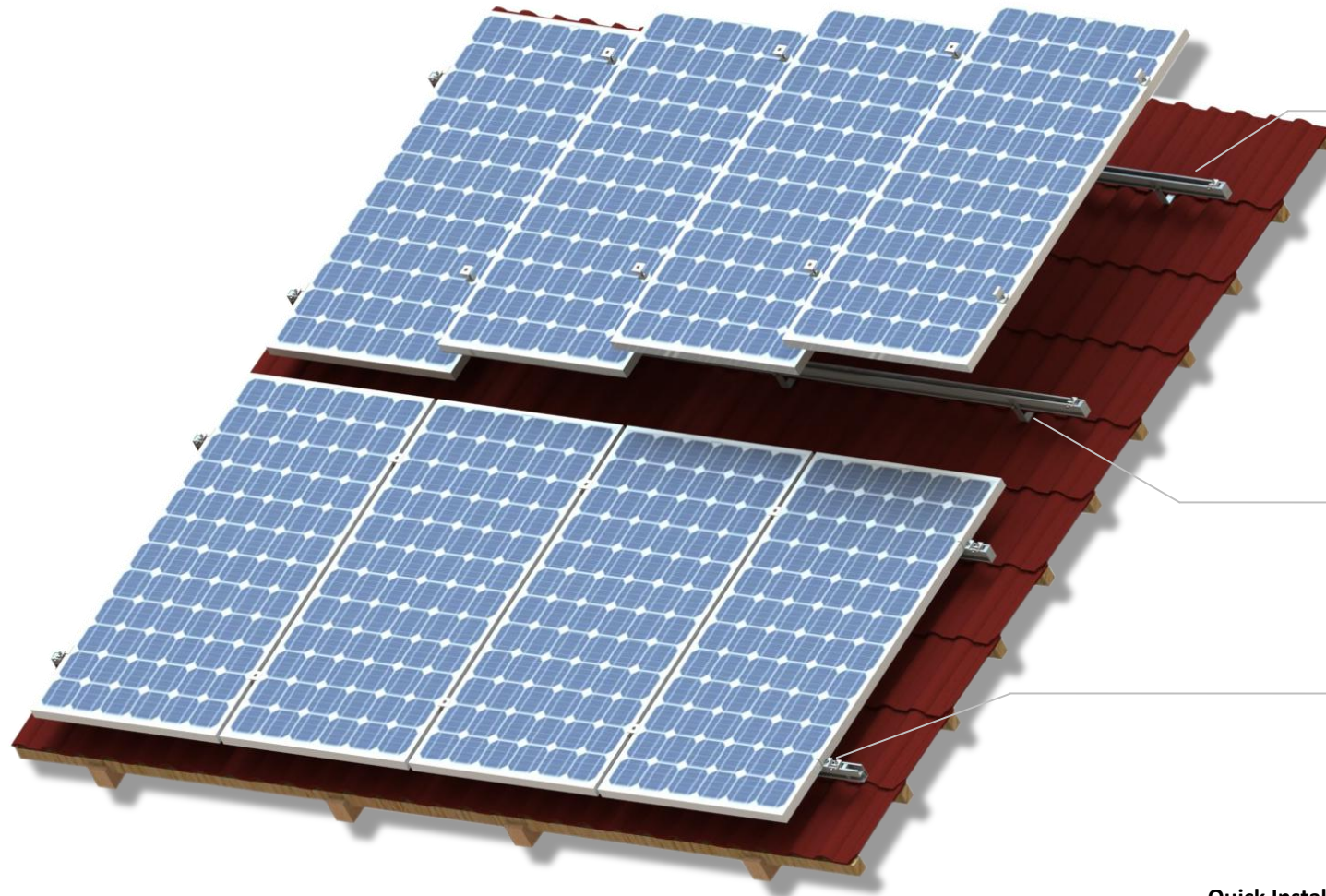
5. ADJUSTABLE TILT MOUNTS

1.6 Adjustable Tilt Mounts			
Item no.	Figure	Item	Comments
BE20-01		Adjustable Stand	Includes front base and back base, secure the railing on the roof and must be used with the supplied EPDM pad Material: AL6005-T5
			
BE20-02		Tilt kits	Adjusting the tightness of fastener in the square tube to get the angle you need. Material: AL6005-T5 Adjustable angle range from: 10° ~ 15°; 15° ~ 30°; 30° ~ 45°; 30° ~ 60°



6. MOUNTING STRUCTURE

6.1 Tile roof mounting system



Product Code: BER-01

- Widely use for any specification modules
- Various roof hooks to suit for different installation conditions
- Made from corrosion-resistant stainless steel/aluminum
- Typical designing with Pre-assemble component packs for minimum assembly time
- Customized solution is allowed

Quick Installation

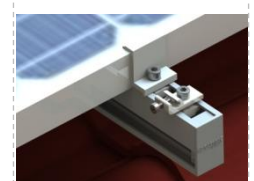
1. Fix the hook on the wood rafters with wood screw.



2. Put the aluminum rails on the top of roof hook, fixing it with nut and bolt.

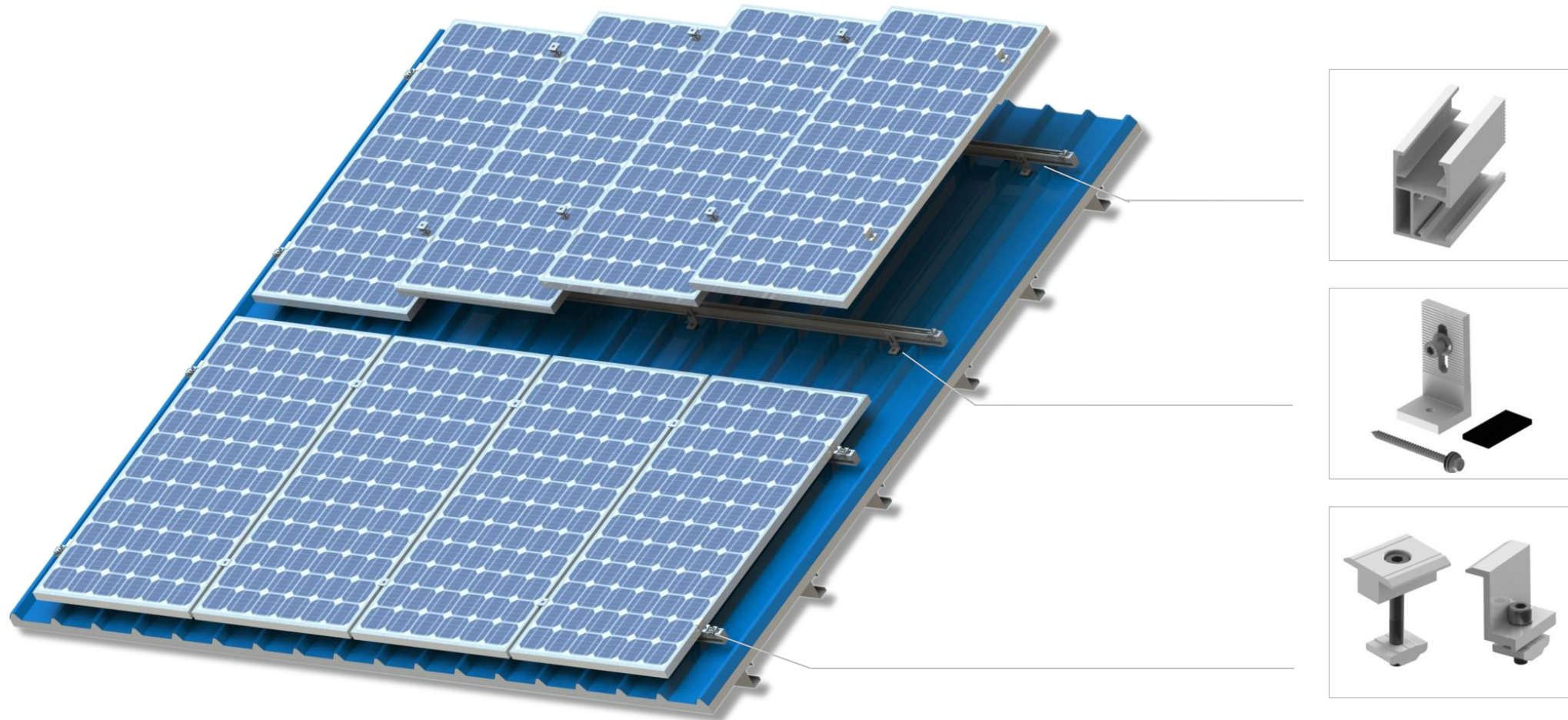


3. Fix the module on the rail by module clamp with bolt and nut.



6.2 Metal Roof Mounting system ("MRMS" for short)

6.2.1 MRMS with L-feet



Product Code: BER-02

- Widely use for any specification modules
- For corrugated sheet roofing
- Safety & Economical
- Preassembled for quick installation
- Components made from high quality aluminum, wood screw & EPDM pad

Quick Installation

1. Drill a hole from the roof surface then fasten the L foot to the hole by wood screw.



2. Insert the nut into the rail channel, and fasten the bolt and nut to fix the rail.



3: Fix the module on the rail by module clamp with bolt and nut.

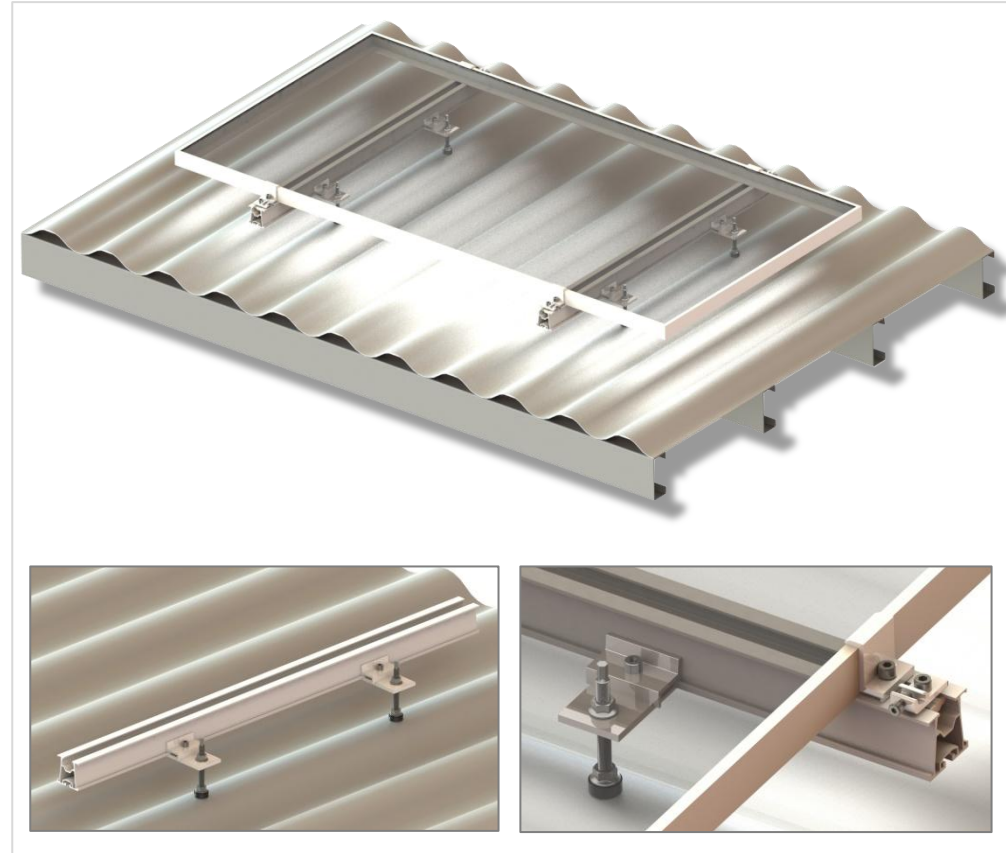


6.2.2 MRMS with Hanger bolt & L-bracket



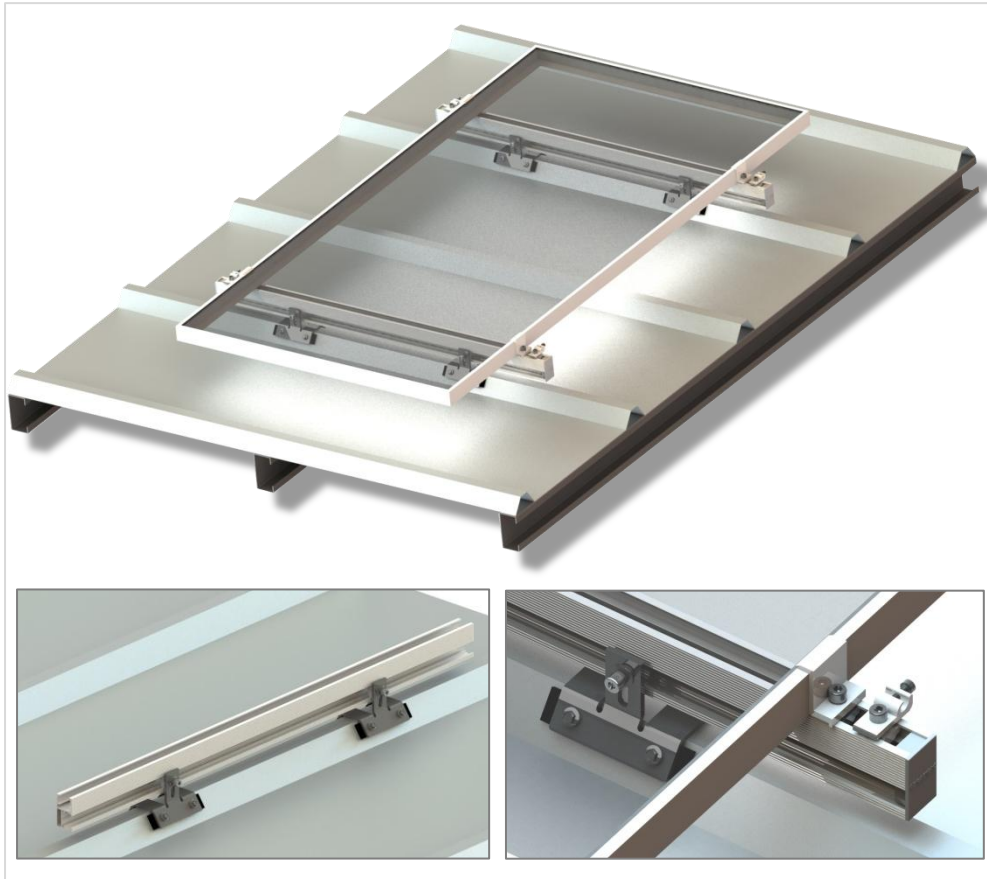
- Product Code: BER-03**
- Connecting I Rail for corrugated roofs with L-bracket
 - Preassembled, flexible designing save installation time
 - Height is easy to adjust
 - Widely use for any specification modules
 - Comprising a special hanger bolt with high quality aluminum, EPDM sealing and L-bracket

6.2.3 MRMS with Hanger bolt & Adapter plate



- Product Code: BER-04**
- Connecting Base Rail for corrugated or trapezoidal sheet metal roofs with mounting plate.
 - Preassembled, flexible designing save installation time
 - Height is easy to adjust
 - Widely use for any specification modules
 - Slot for easy connection to base rail with mounting plate
 - Customized solution is allowed

6.2.4 MRMS with Trapezoidal clamp 1#



Product Code: BER-05

- Connecting I Rail for trapezoidal sheet metal roofs.
- Preassembled for quick installation
- Widely use for any specification modules
- Aluminum and stainless-steel parts with EPDM pad to be highly corrosion-resistant
- For direct fastening to the trapezoidal corrugated metal roof with self tapping screw.

6.2.5 MRMS with Trapezoidal clamp 2#



Product Code: BER-06

- Connecting I Rail for trapezoidal sheet metal roofs.
- Preassembled for quick installation
- Widely use for any specification modules
- Aluminum and stainless-steel parts with EPDM pad to be highly corrosion-resistant
- For direct fastening to the trapezoidal corrugated metal roof with self tapping screw.

6.2.6 MRMS with Trapezoidal clamp 3#



Product Code: BER-07

- Connecting Base Rail for trapezoidal sheet metal roofs.
- Preassembled for quick installation
- Widely use for any specification modules
- Aluminum and stainless-steel parts with EPDM pad to be highly corrosion-resistant
- For direct fastening to the trapezoidal corrugated metal roof with self tapping screw.

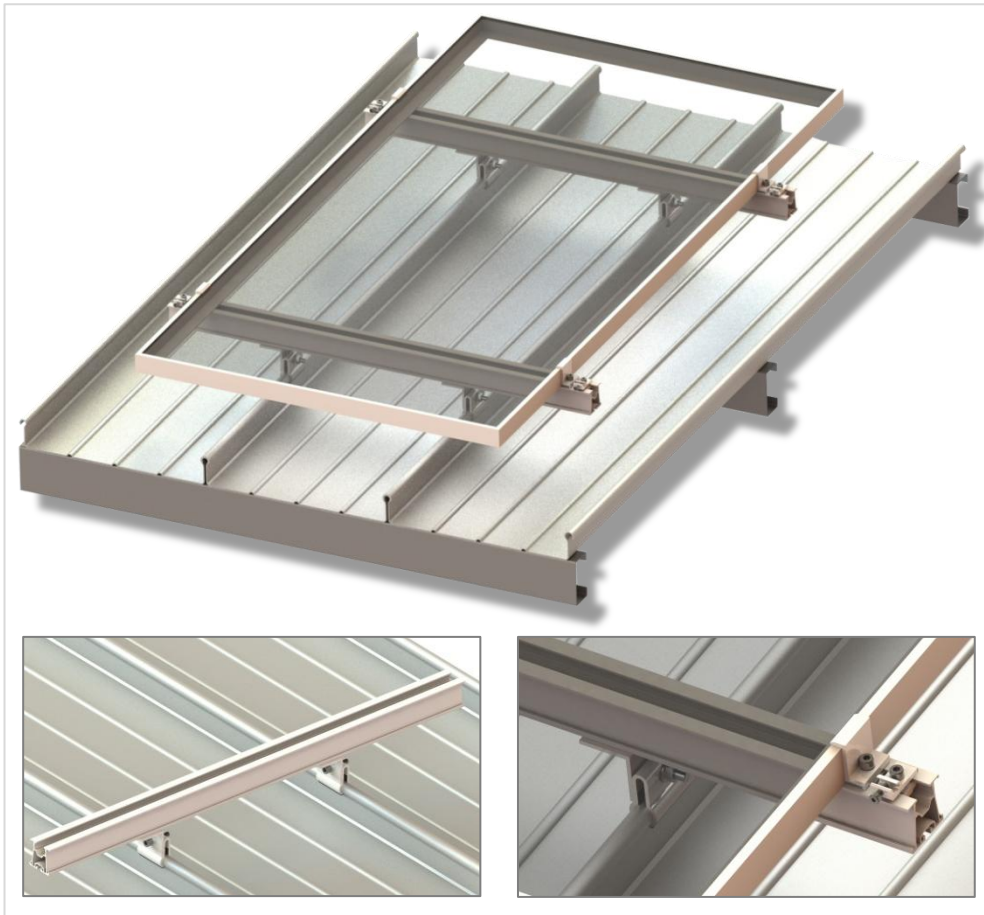
6.2.7 MRMS with Standing seam clamp 1#



Product Code: BER-08

- Connecting Base Rail for Butler Roof
- Preassembled for quick installation
- Widely use for any specification modules
- Firmly secured with highly water-proof
- The roof membrane is not damaged

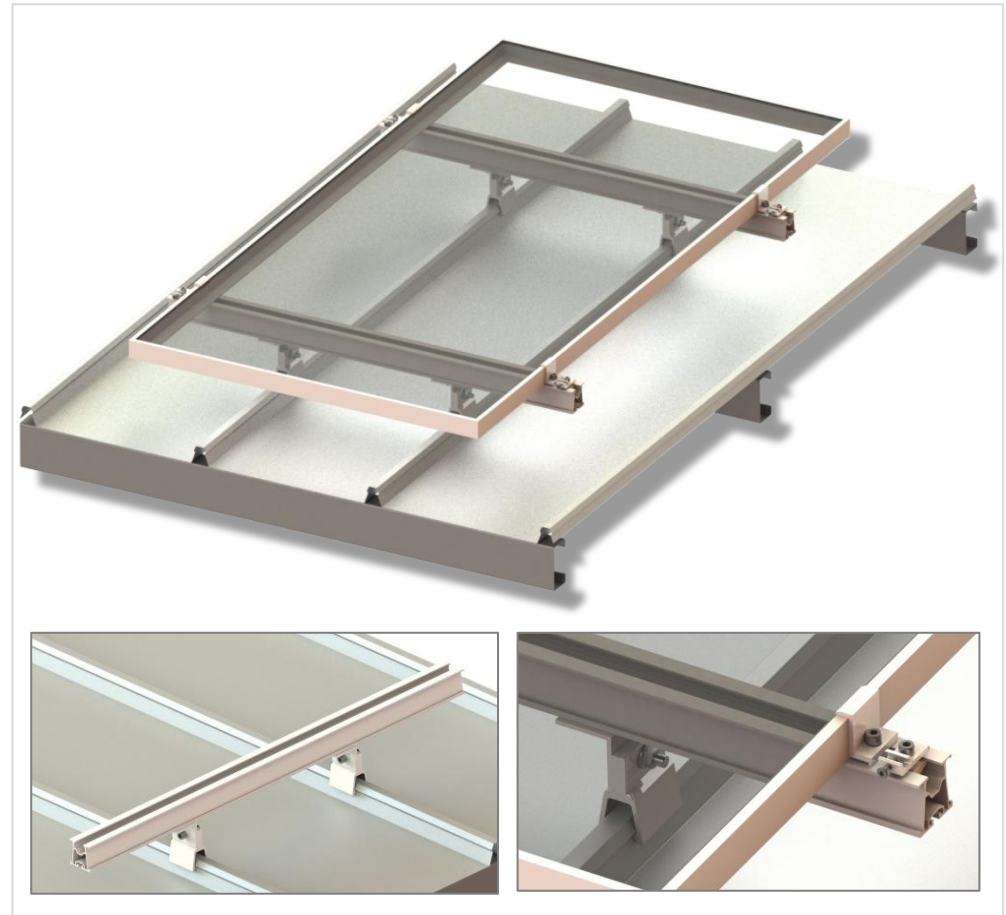
6.2.8 MRMS with Standing seam clamp 2#



Product Code: BER-09

- Connecting Base Rail for KalZip or BEMO roof.
- Preassembled for quick installation
- Widely use for any specification modules
- Firmly secured with highly water-proof
- The roof membrane is not damaged

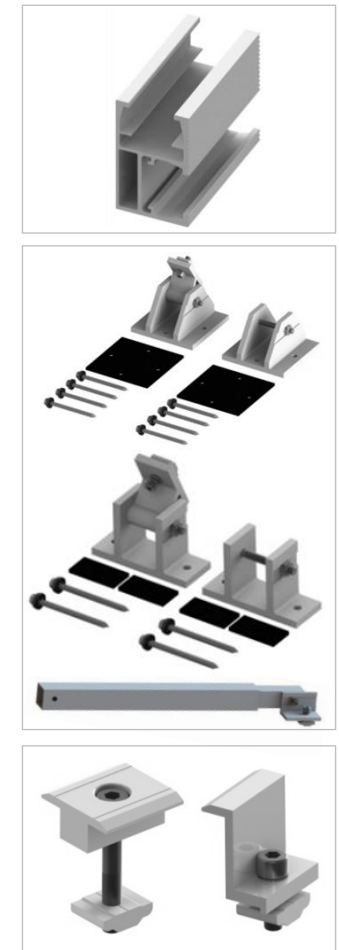
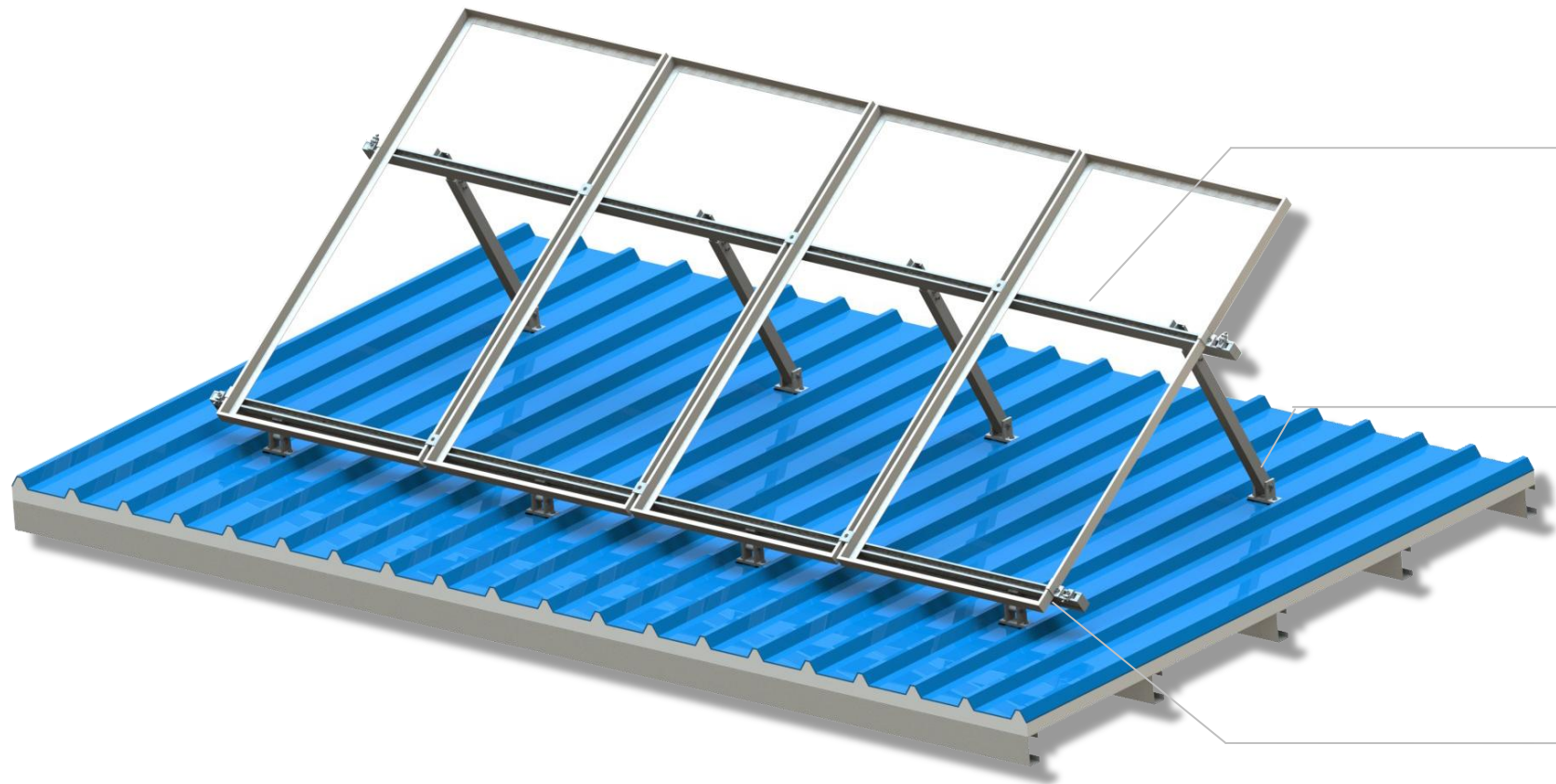
6.2.9 MRMS with Standing seam clamp 3#



Product Code: BER-10

- Connecting Base Rail for Zambelli RibRoof
- Preassembled for quick installation
- Widely use for any specification modules
- Firmly secured with highly water-proof
- The roof membrane is not damaged

6.3 Adjustable tilt system



Product Code: BER-11

- Suitable for various metal roofs with adjustable angle.
- Combing with tilt kits attaching directly to the I-rail.
- Each assembly kit performs strong locking force
- Retractable adjustment
- Corrosion resistant aluminum components
- Strong base and tilt kit to enhance the stability of whole system
- High-quality materials for long service life

Quick Installation

1. Fasten the adjustable stand to the hole by wood screw, install the tilt kits on back base



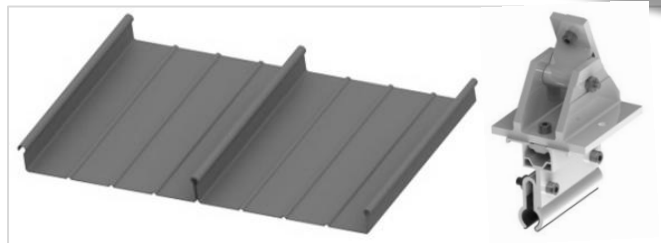
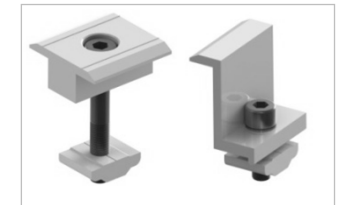
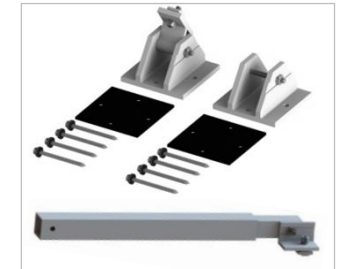
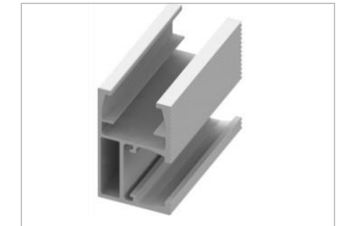
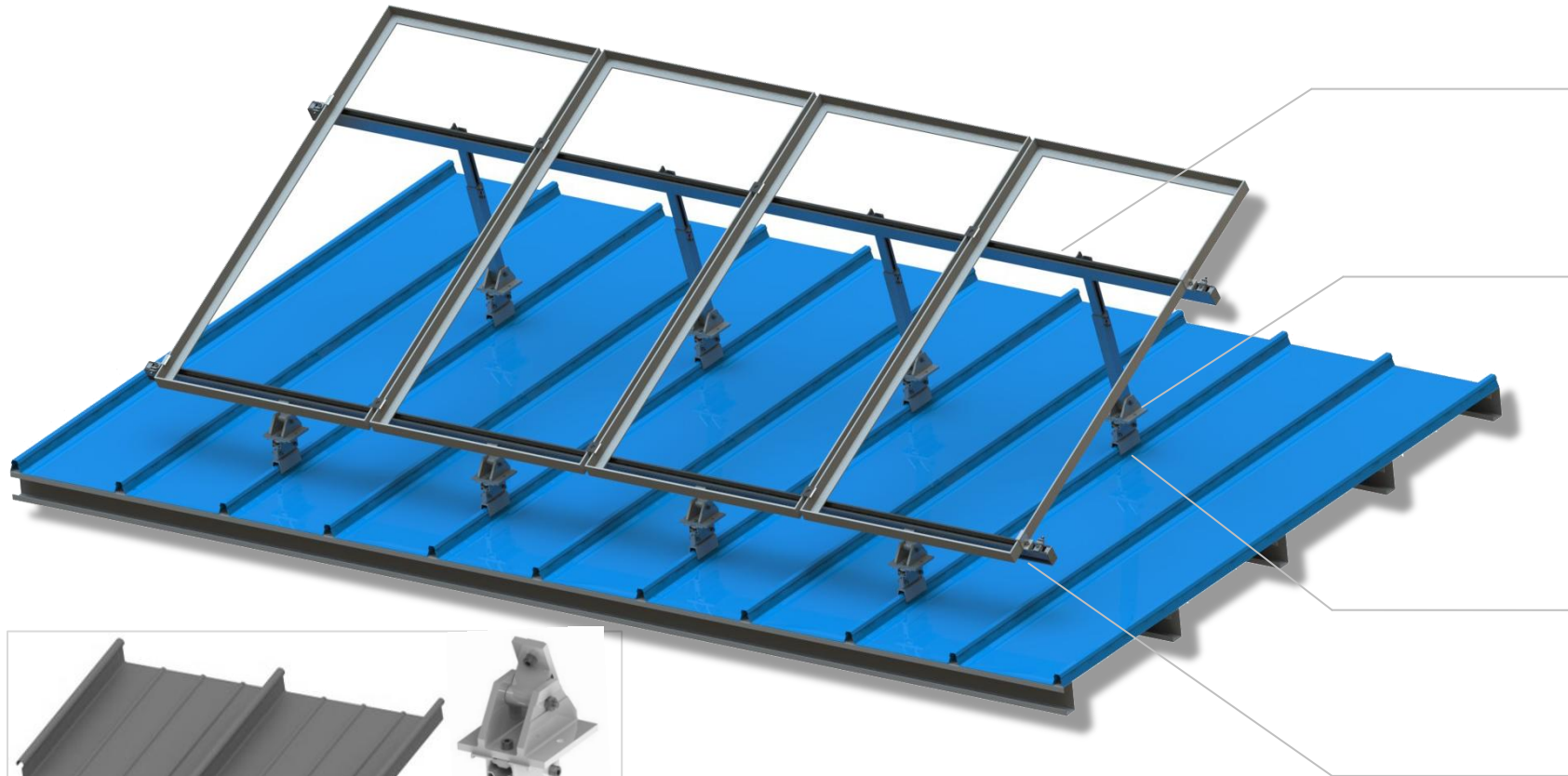
2. Insert the nut of tilt leg into the rail channel, and fasten the bolt and nut to fix the rail.



3. Fix the module on the rail by module clamp with bolt and nut.



6.4 Adjustable tilt system with Standing seam clamp



Product Code: BER-12

- Combing adjustable stand with standing seam clamp by T-support
- Suitable for KalZip/BEMO roof(or Zambelli RibRoof)with adjustable angle.
- Each assembly kit performs strong locking force
- Retractable adjustment
- Corrosion resistant aluminum components
- Strong base and tilt kit to enhance the stability of whole system
- High-quality materials for long service life

Quick Installation

1. Fix the standing seam clamps on the roof, fasten the adjustable stand on them, install the tilt kits on back base



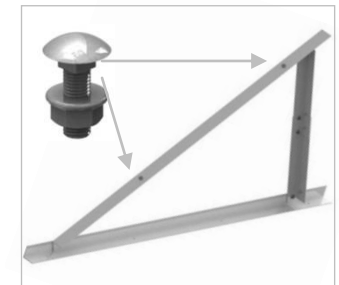
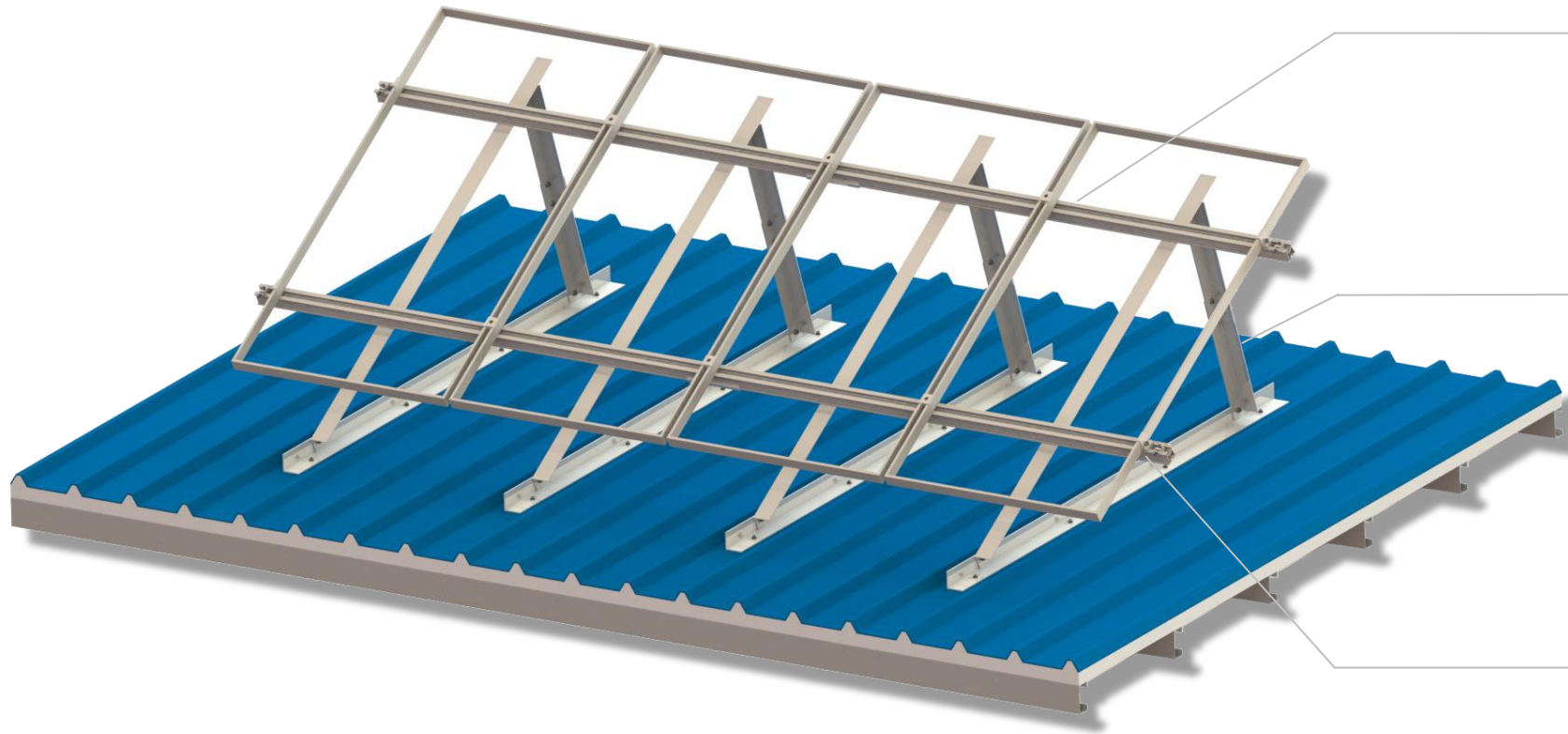
2. Insert the nut of tilt leg into the rail channel, and fasten the bolt and nut to fix the rail.



3. Fix the module on the rail by module clamp with bolt and nut.



6.5 Triangle mounting system



Product Code: BER-13

- Suitable for flat and pitched roofs
- Customized angle allowed
- Preassembled components to ensure quick assembly time
- Widely use for any specification modules
- High-quality materials for long service life

Quick Installation

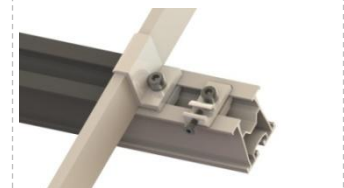
1. Fix triangle leg on the roof by wood screw.



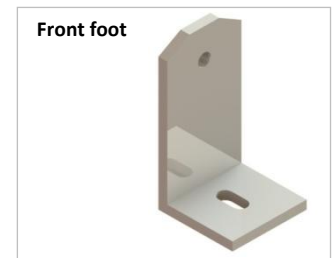
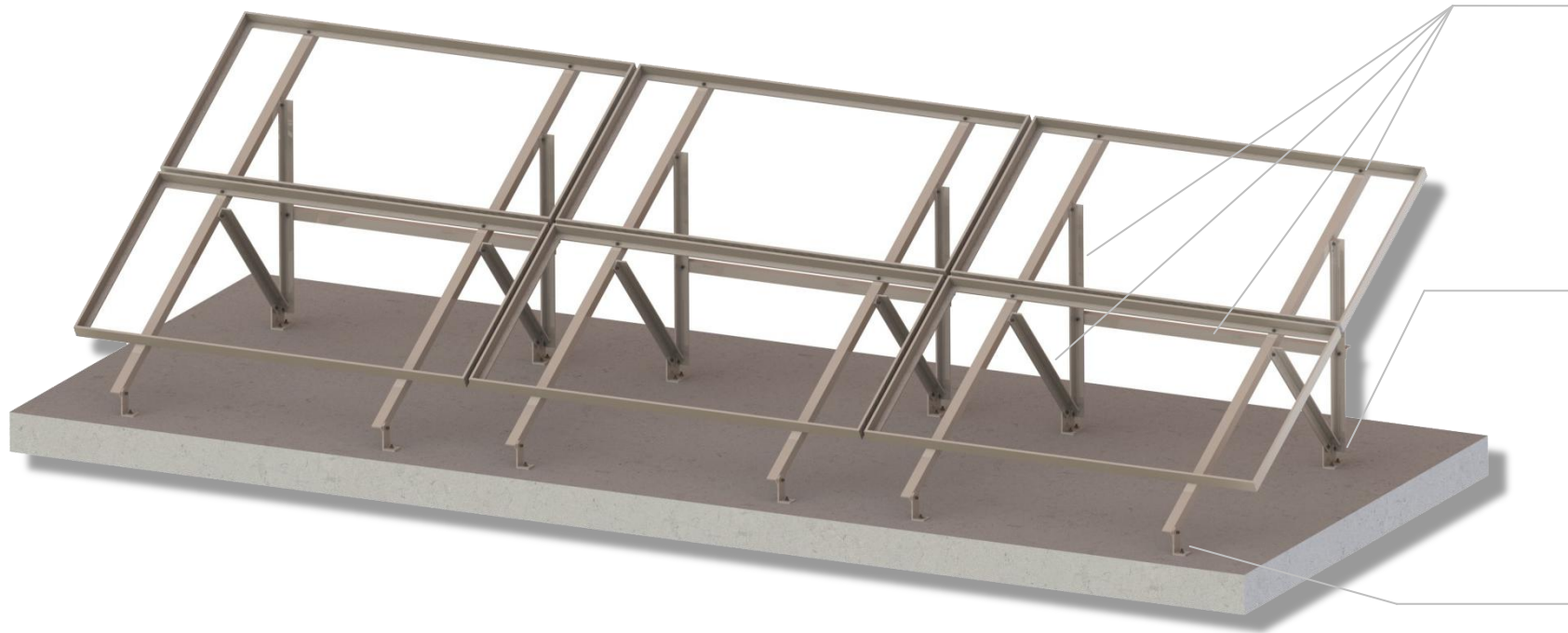
2. Install Base rail on triangle legs by cup square bolt and flanged nut.



3: Fix the module on the rail by module clamp with bolt and nut.



6.5 PVK Mounting System



Product Code: BEG-01

- Suitable for open ground
- Customized angle allowed
- Pre-Assemble & Time saving
- Solid structure, do not need I-rails.
- Widely use for any specification modules
- No tile cutting, no tile drilling
- High-quality materials for long service life

Quick Installation

1. Fix solar panels on the main support by bolts.



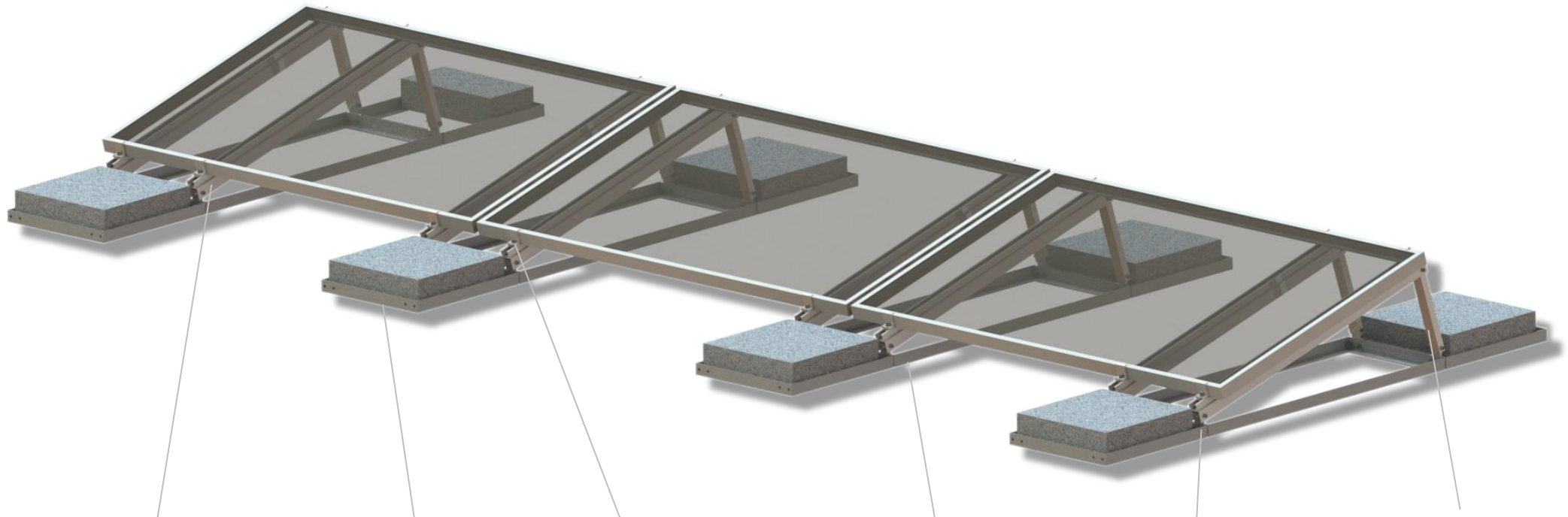
2. Install front foot, back foot and back structure.



3. Fasten the fixed solar panels on the structure.



6.4 Ballasted mounting system

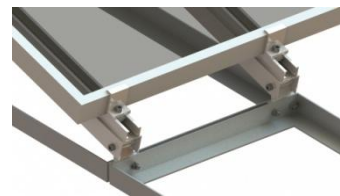


Product Code: BER-14

- Suitable for flat roofs, especially for bituminous and membrane roofs with limited load bearing capacity.
- Non-penetrating with flexible ballast
- Typically designing for easy and quick installation
- No damage to the roof.
- Pre-assembly EPDM protection pad for corrosion resistant
- Unimpeded water flow

Quick Installation

1. Fasten the adjustable stand to the hole by wood screw, install the tilt kits on back base



2. Insert the nut into the rail channel, and fasten the bolt and nut to fix the rail.



3: Fix the module on the rail by module clamp with bolt and nut.

