

Profile Length -> 6,20m

Profile weight -> 810g/m



Mounting rail P1

Article code: P1

Aluminium mounting rail for solar modules assembly. It can be used for cross-mounting using PCON02 connectors. **The maximum rail span width 1,5m depending on snow zones.** MCL1-C1, MCL2-C3, ECL1-C1 and ECL2-C3 clamps can be mounted on this profile. At the bottom part of the profile goes screw M10 or T-bolt, which is fixed to roof hook or some other bracket. Profile length is 6.2 m, but can be cut to the size per customer's request.

Figure 1

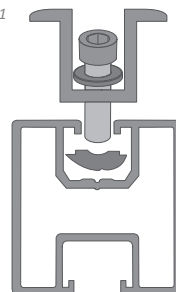
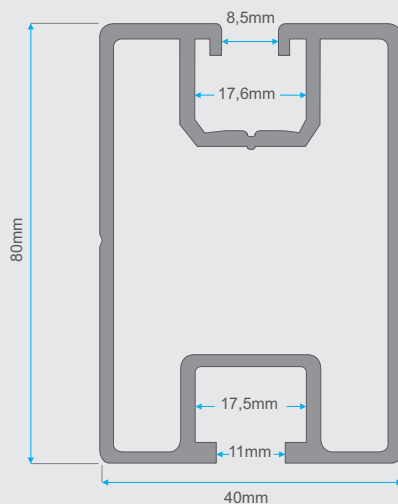
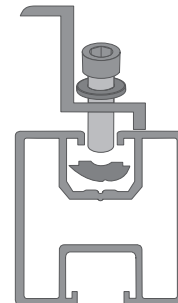


Figure 2



Profile Length -> 6,10m

Profile weight -> 1253g/m



Mounting rail P2

Article code: P2

Aluminium mounting rail with higher load capacity for solar modules mounting with larger spacing between the hooks or brackets. **The maximum rail span width 2,5 m depending on snow zones.** MCL1-C1, MCL2-C3, ECL1-C1 and ECL2-C3 clamps can be mounted on this model. At the bottom of the profile goes screw M10 or T-bolt, which is fixed to roof hook or some other bracket. Length 6.1 m, can be cut to the size per customer's request.

Figure 3

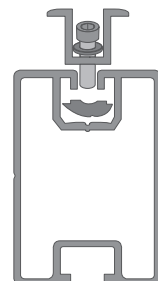
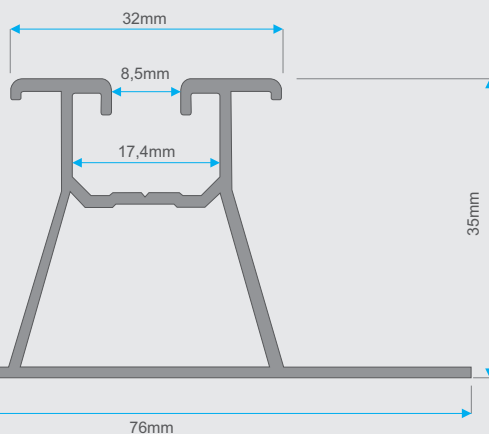
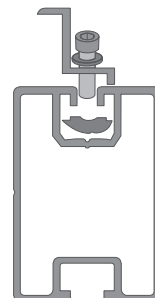


Figure 4



Profile Length -> 6,20m

Profile weight -> 700g/m



Mounting rail P35 for trapezoidal metal roof

Article code: P35

Aluminium mounting rail for trapezoidal metal roof. MCL1-C1, MCL2-C3, ECL1-C1 and ECL2-C3 clamps can be mounted on this model. Length is 6.2 m, can be cut to the size per customer's request.

Figure 5

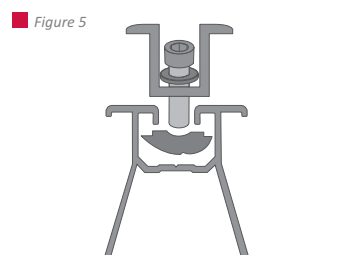
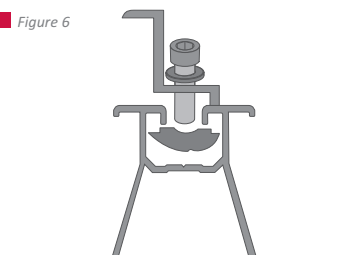
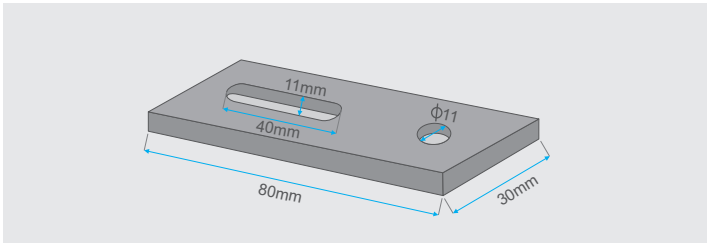


Figure 6

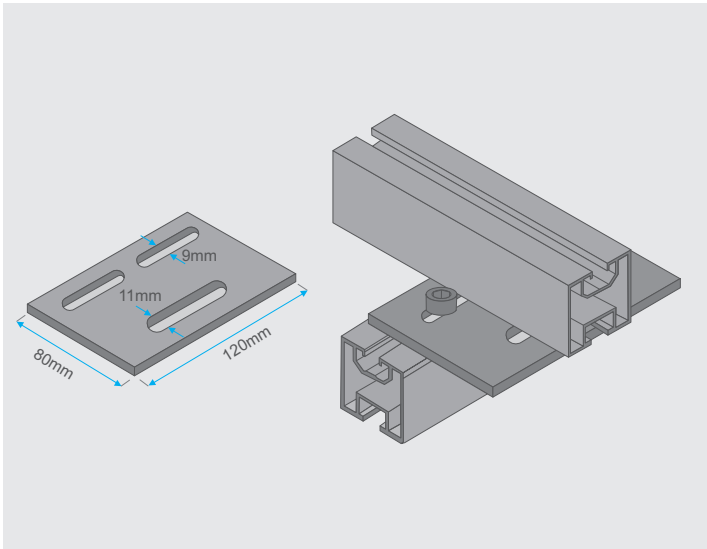




Adapter plate for hanger bolt

Article code: SP1

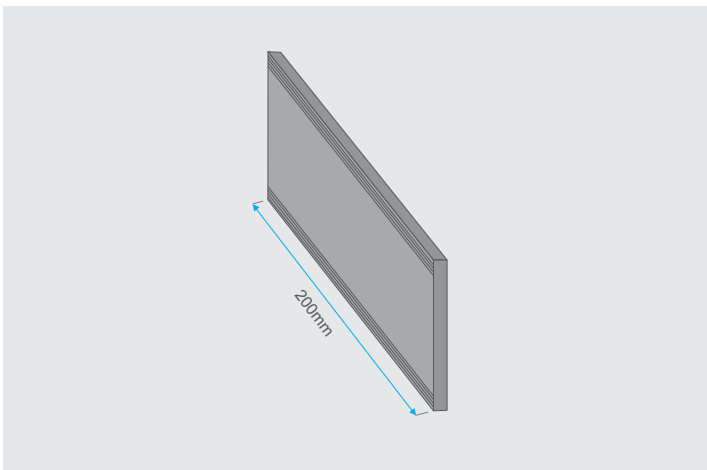
Adapter plate with $\Phi 11$ hole and slot 11x40mm, material stainless steel. Dimensions 30x80mm, thickness 5mm



Rail cross joint connector PCON02 for cross - connection of profiles (double construction)

Article code: PCON02

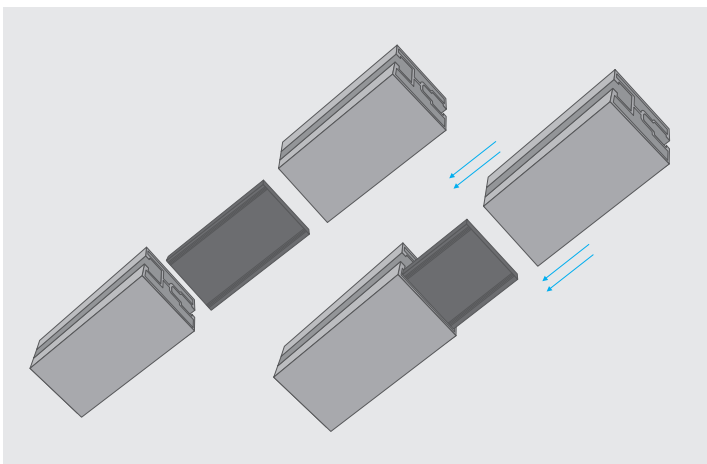
Aluminum rail connector for cross-connection (cross-bracing) of profiles. Under the upper profile goes hexagonal or T-bolt M10 and above the lower profile goes 2 allen screw M8, 16mm long and 2 roll in T-slot nut.



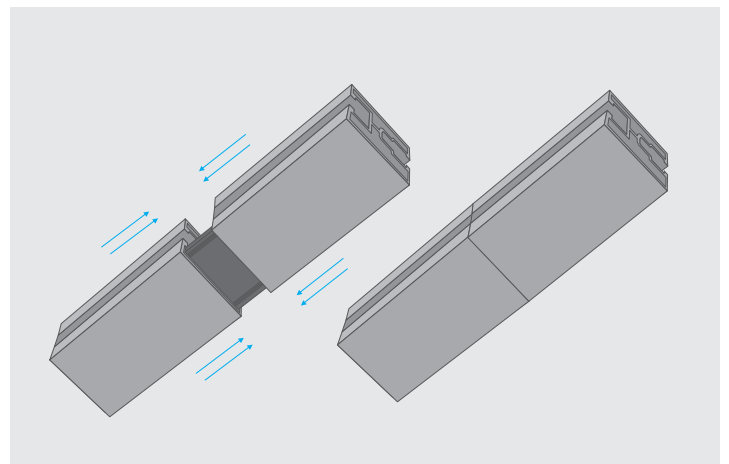
Rail connector PCON04 for connection of mounting rail P1

Article code: PCON04

Aluminum plate, length 200mm, for connection of two profiles P1, does not require any screws. The plate needs only to be inserted into the slot.



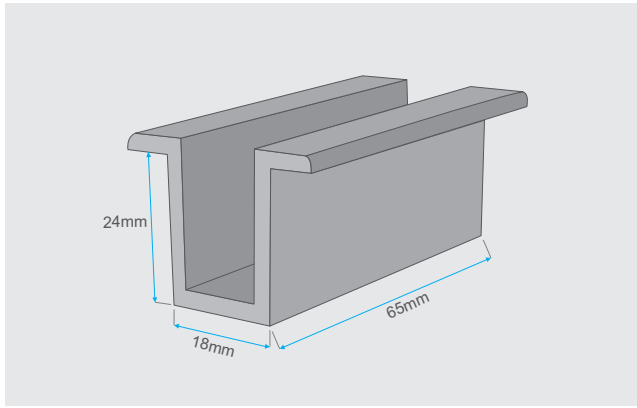
■ demonstration of connection with PCON04 rail connector



■ rails connected with PCON04 rail connector

CLAMP FOR MODULES

2



Middle clamp MCL1

Article code: MCL1

Middle clamp for module without screws and bolts.

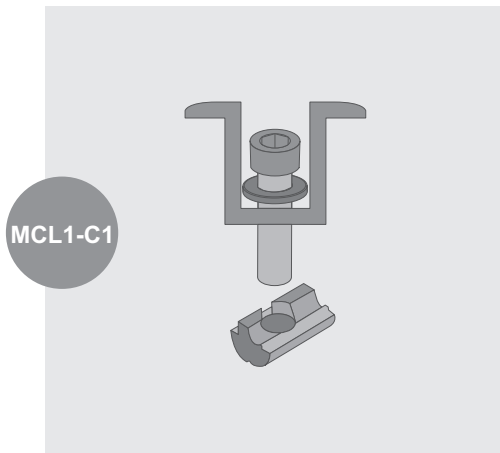
Middle clamp set

The set consists of the Aluminum clamp, allen screw M8, roll in T-slot nut.

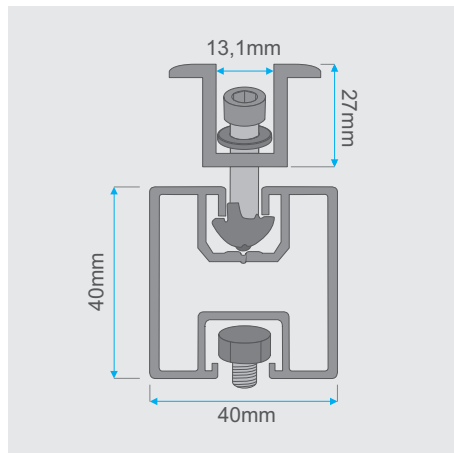
Clamp for module can be mounted on various profile types. It is mounted on rails in three different versions, depending on the type of rails.

MCL1-C1 - clamp is mounted with the pin, no need to be pulled into the slot from the end of the profile, can be inserted to any position.

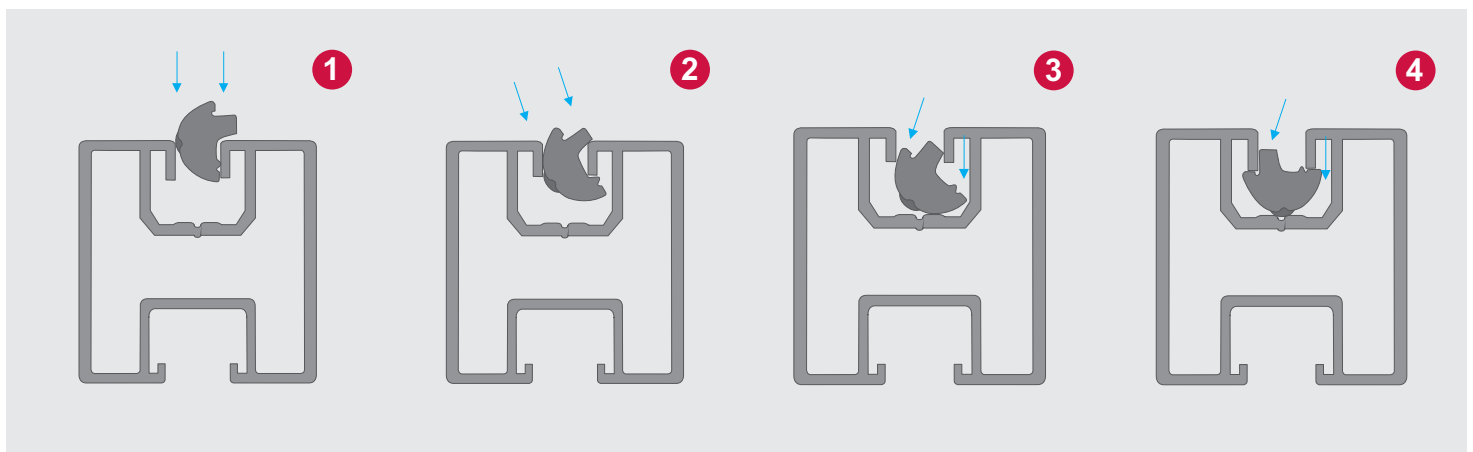
| Model | Modul | M8 allen screw |
|------------|-------|----------------|
| MCL1-C1-35 | 35mm | 25mm |
| MCL1-C1-40 | 40mm | 30mm |
| MCL1-C1-42 | 42mm | 30mm |
| MCL1-C1-45 | 45mm | 35mm |
| MCL1-C1-46 | 46mm | 35mm |
| MCL1-C1-50 | 50mm | 40mm |



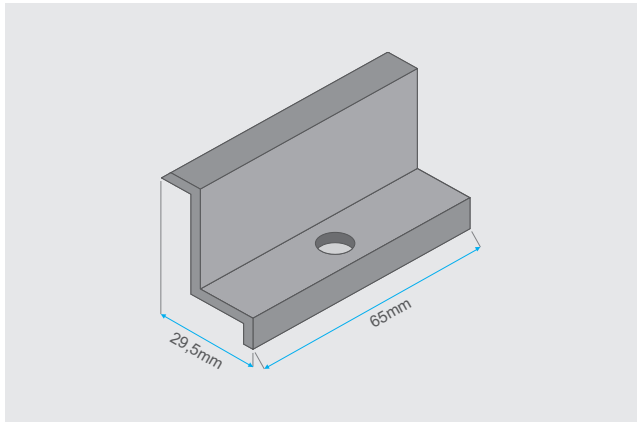
■ clamp set with the pin



■ clamp set with the pin mounting on P1 rail



■ demonstration of mounting on P1 rail



End clamp ECL1

Article code: ECL1

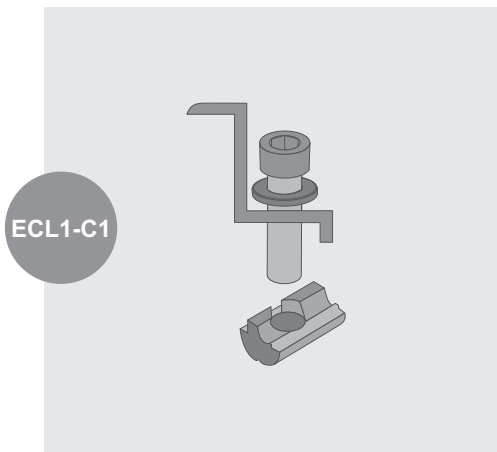
End clamp for module without screws and bolts.

End clamp set

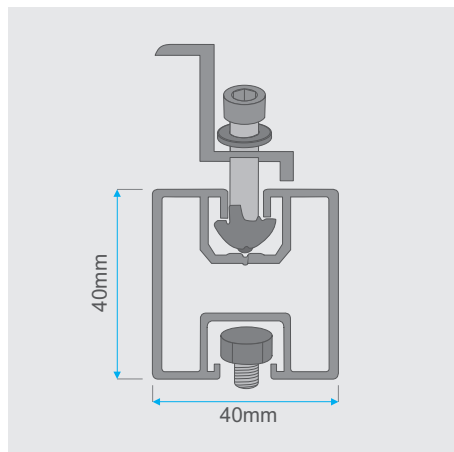
The set consists of the aluminum clamp, allen screw M8, roll in T-slot nut.

Clamp for module can be mounted on various profile types. It is mounted on rails in four different versions, depending on the type of rails.

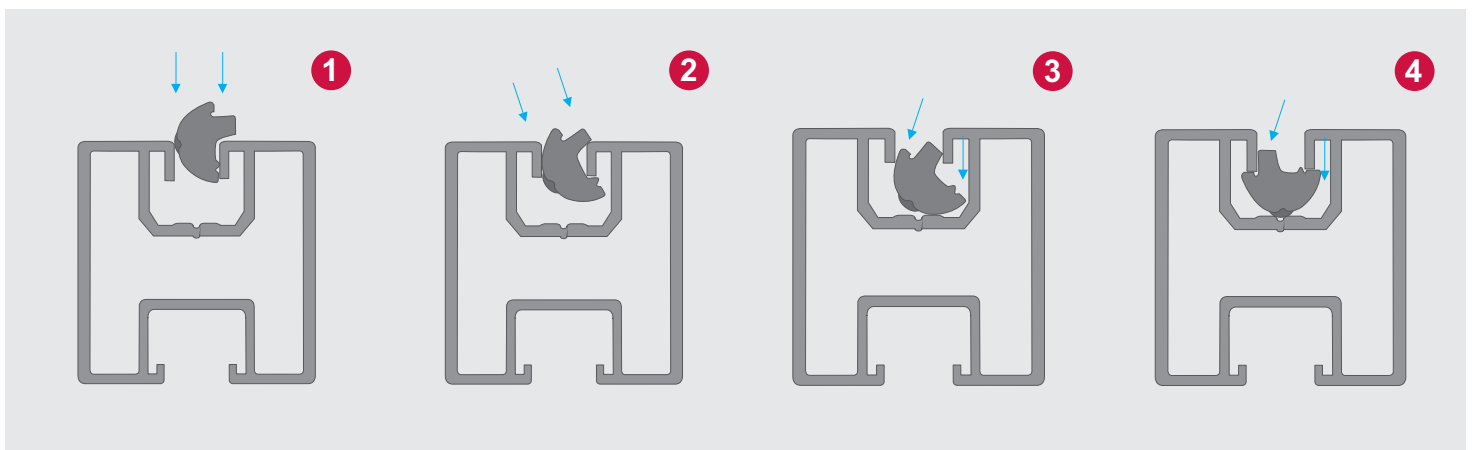
| Model | Modul | M8 allen screw |
|------------|-------|----------------|
| ECL1-C1-35 | 35mm | 20mm |
| ECL1-C1-40 | 40mm | 20mm |
| ECL1-C1-42 | 42mm | 20mm |
| ECL1-C1-45 | 45mm | 20mm |
| ECL1-C1-46 | 46mm | 20mm |
| ECL1-C1-50 | 50mm | 20mm |



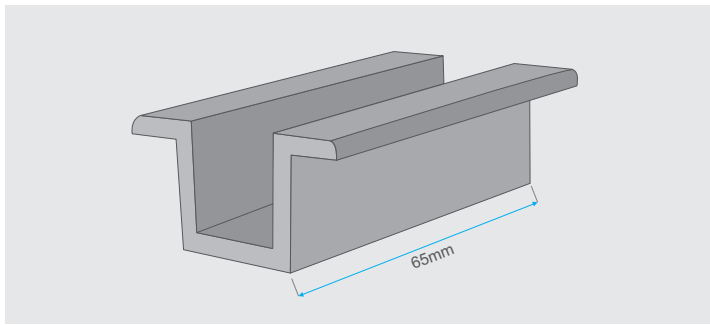
■ clamp set with the pin



■ clamp set with the pin mounting on P1 rail



■ demonstration of mounting on P1 rail



Middle clamp MCL2

Article code: MCL2

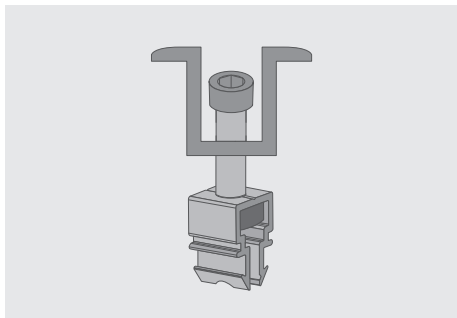
Middle clamp for module without screws and bolts.

Middle clamp set with clip

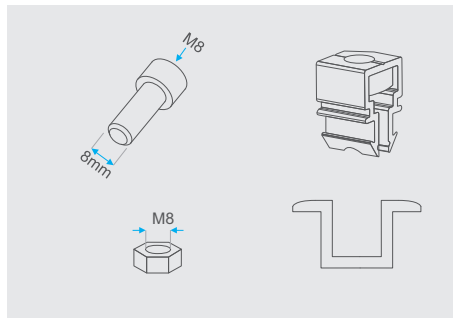
Middle clamp set for modules with „click“ pin for ULTRA FAST MOUNTING, just one click is sufficient and clamp is mounted on aluminium mounting rail. Fastest clamp mounting system on the market.

ULTRA FAST
ASSEMBLY

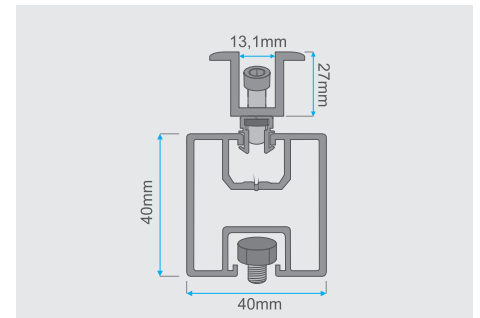
| Model | Modul | M8 allen screw |
|------------|-------|----------------|
| MCL2-C3-35 | 35mm | 30mm |
| MCL2-C3-40 | 40mm | 35mm |
| MCL2-C3-42 | 42mm | 40mm |
| MCL2-C3-45 | 45mm | 40mm |
| MCL2-C3-46 | 46mm | 40mm |
| MCL2-C3-50 | 50mm | 45mm |



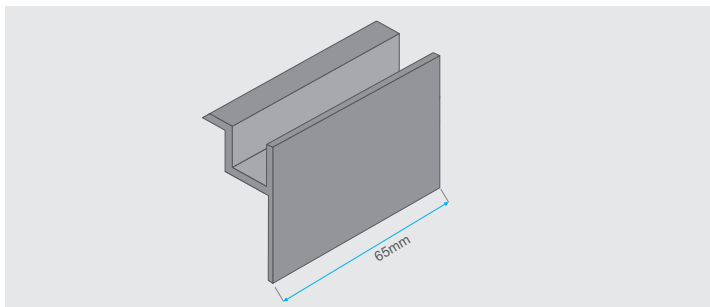
■ clamp set with „click“ pin



■ section of clamp set with a „click“ pin



■ clamp set with „click“ pin mounted on rail P1, also possible mounting on rail P2



End clamp ECL2

Article code: ECL2-C3-35, ECL2-C3-40, ECL2-C3-42, ECL2-C3-45, ECL2-C3-46, ECL2-C3-50

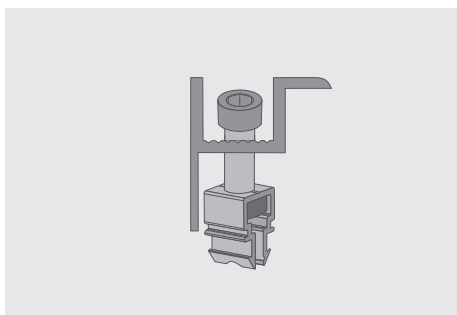
End clamp for module without screws and bolts.

End clamp set with clip

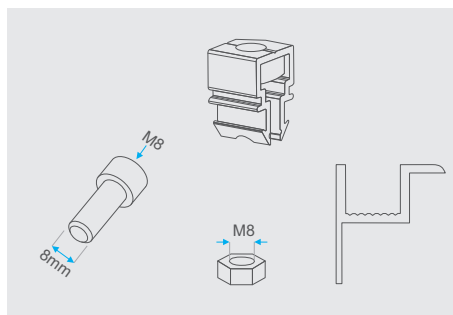
End clamp set for modules with „click“ pin for ULTRA FAST MOUNTING, just one click is sufficient and clamp is mounted on aluminium mounting rail. Fastest clamp mounting system on the market.

ULTRA FAST
ASSEMBLY

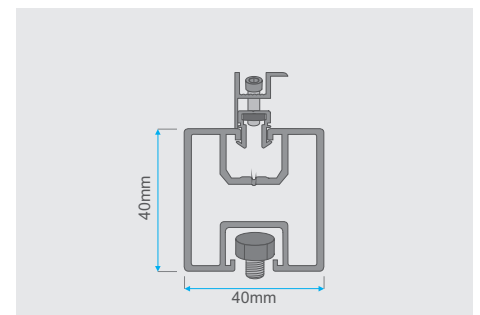
| Model | Modul | M8 allen screw |
|-------------|-------|----------------|
| ECL2-C3-35C | 35mm | 20mm |
| ECL2-C3-40C | 40mm | 25mm |
| ECL2-C3-42C | 42mm | 40mm |
| ECL2-C3-45C | 45mm | 45mm |
| ECL2-C3-46C | 46mm | 45mm |
| ECL2-C3-50C | 50mm | 50mm |



■ clamp set with „click“ pin



■ section of clamp set with a „click“ pin

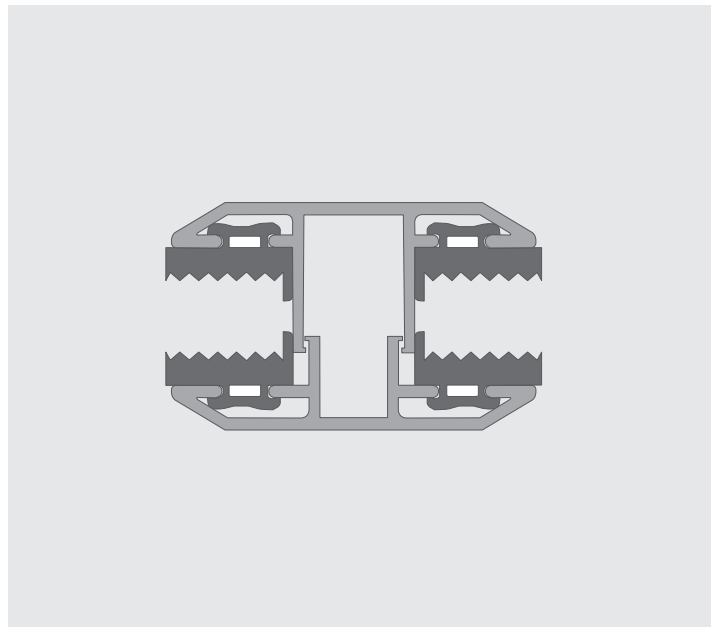
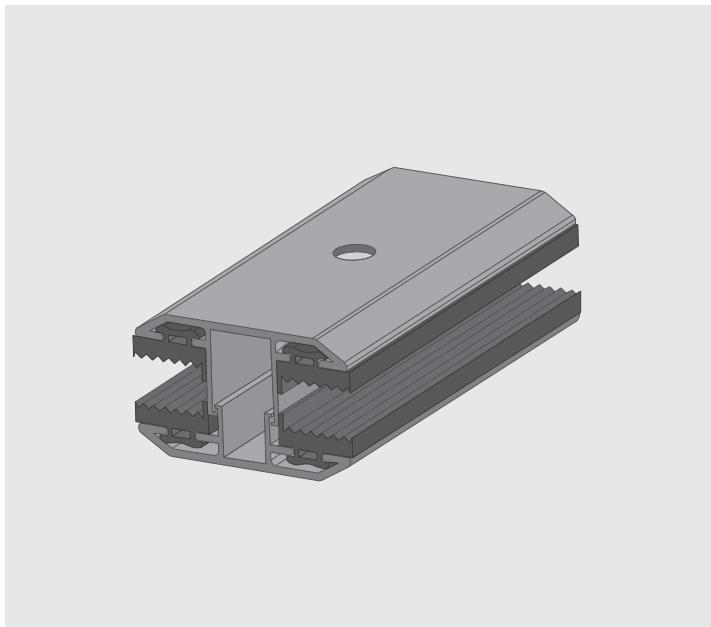


■ clamp set with „click“ pin mounted on rail P1

Middle clamp for thin film modules

Article code: **TFMC1**

The possibility to use modules with different thickness. Suitable for all types of thin film modules glass / glass.

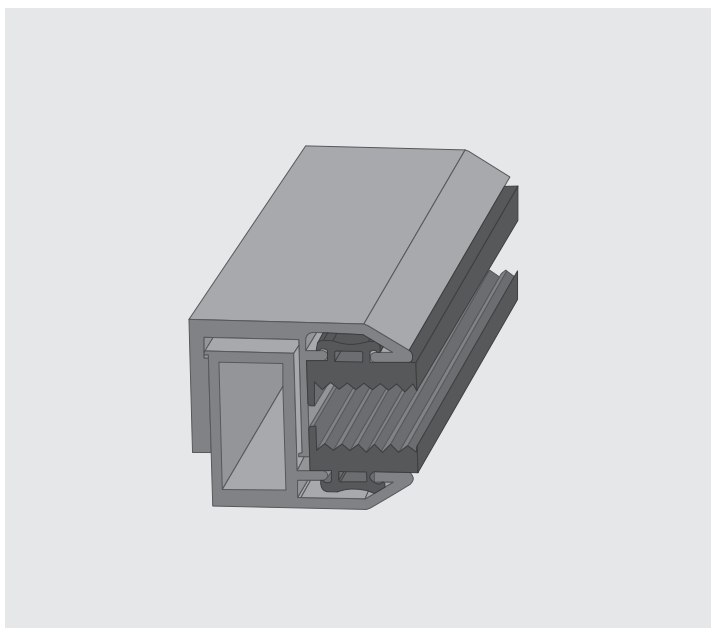


■ section of middle clamp for thin film

End clamp for thin film modules

Article code: **TFEC1**

The possibility to use modules with different thickness. Suitable for all types of thin film modules glass / glass.

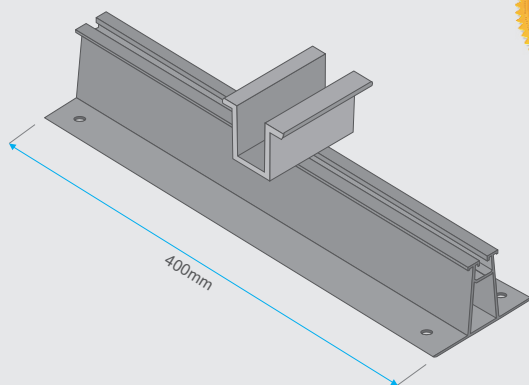


■ section of end clamp for thin film

MINI RAILS

3

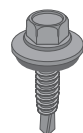
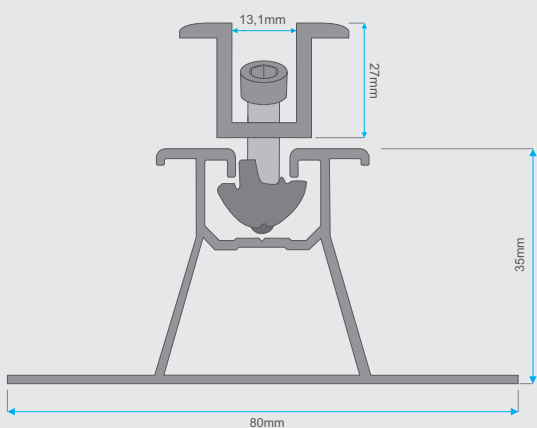
**BEST
SELLER**



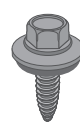
Mini rail set middle - ORIENTATION PORTRAIT

Article code: MP1 (middle clamp)

MINI RAIL SET MIDDLE-ORIENTATION PORTRAIT for mounting modules on trapezoidal roof in *PORTRAIT* position (longer side of the module goes longitudinal on trapezoidal roof) by drilling with self-drilling bolts on the raised peak (self-drilling screws are not included). The set consists of aluminium profiles drilled at four places (covers two raised peaks), set module clamp (end or middle), EPDM tape under the profile, where the holes are located. Details of the assembly in pictures 7 and 8. Middle clamp set – consists of Aluminium clamp, allen screw M8 35mm INOX, plates with thread M8 and spring,). Mini profile may be longer and with more holes, then the price is higher. It may also be shorter and the price is lower.



SD 5,5x25



TS 6x25 thin sheet

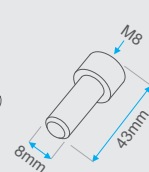
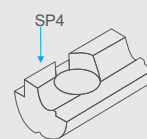


Figure 7

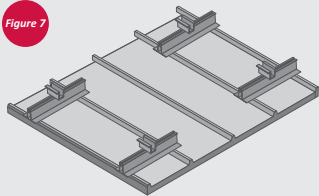
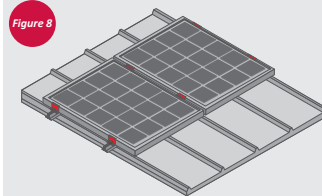
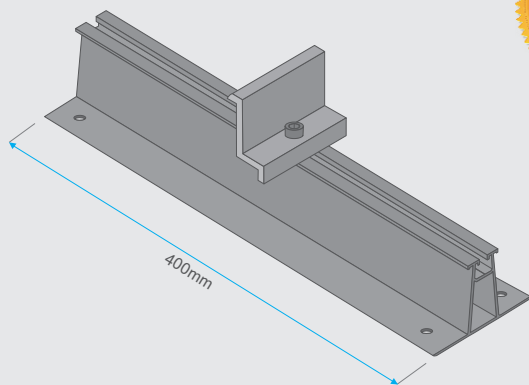


Figure 8



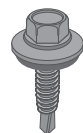
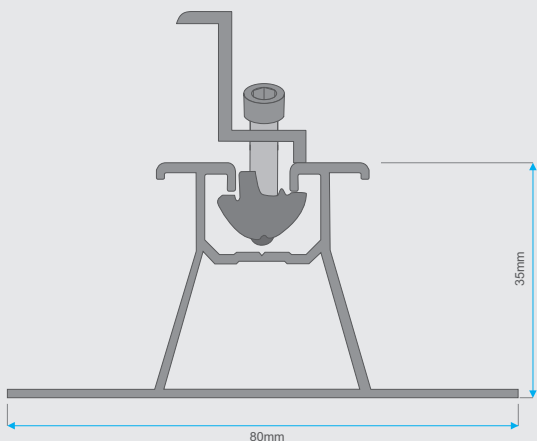
**BEST
SELLER**



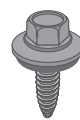
Mini rail set end - ORIENTATION PORTRAIT

Article code: MP2 (end clamp)

MINI RAIL SET END-ORIENTATION PORTRAIT for mounting modules on trapezoidal roof in *PORTRAIT* position (longer side of the module goes longitudinal on trapezoidal roof) by drilling with self-drilling bolts on the raised peak (self-drilling screws are not included). The set consists of aluminium profiles drilled at four places (covers two raised peaks), set module clamp (end or middle), EPDM tape under the profile, where the holes are located. Details of the assembly in pictures 9 and 10. End clamp set – consists of Aluminium clamp, allen screw M8 35mm INOX, plates with thread M8 and spring. Mini profile may be longer and with more holes, then the price is higher. It may also be shorter and the price is lower.



SD 5,5x25



TS 6x25 thin sheet

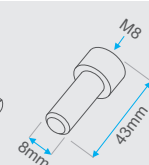
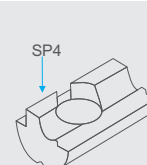


Figure 9

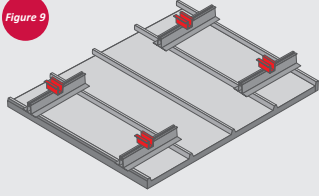
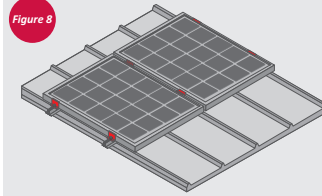
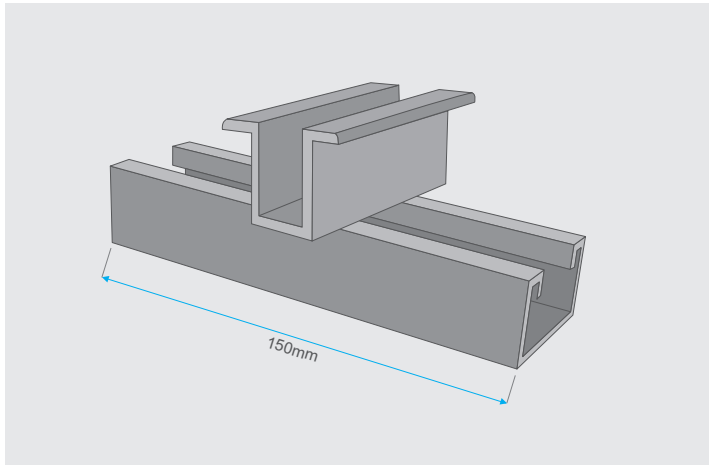


Figure 8

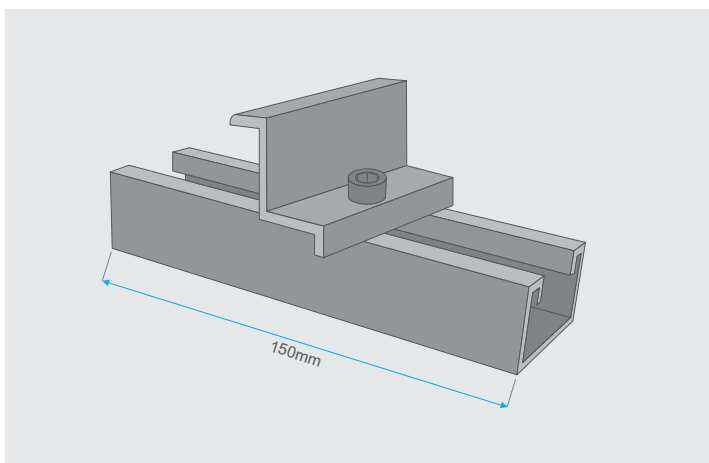
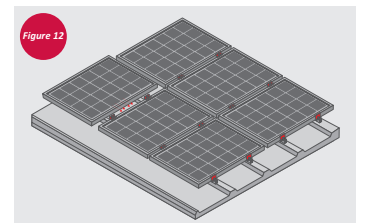
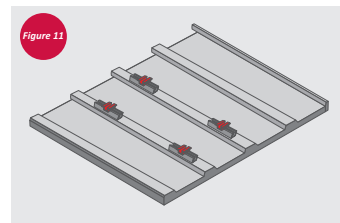
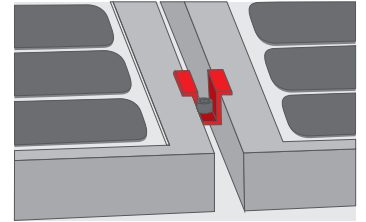
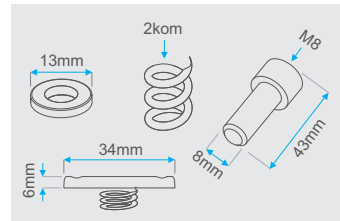
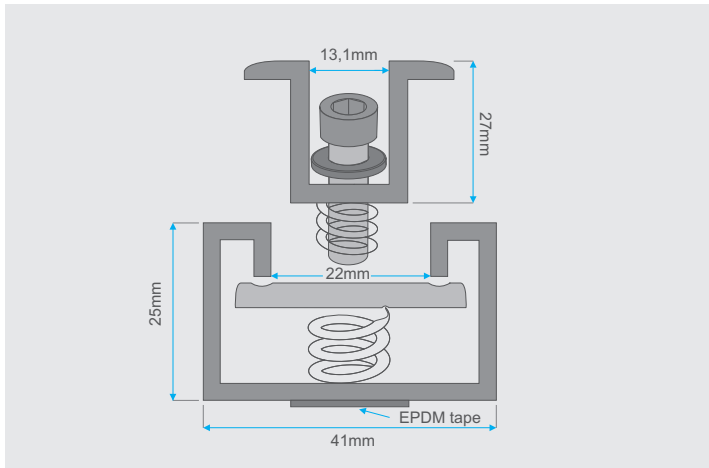




Mini rail set middle - ORIENTATION LANDSCAPE

Article code: MP3 (middle clamp)

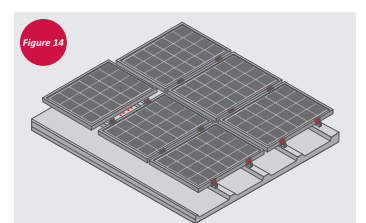
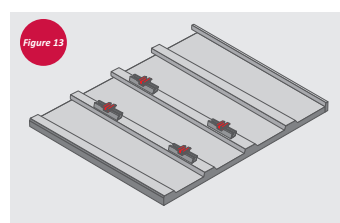
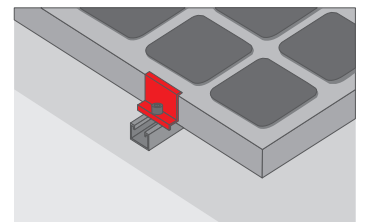
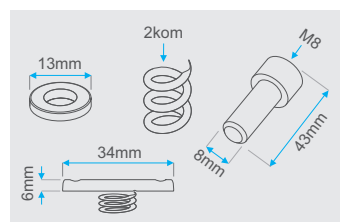
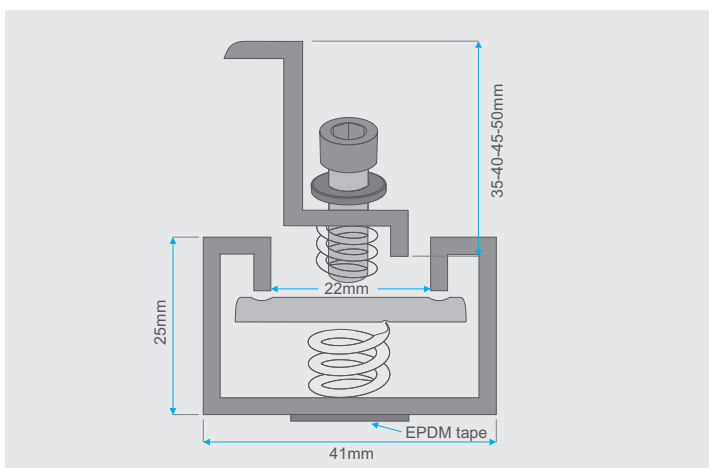
MINI RAIL SET MIDDLE-ORIENTATION LANDSCAPE (longwise the trapezoidal roof) for mounting modules on trapezoidal roof in LANDSCAPE position (longer side of the module goes horizontal on trapezoidal roof) by drilling with self-drilling bolts on the raised peak (self-drilling screws are not included). The set consists of aluminium profiles drilled at two places, set of module clamp (middle), EPDM tape under the profile, where the holes are located. Mini rails are cut from profile P31, with length approx 15cm. Details of the assembly in pictures 11 and 12. Middle clamp set – consists of Aluminium clamp, allen screw M8 35mm INOX. Mini profile may be longer and with more holes, then the price is higher. It may also be shorter and the price is lower.



Mini rail set end - ORIENTATION LANDSCAPE

Article code: MP4 (end clamp)

MINI RAIL SET END-ORIENTATION LANDSCAPE (longwise the trapezoidal roof) for mounting modules on trapezoidal roof in LANDSCAPE position (longer side of the module goes horizontal on trapezoidal roof) by drilling with self-drilling bolts on the raised peak (self-drilling screws are not included). The set consists of aluminium profiles drilled at two places, set of module clamp (end), EPDM tape under the profile, where the holes are located. Mini rails are cut from profile P31, with length approx 15cm. Details of the assembly in pictures 13 and 14. End clamp set – consists of Aluminium clamp, allen screw M8 35mm INOX. Mini profile may be longer and with more holes, then the price is higher. It may also be shorter and the price is lower.

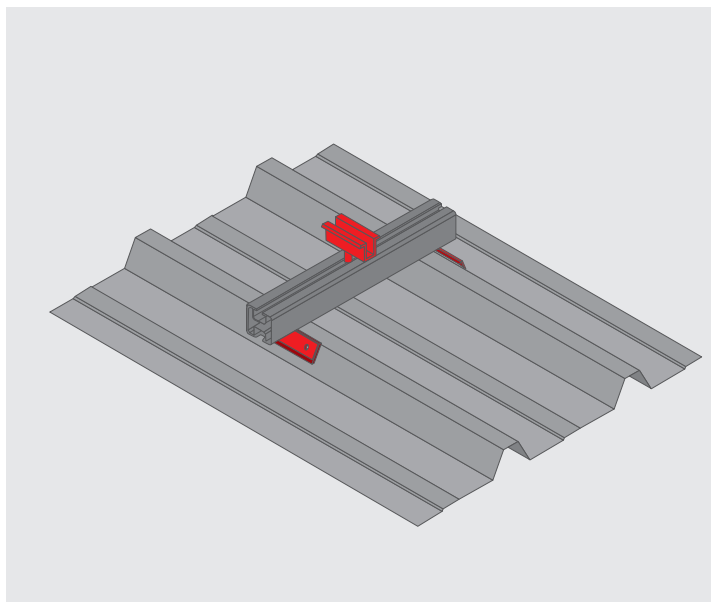
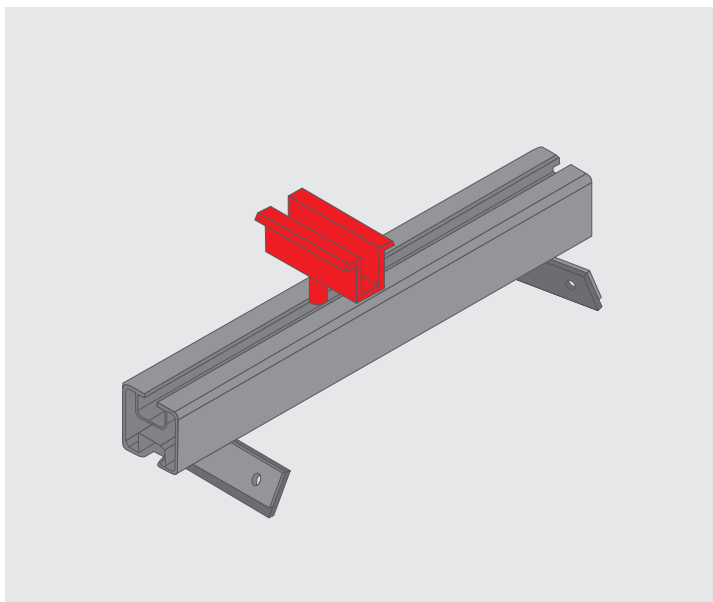


Mini rail set P1 - ORIENTATION PORTRAIT

Article code: **MP5 (middle clamp)**

MP6 (end clamp)

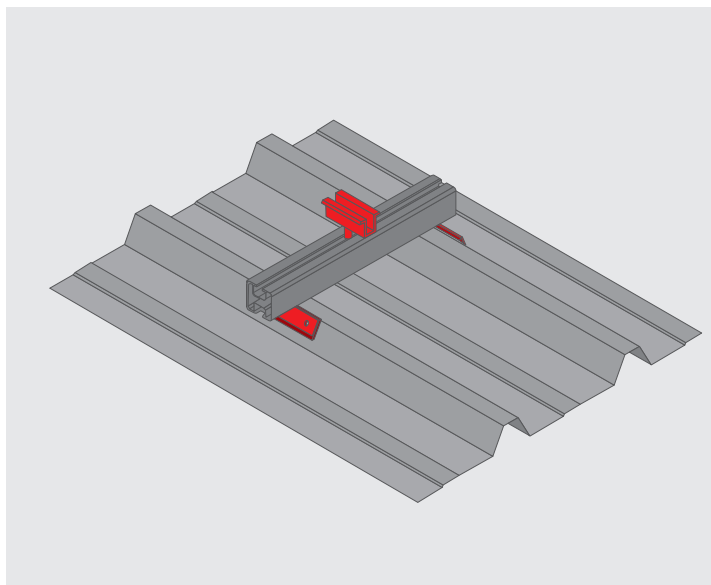
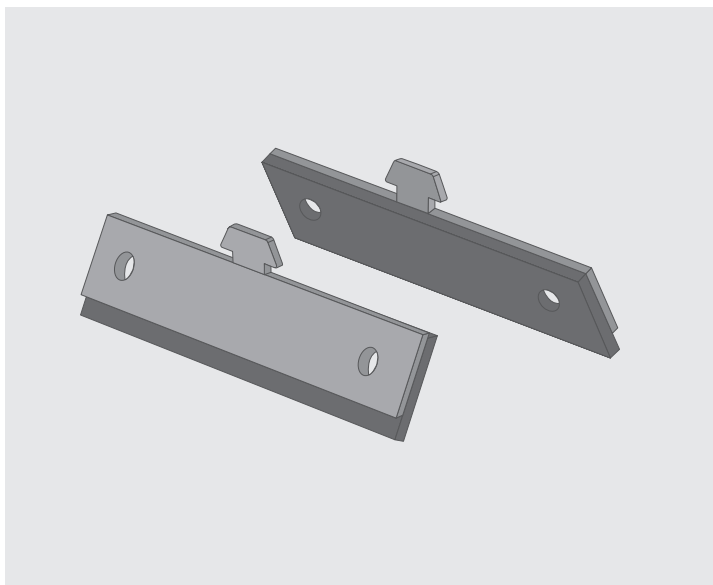
Mini rail set for trapezoidal roof consists of 40cm P1 profile, 2 universal clamp plates, module middle or end clamp and limiter which will not allow slide of mini rail under universal clamp plates. Self-drilling screws for trapezoidal roof are not included into price.



Universal clamp plate for trapezoidal roof

Article code: **UP1**

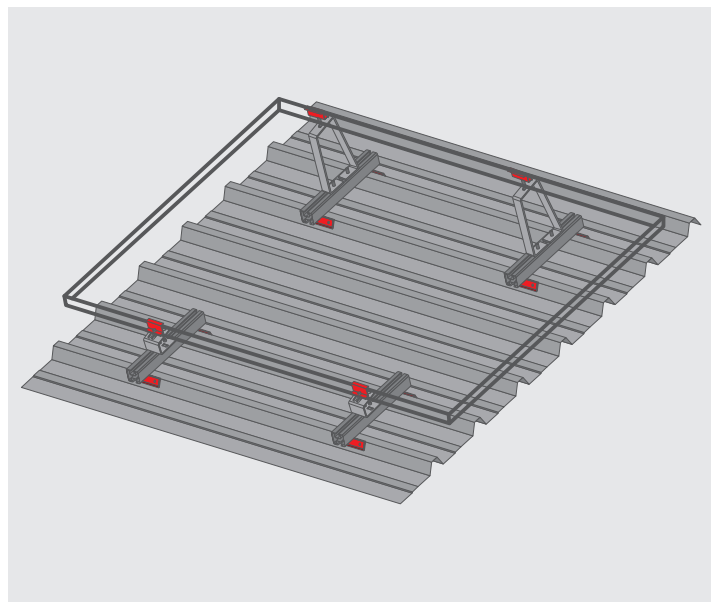
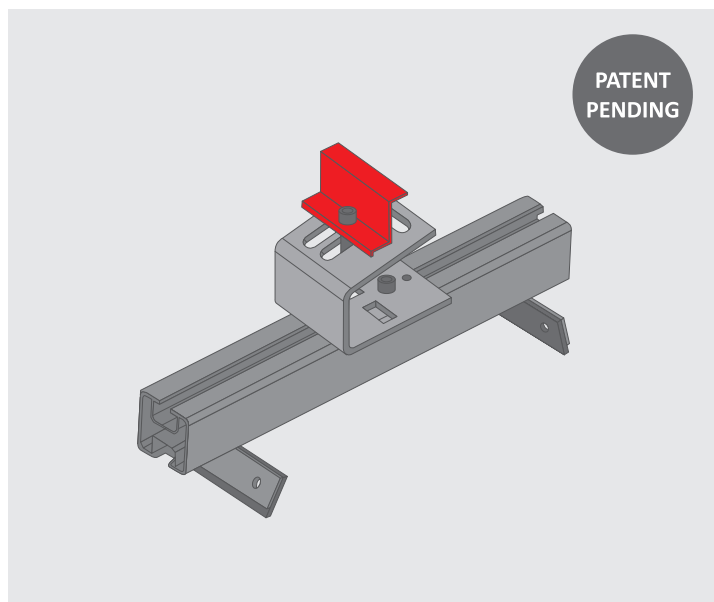
Possible mouting on all types of trapezoidal roof. It can be used with profile P1 and P2. Self-drilling screws for trapezoidal roof are not included into price.



Lower mini profile set for tilt 10°

Article code: MP6

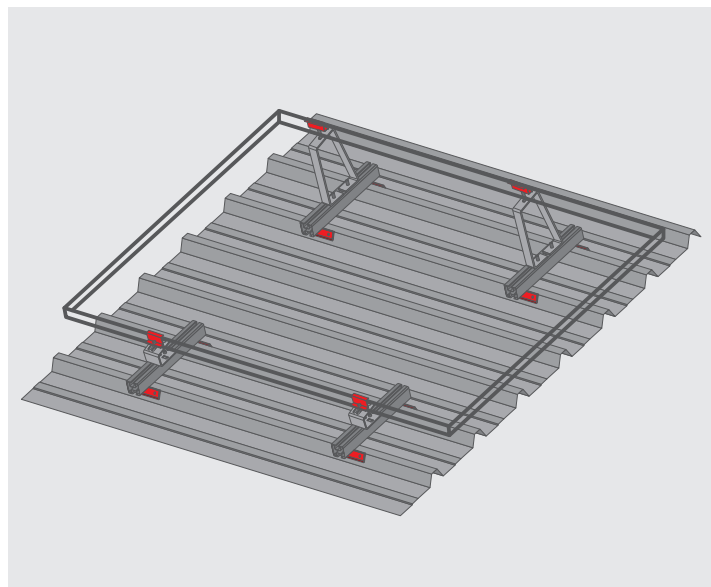
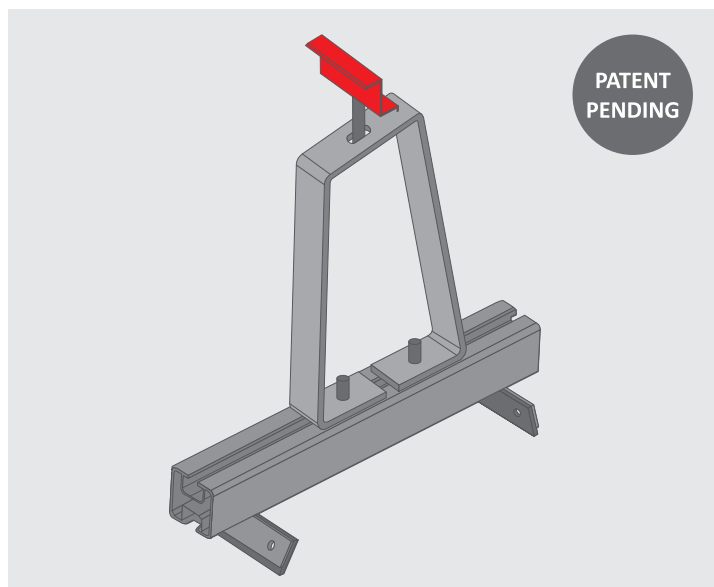
Set consisting of 2 universal clamp plate, mini rail P1 40cm long, lower tilt element and End module clamp. Per each module 2 sets are required. All items are made of stainless steel except mini rail and module clamp which are made of aluminium. Self drilling screws for trapezoidal roof are not included into price.



Upper mini profile set for tilt 10°

Article code: MP7 - stainless steel

Set consisting of 2 universal clamp plate, mini rail P1 40cm long, upper tilt element and End module clamp. Per each module 2 sets are required. All items are made of stainless steel except mini rail and module clamp which are made of aluminium. Self drilling screws for trapezoidal roof are not included into price.



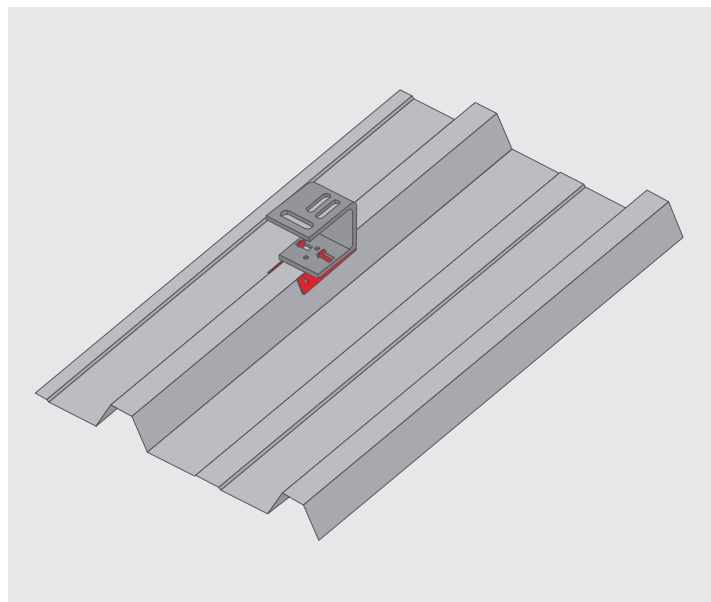
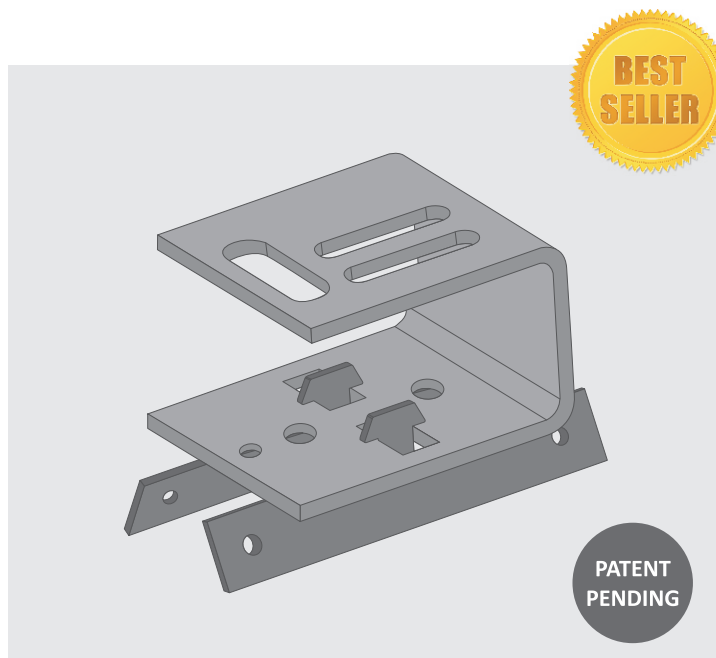
TRIMDECK FOOT

4

Universal trimdeck foot for trapezoidal roof

Article code: UR1 - stainless steel

Universal trimdeck foot is adjustable according to different size of trapezoidal roof. It can be mounted on various trapezoidal roofs, with the width of the trapezoid 15-47mm. It can be used for direct panel mounting without Aluminium rail if modules are arranged in the landscape direction. Besides that it can be also used with aluminum mounting rail arranged perpendicular to the incline and modules are in this case arranged in portrait orientation. Self-drilling screws for trapezoidal roof are not included into price.

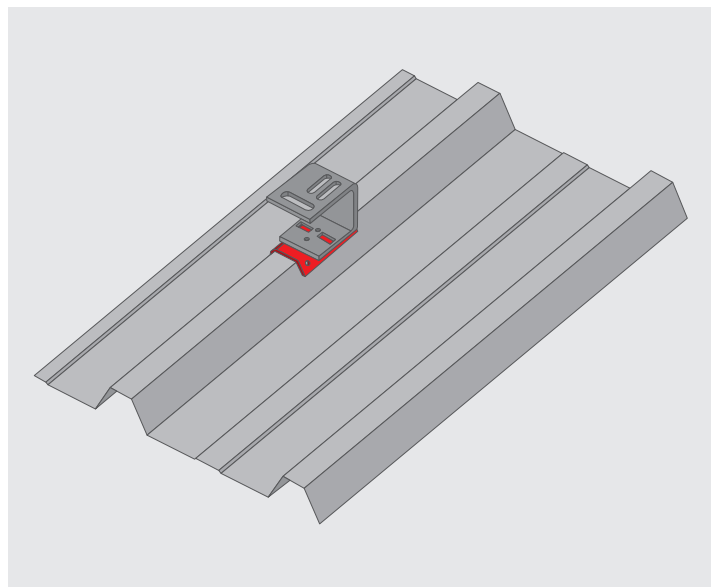
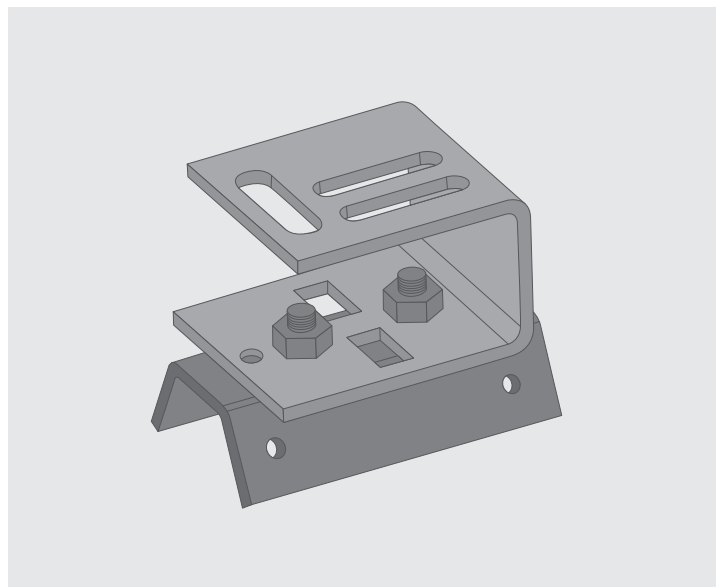


■ trimdeck foot mounted on trapezoidal roof

Trimdeck foot for trapezoidal roof with adjustable top part

Article code: UR2 - stainless steel

Trimdeck foot can be used with aluminium mounting rail in direction of the trapezoidal roof and horizontal on the trapezoidal roof. Besides, we can also use it for direct panel mounting without Aluminium rail with modules set in the landscape direction. Self-drilling screws for trapezoidal roof are not included into price.

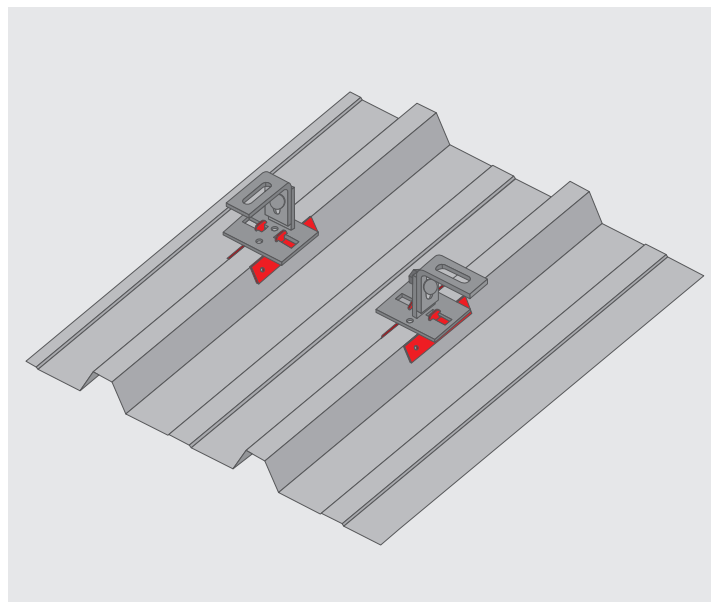
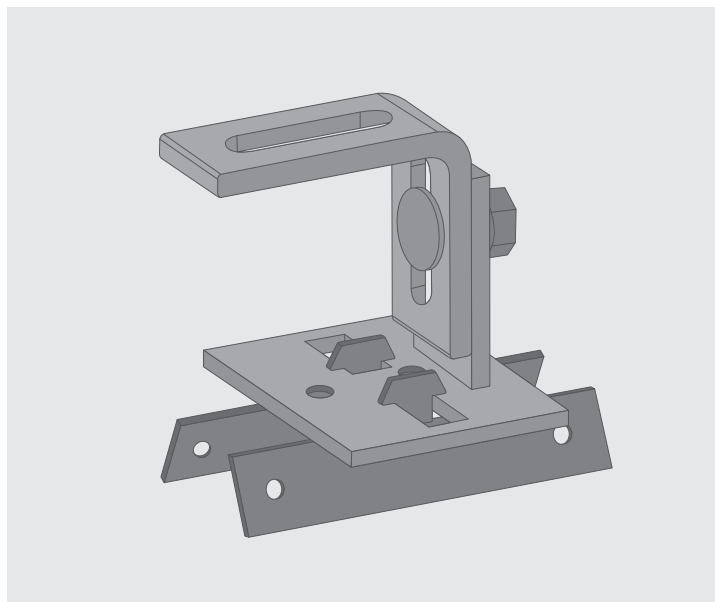


■ trimdeck foot mounted on trapezoidal roof

Universal trimdeck foot with height adjustment, orientation Portrait

Article code: UR3 - stainless steel

Trimdeck foot can be used with aluminium mounting rail, horizontal on trapezoidal roof, with modules set in portrait orientation. Besides, we can also use it for direct panel mounting without Aluminium rail. Self-drilling screws for trapezoidal roof are not included into price.

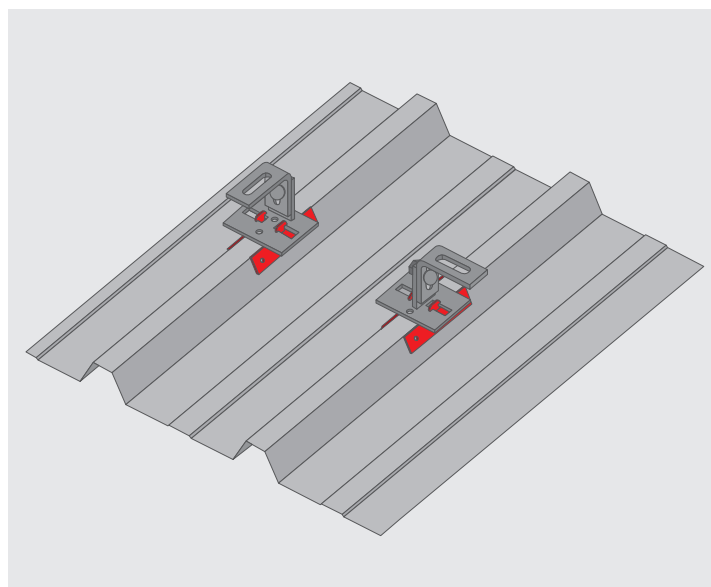
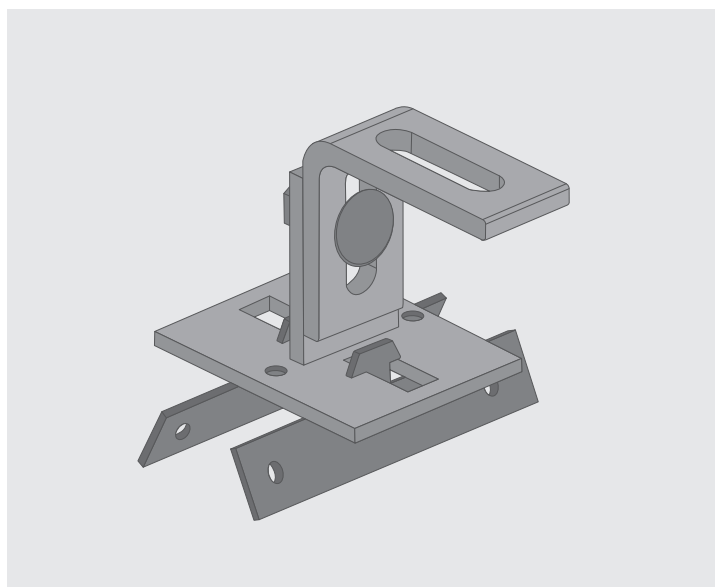


■ trimdeck foot mounted on trapezoidal roof

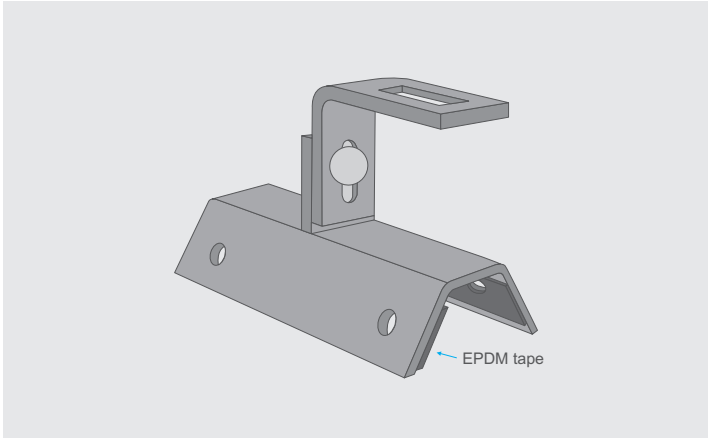
Universal trimdeck foot with height adjustment, orientation Landscape

Article code: UR4 - stainless steel

Trimdeck foot can be used with aluminium mounting rail longitudinal on trapezoidal roof, with modules set in landscape orientation.



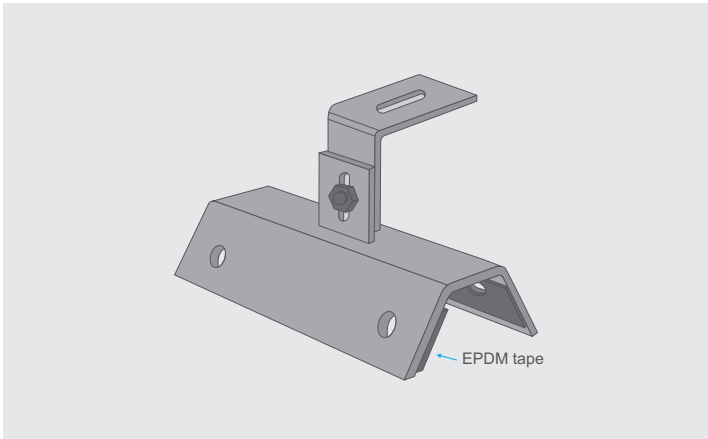
■ trimdeck foot mounted on trapezoidal roof



Trimdeck foot with height adjustment- orientation Portrait

Article code: RT1 - stainless steel

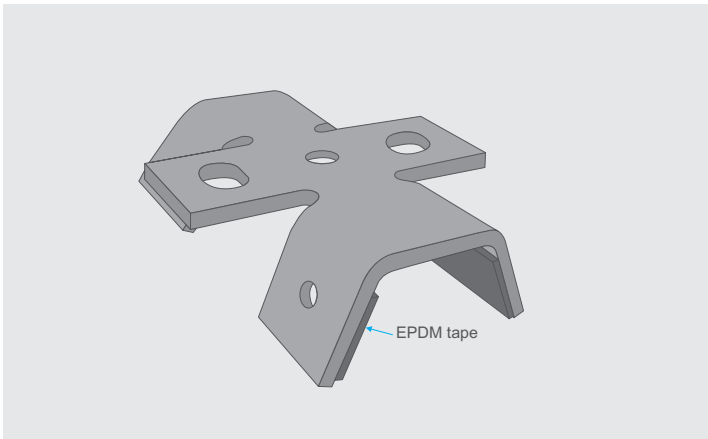
Trimdeck foot can be used with aluminium rail, mounted horizontal on trapezoidal roof, with modules set in portrait orientation. Self-drilling screws for trapezoidal roof are not included into price.



Trimdeck foot with height adjustment- orientation Landscape

Article code: RT2 - stainless steel

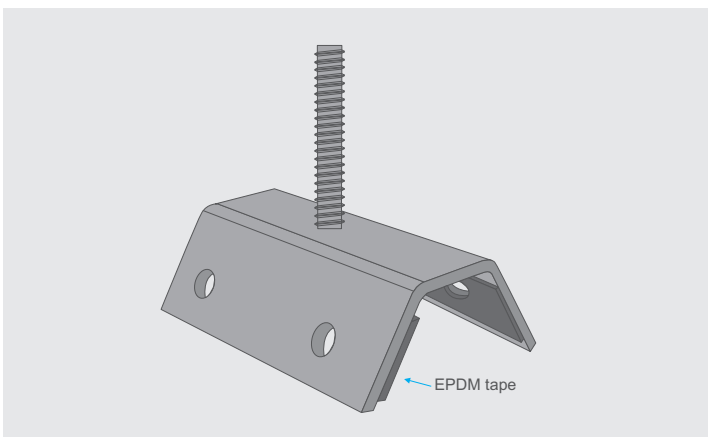
Trimdeck foot can be used with aluminium rail, mounted longitudinal on trapezoidal roof, with modules set in landscape orientation. Self-drilling screws for trapezoidal roof are not included into price.



Trimdeck foot basic

Article code: RT3 - stainless steel

Trimdeck foot can be used with aluminium mounting rail, in direction of trapezoidal roof and horizontal on the trapezoidal roof. Besides, we can also use it for direct panel mounting without Aluminium mounting rail, in the landscape direction. Self-drilling screws for trapezoidal roof are not included into price.



Trimdeck foot with bolt

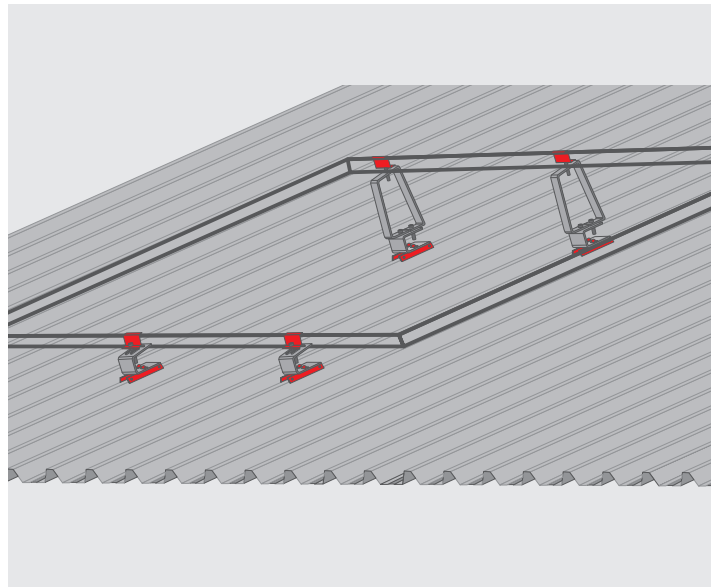
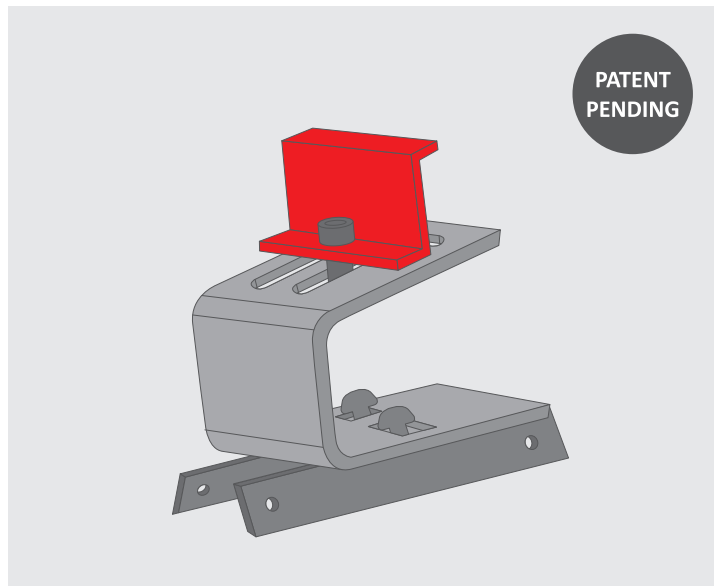
Article code: RT4 - stainless steel

Trimdeck foot can be used for construction with tilt for fixing triangle or pillar for mounting construction with tilt. Optionally can be installed 2 screws. Self-drilling screws for trapezoidal roof are not included into price.

Lower trimdeck foot for tilt 10°

Article code: UR5T

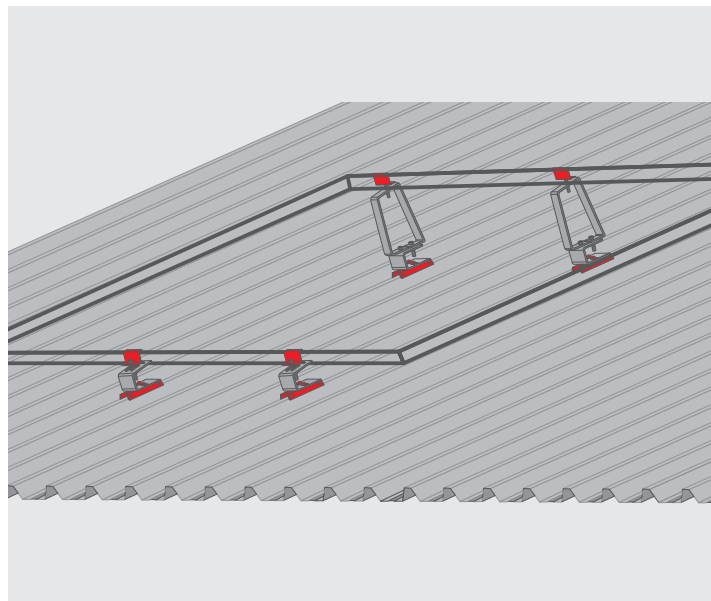
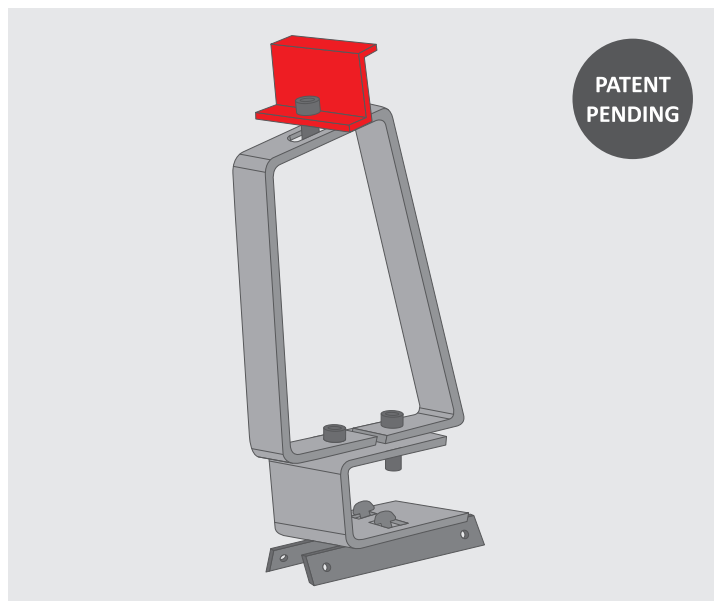
Set consisting of 2 universal trimdeck foot for trapezoidal roof, lower tilt element and End module clamp. Per each module 2 sets are required. All items are made of stainless steel, only module clamp is aluminium. Self drilling screws for trapezoidal roof are not included into price.



Upper trimdeck foot for tilt 10°

Article code: UR6T - stainless steel

Set consisting of 2 universal trimdeck foot for trapezoidal roof, upper tilt element and End module clamp. Per each module 2 sets are required. All items are made of stainless steel, or galvanized steel, only module clamp is aluminium. Self drilling screws for trapezoidal roof are not included into price.



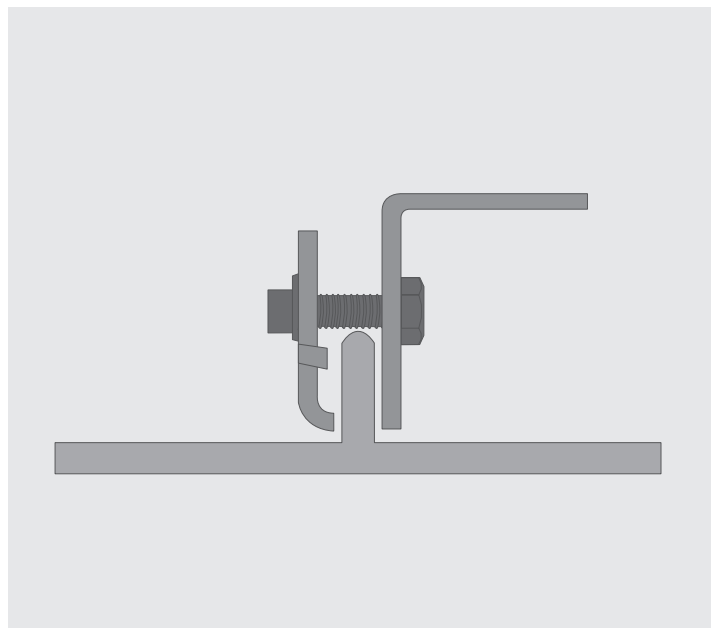
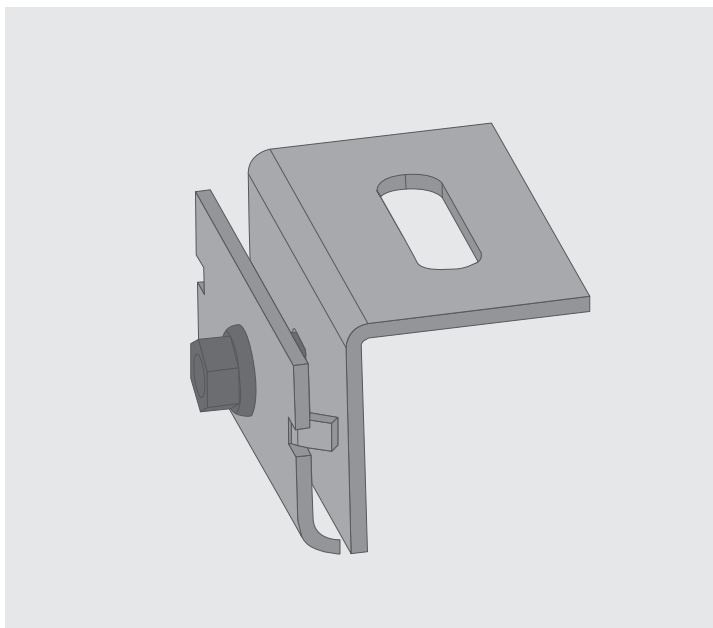
CLAMP FOR SEAMED ROOF AND KALZIP ROOF



Seamed roof clamp

Article code: SSC1

Seamed roof clamp holds on one side to seamed roof and on the other side aluminium profile is fixed. Material stainless steel.

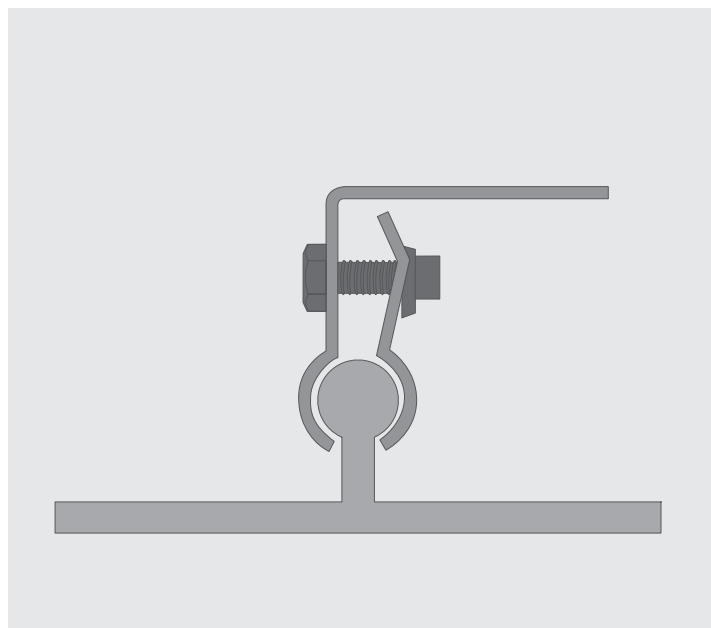
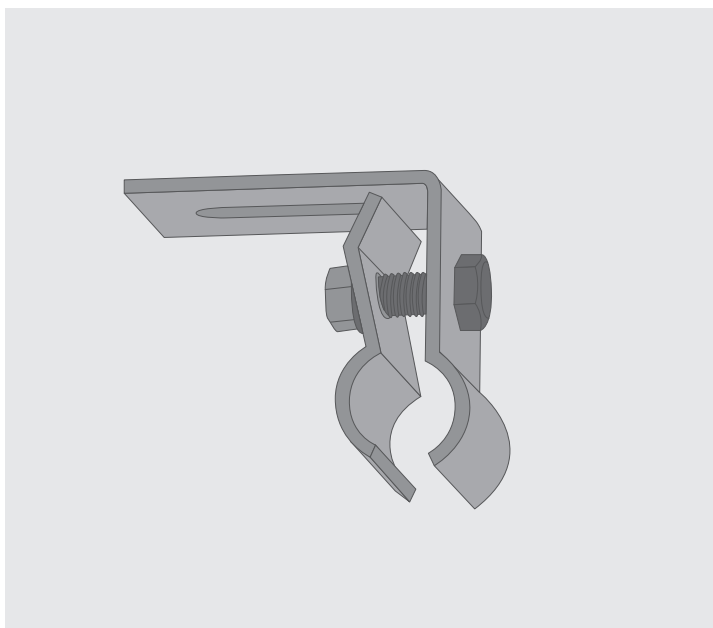


■ demonstration of clamp mounted on seamed roof

KalZip clamp

Article code: SSC2

Seamed roof clamp holds on one side to seamed roof KalZip type and on the other side aluminium profile is fixed. Material stainless steel.



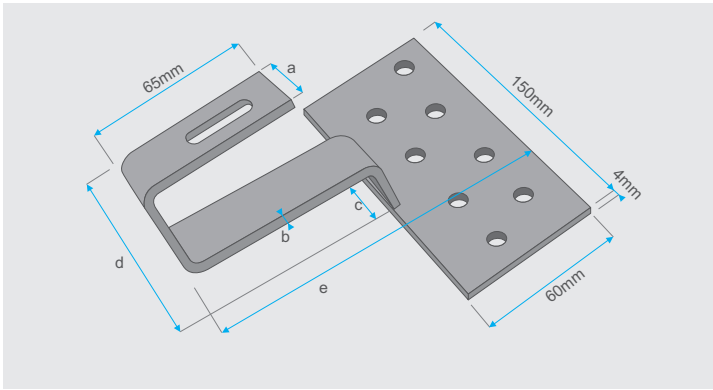
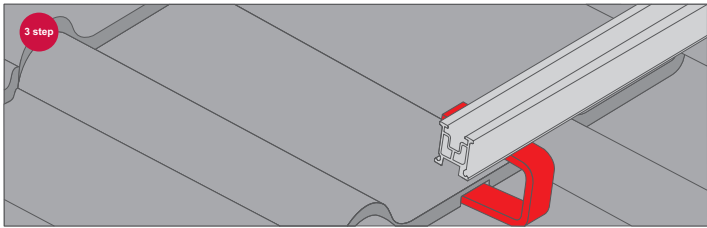
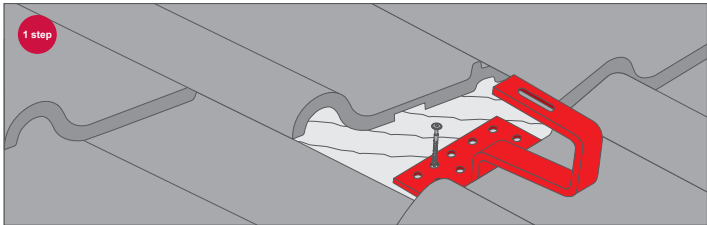
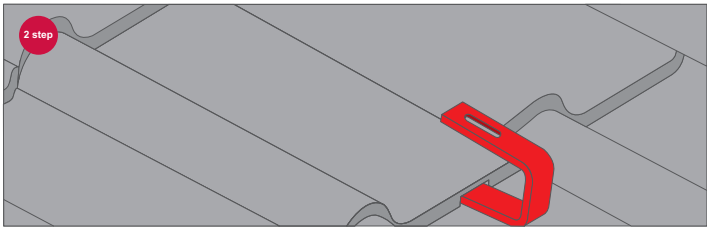
■ demonstration of clamp mounted on seamed roof KalZip type

ROOF HOOKS

6

Pantile roof hook

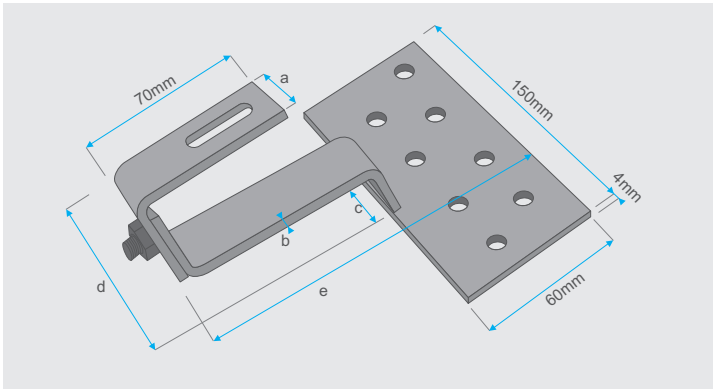
Hooks which are used for mounting on all types of classic roof tile



Pantile roof hook

Roof hook for pitched pantile roof. Material stainless steel.

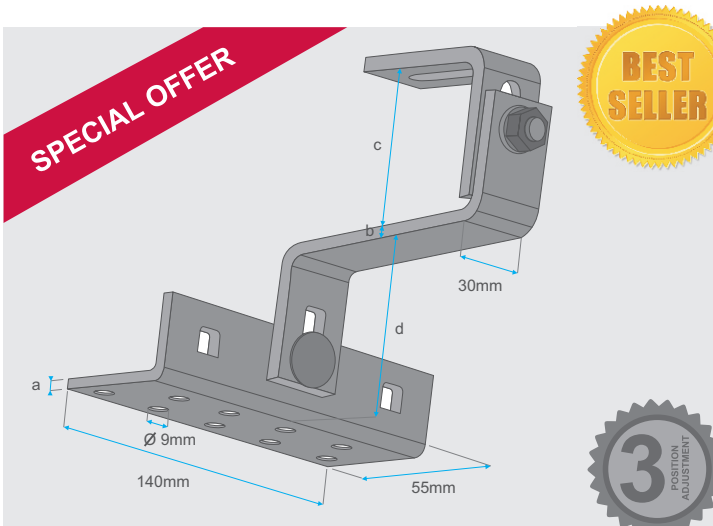
| Article code | a | b | c | d |
|--------------|------|-----|----------------------|--------|
| HK2 | 30mm | 5mm | depending on pantile | 130 mm |
| HK3 | 30mm | 6mm | depending on pantile | 130 mm |



Pantile roof hook, height adjustable

Roof hook for pitched pantile roof. Adjustable on position above roof tile. Material stainless steel.

| Article code | a | b | c | d |
|--------------|------|-----|----------------------|--------|
| HK4 | 30mm | 5mm | depending on pantile | 130 mm |
| HK5 | 30mm | 6mm | depending on pantile | 130 mm |



Universal pantile roof hook

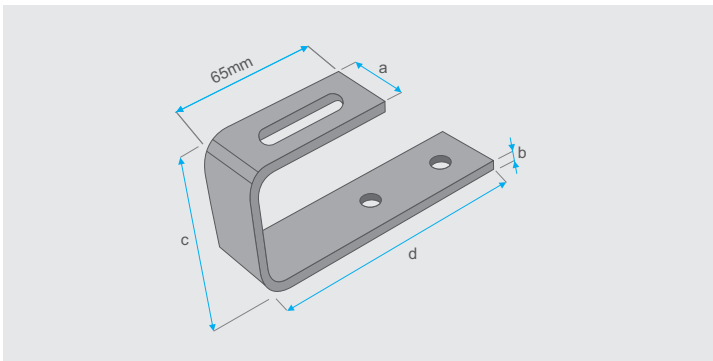
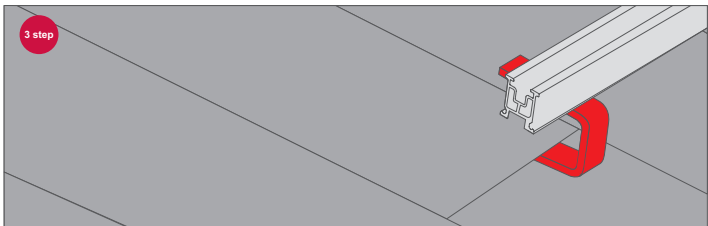
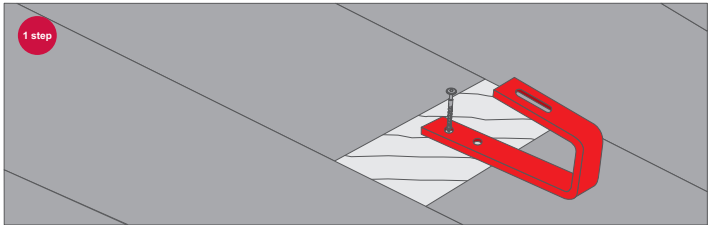
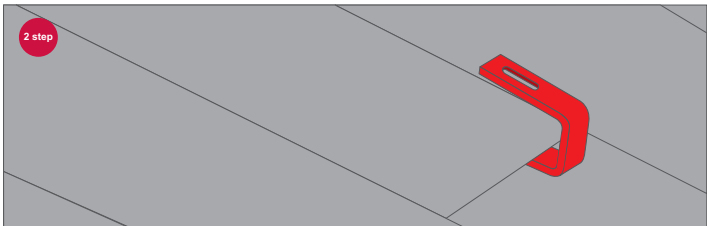
Article code: HKC1 - stainless steel

With 3 adjustment, 6mm middle part, 2 carriage bolts and 2 serrated nuts. Material stainless steel.

| a | b | c | d |
|-----|-----|---------|---------|
| 5mm | 6mm | 50-80mm | 48-60mm |

Roof hooks mounted on slate roof

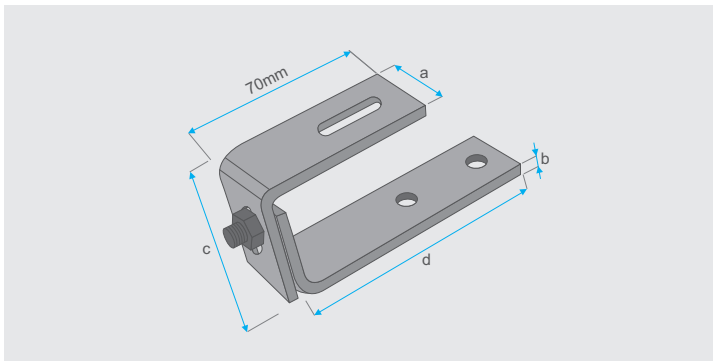
Hooks which are used for mounting on all types of slate roofs



Slate roof hooks

Roof hook for pitched slate roof. Material stainless steel.

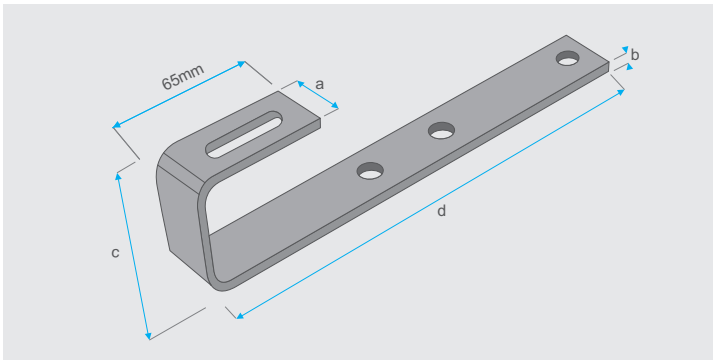
| Article code | a | b | c | d |
|--------------|------|-----|-------|-------|
| HK6 | 30mm | 5mm | 70 mm | 140mm |
| HK7 | 30mm | 6mm | 70 mm | 140mm |



Slate roof hooks, height adjustable

Roof hook for pitched slate roof. Adjustable on position above roof tile. Material stainless steel.

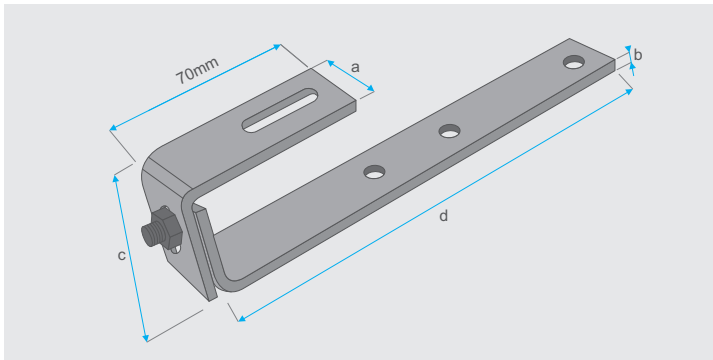
| Article code | a | b | c | d |
|--------------|------|-----|---------|-------|
| HK8 | 30mm | 5mm | 70-95mm | 140mm |
| HK9 | 30mm | 6mm | 70-95mm | 140mm |



Slate roof hooks

Roof hook for pitched slate roof. Material stainless steel.

| Article code | a | b | c | d |
|--------------|------|-----|------|-------|
| HK10 | 30mm | 5mm | 70mm | 250mm |
| HK11 | 30mm | 6mm | 70mm | 250mm |



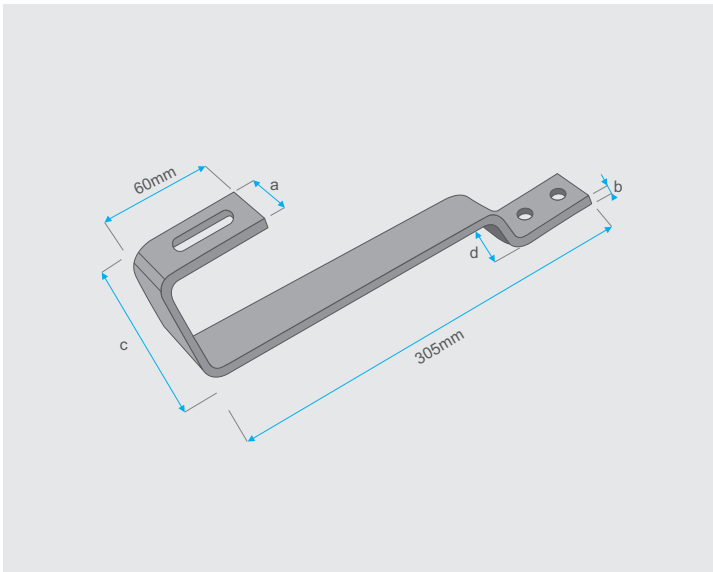
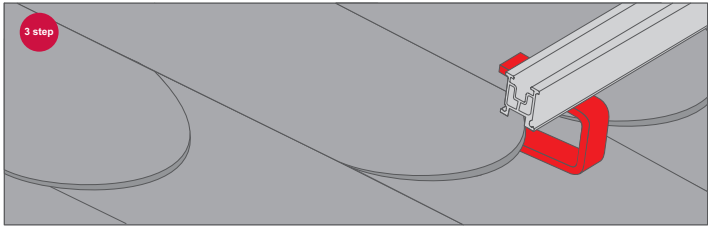
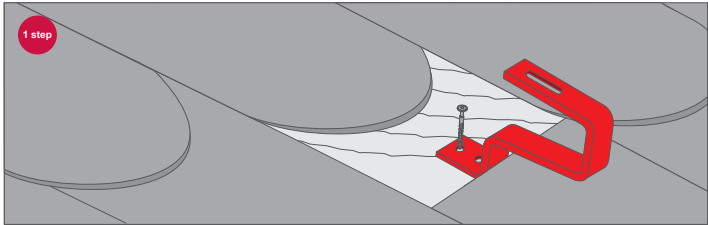
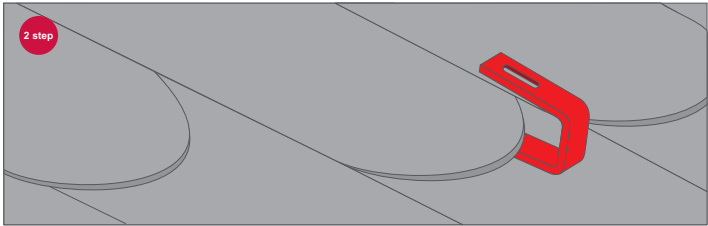
Slate roof hooks, height adjustable

Roof hook for pitched slate roof. Adjustable on position above roof tile. Material stainless steel .

| Article code | a | b | c | d |
|--------------|------|-----|---------|-------|
| HK12 | 30mm | 5mm | 70-95mm | 250mm |
| HK13 | 30mm | 6mm | 70-95mm | 250mm |

Flat tile roof hook

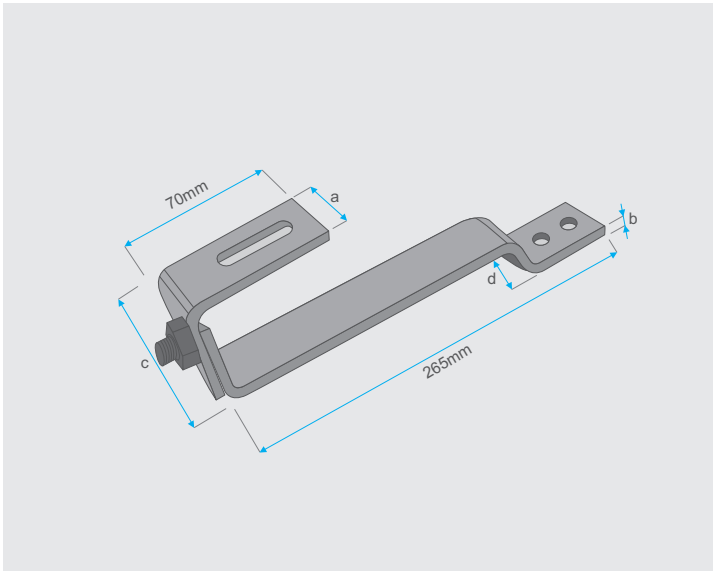
Hooks which are used for mounting on all types of flat roof tile



Flat tile roof hook

Roof hook for pitched flat tile roof. Material stainless steel.

| Article code | a | b | c | d |
|--------------|------|-----|-------|------|
| HK 14 | 30mm | 5mm | 134mm | 44mm |
| HK 15 | 30mm | 6mm | 134mm | 44mm |



Flat tile roof hook, height adjustable

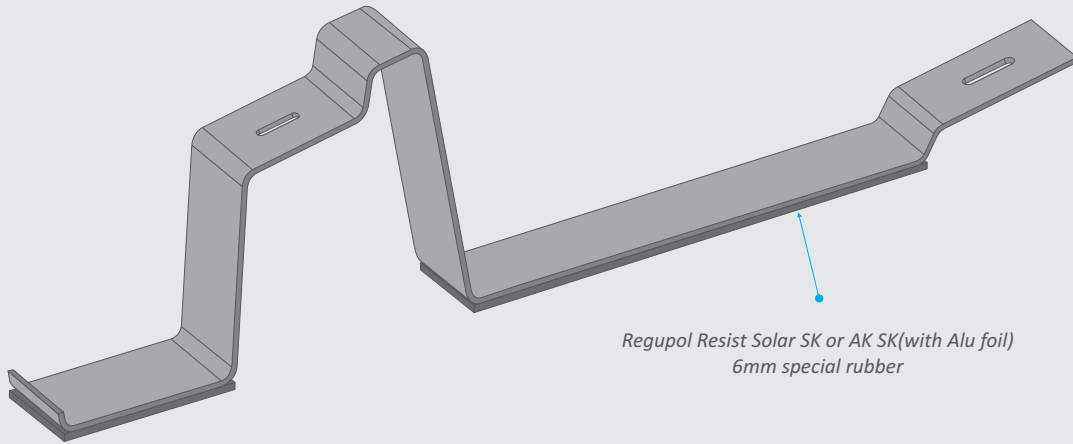
Roof hook for pitched flat tile roof. Adjustable on position above roof tile. Material stainless steel.

| Article code | a | b | c | d |
|--------------|------|-----|-----------|------|
| HK 16 | 30mm | 5mm | 120-145mm | 32mm |
| HK 17 | 30mm | 6mm | 120-145mm | 32mm |

FLAT ROOF



FLAT BAR system for SOUTH flat roof with tilt



Regupol Resist Solar SK or AK SK(with Alu foil)
6mm special rubber

Bracket made of aluminium flat bar 80mm width for tilt south 5°, 10°, 15° and 20°

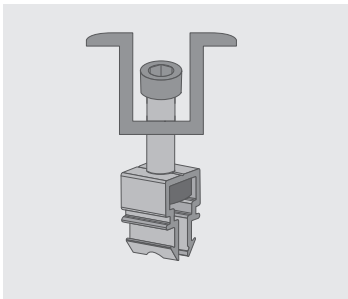
Modules are mounted directly on lower bracket and fixed with middle MCL2 and end ECL2 module clamps

FR11 - aluminium bracket 80 mm for construction under 5°

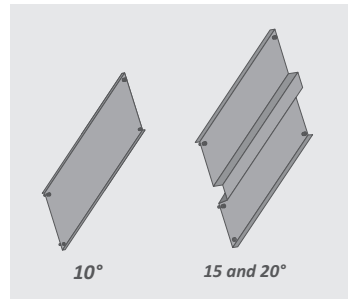
FR12 - aluminium bracket 80 mm for construction under 10°

FR13 - aluminium bracket 80 mm for construction under 15°

FR14 - aluminium bracket 80 mm for construction under 20°



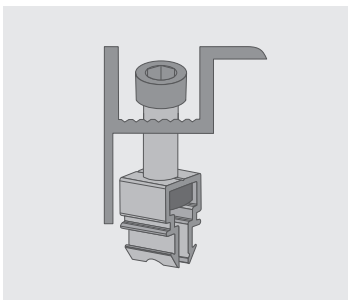
MCL2-C3 - middle clamp set with clip



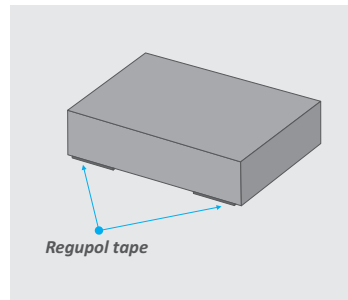
WSH01 - aluminium windshield 0,6mm for 5°

WSH02 - aluminium windshield 0,6mm for 10°

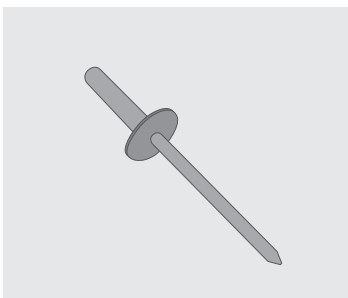
WSH03 - aluminium windshield 0,6mm for 20°



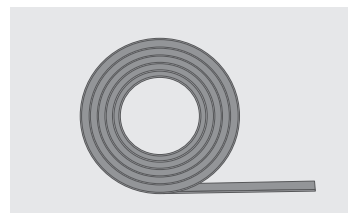
ECL2-C3 - middle clamp set with clip



Cb1 - Concrete balast 12x20x40cm



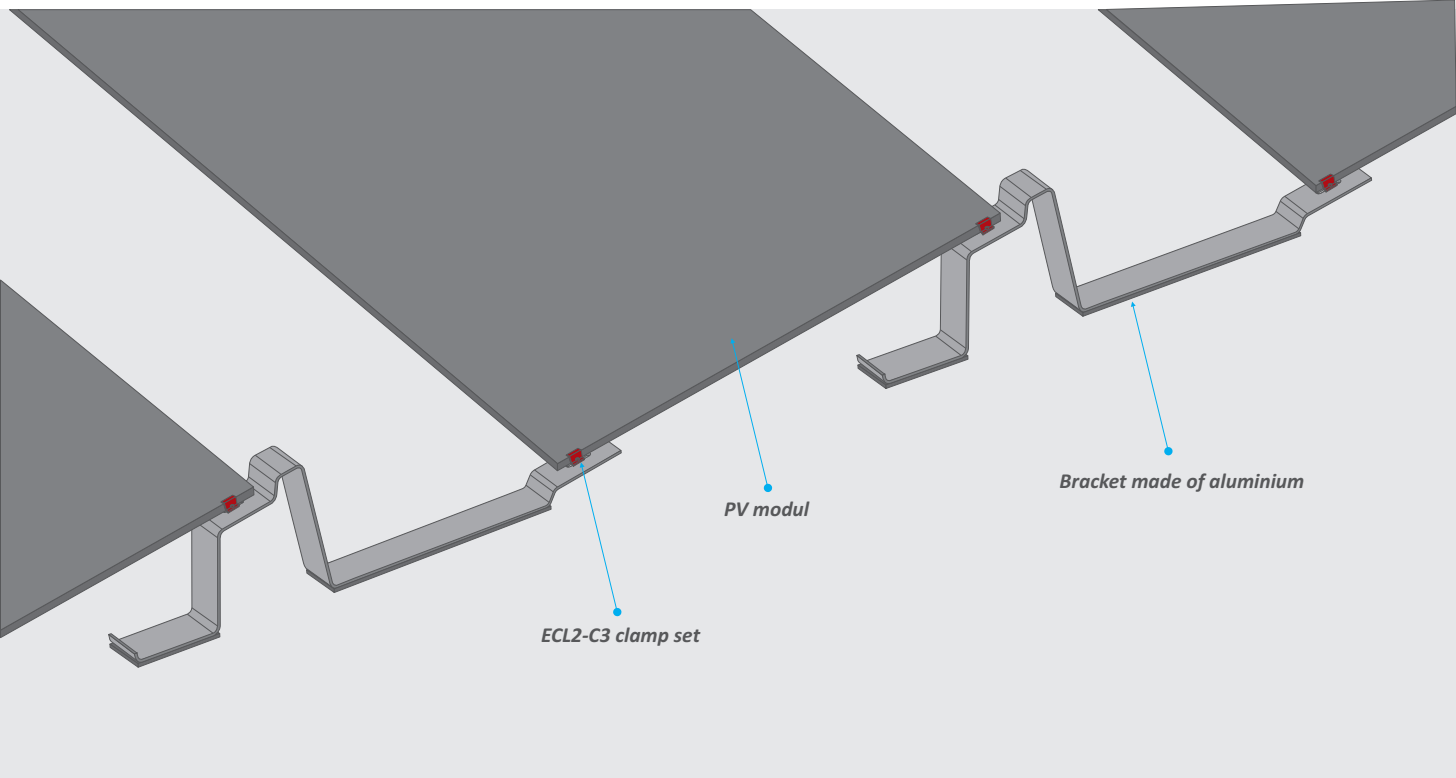
Sp17 - Rivet



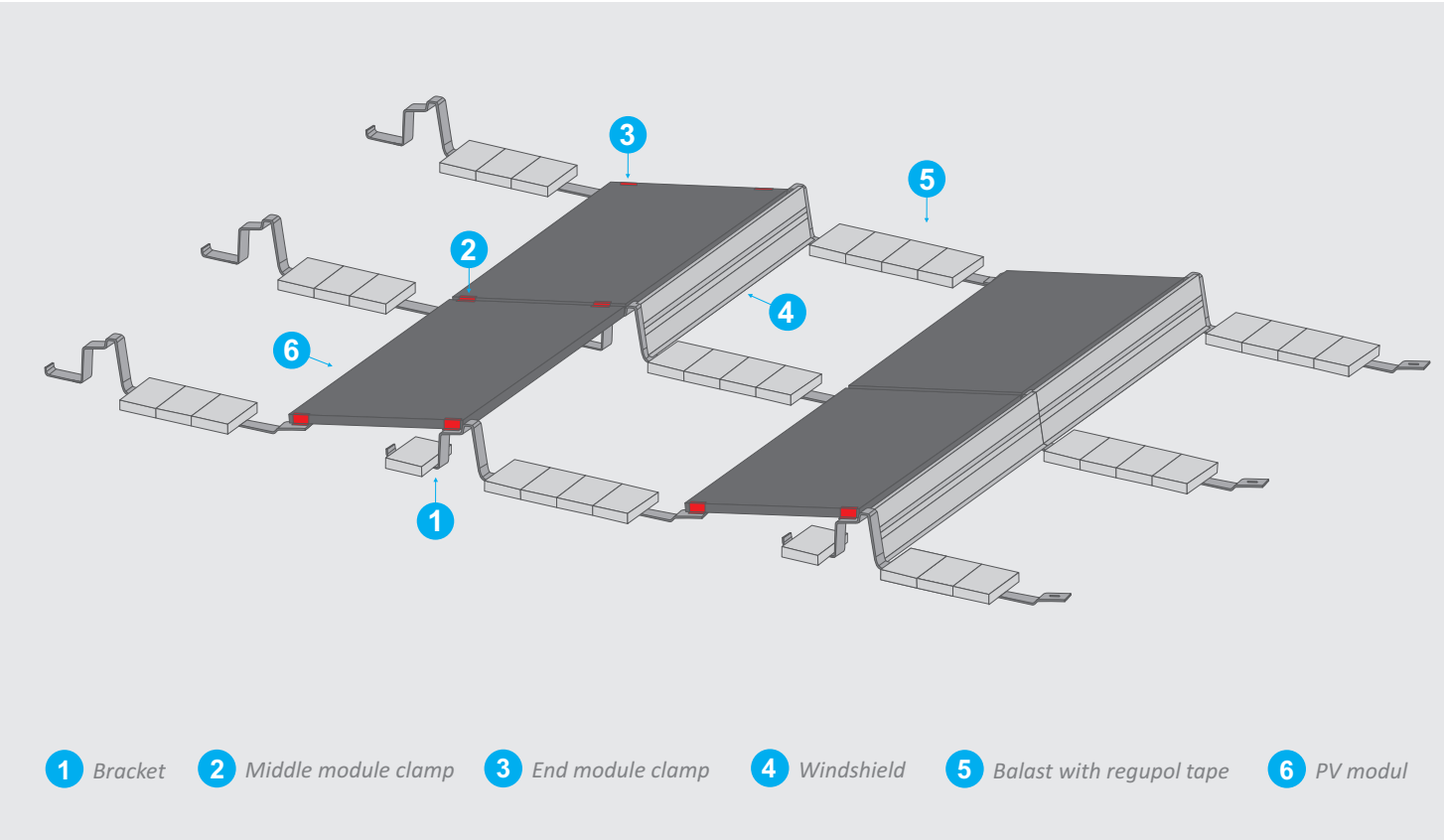
RRS1/RRS2 - Regupol resist solar SK(without Alu foil) or AK SK(with alu foil), special rubber for solar applications, reel dimension 15.000mmx80x6mm. Reels are coming with self adhesive backing, Regupol® resist solar type AK SK is lined with a triplex aluminium foil on its underside. It thus

prevents plasticizer migration between non-rubber-compatible membranes (e.g. soft PVC) and the building protection material

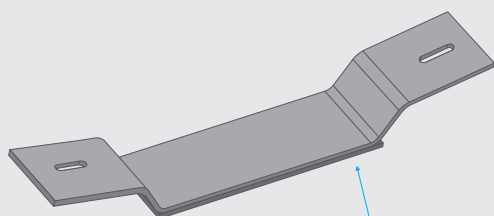
Bracket made of aluminium flat bar 80mm width



Demonstration for FLAT BAR system for SOUTH flat roof with tilt



FLAT BAR EAST WEST SYSTEM WITH TILT 10° for flat roof

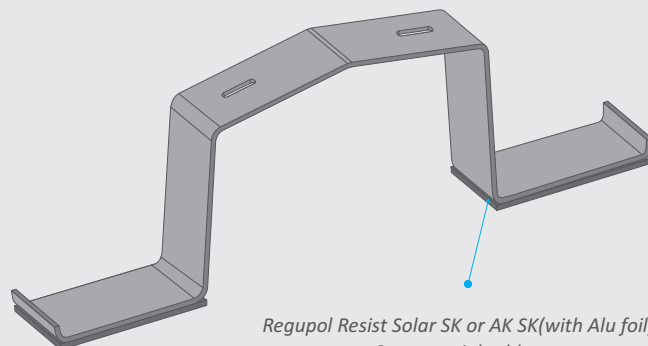


*Regupol Resist Solar SK or AK SK(with Alu foil)
6mm special rubber*

Double lower bracket made of aluminium for tilt east-west 10°

Modules are mounted directly on lower brackets and fixed with middle and end module clamps

Fr41 - aluminium double lower bracket for construction under 10°

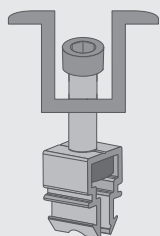


*Regupol Resist Solar SK or AK SK(with Alu foil)
6mm special rubber*

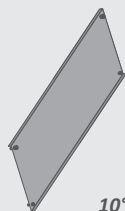
Double Middle bracket made of aluminium for tilt east-west 10°

Modules are mounted directly on double middle bracket and fixed with middle and end module clamps

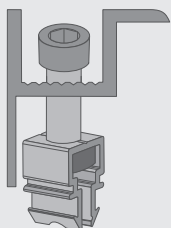
Fr42 - aluminium double middle bracket for construction under 10°



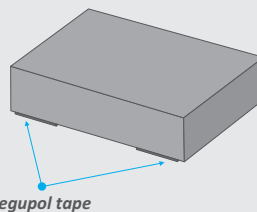
MCL2-C3 - middle clamp set with clip



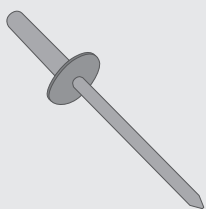
WSH02 - aluminium windshield 0,6mm
for 10°



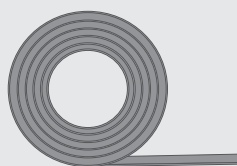
ECL2-C3 - middle clamp set with clip



CB1 - Concrete balast 12x20x40cm



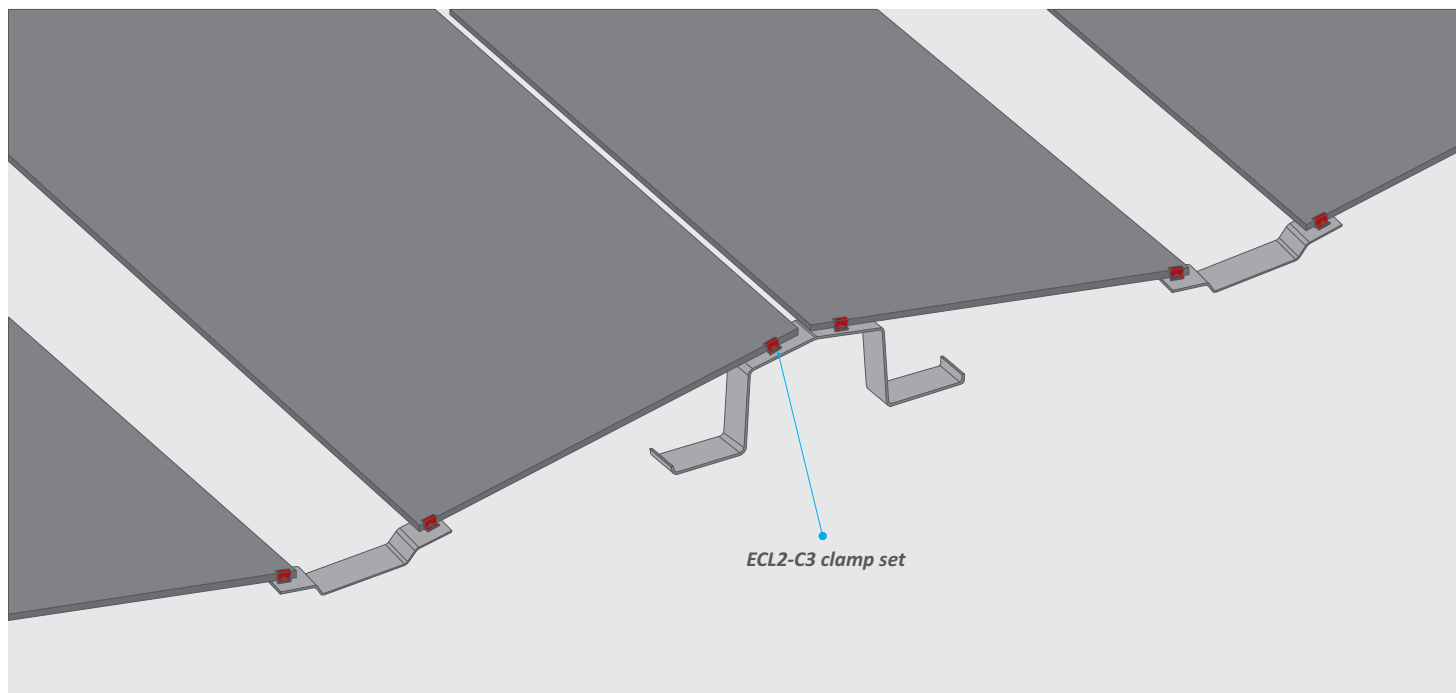
SP17 - Rivet



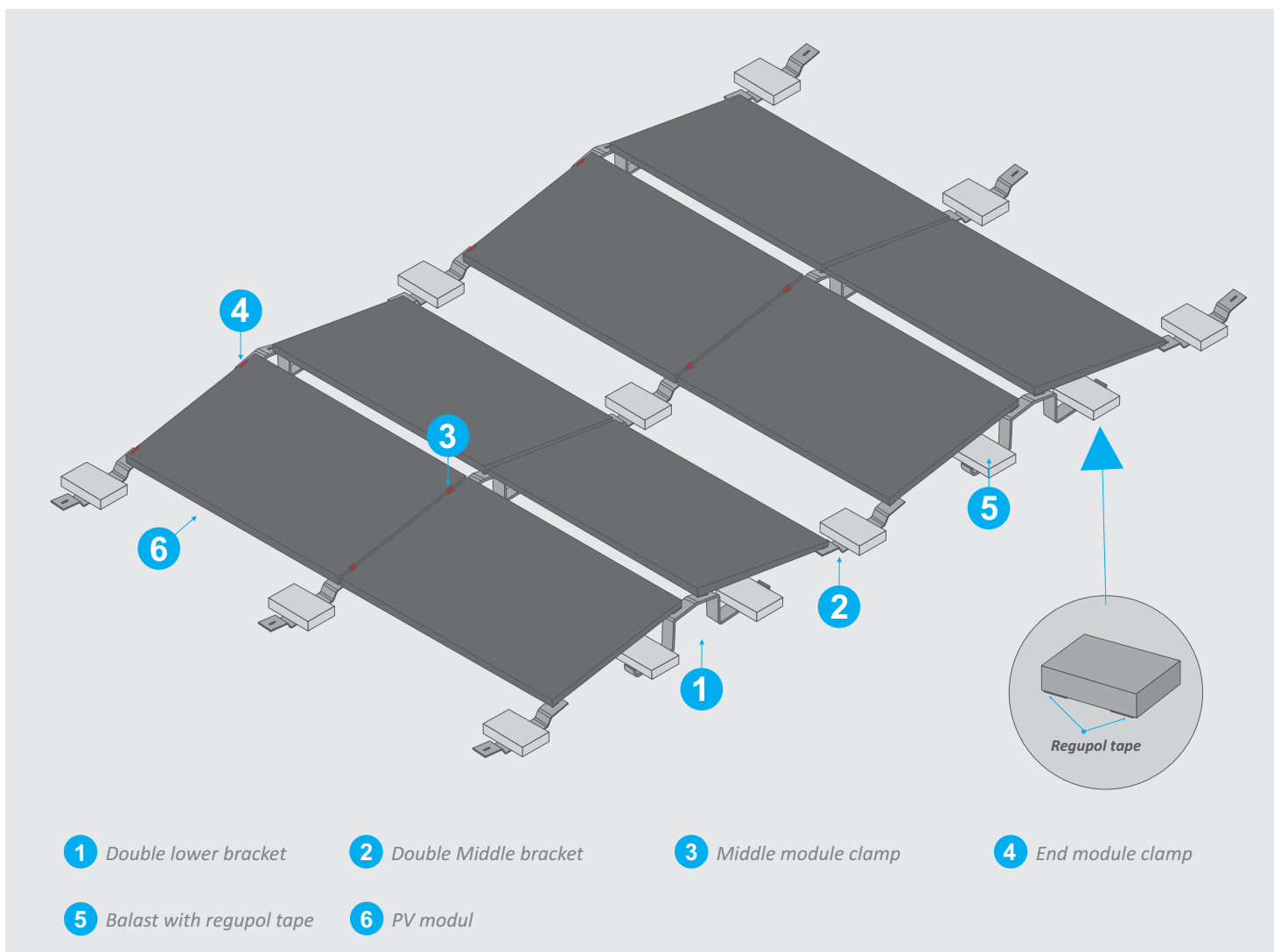
RRS1/RRS2- Regupol resist solar
SK(without Alu foil) or AK SK(with alu foil),
special rubber for solar applications, reel
dimension 15.000mmx80x6mm. Reels are
coming with self adhesive backing, Regupol®
resist solar type AK SK is lined with a triplex
aluminium foil on its underside. It thus

prevents plasticizer migration between non-rubber-compatible membranes (e.g. soft PVC)
and the building protection material

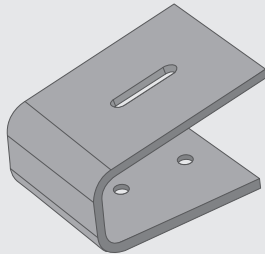
FLAT BAR EAST WEST SYSTEM WITH TILT 10° for flat roof



Demonstration for FLAT BAR EAST WEST SYSTEM WITH TILT 10° for flat roof



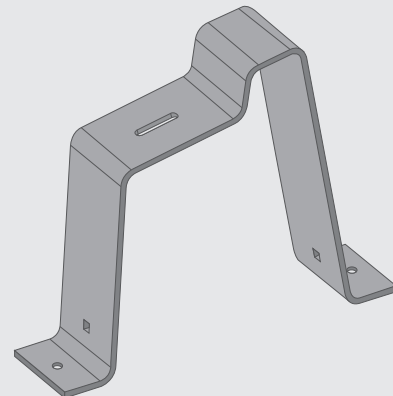
BRACKET ON RAIL P35 WITH TILT ON SOUTH for flat roof



Lower bracket made of aluminium for tilt south 5°, 10°, 15° and 20°

Modules are mounted directly on lower bracket and fixed with middle and end module clamps

Fr51 - aluminium lower bracket for construction under 5°, 10°, 15°, 20°



Upper bracket made of aluminium for tilt south 5°, 10°, 15° and 20°

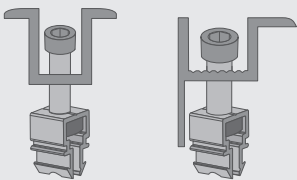
Modules are mounted directly on upper bracket and fixed with middle and end module clamps

Fr61 - aluminium upper bracket for construction under 5°

Fr62 - aluminium upper bracket for construction under 10°

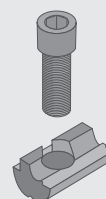
Fr63 - aluminium upper bracket for construction under 15°

Fr64 - aluminium upper bracket for construction under 20°



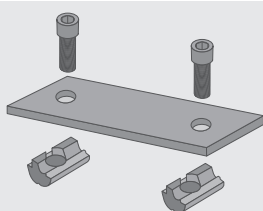
MCL2-C3 - middle clamp set with clip

ECL2-C3 - middle clamp set with clip

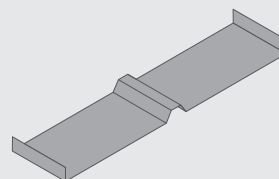


Sp4 - Aluminium slot nut for fixing clamps to rails P1, P2 and P35

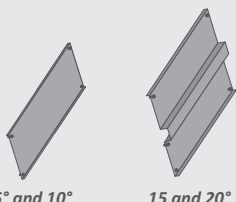
M8x16D912A2 - Allen screw M8, DIN912, 16mm



PCON05 - Connector for rail P35, flat bar with 2 pcs of screw and 2 pcs of slot nut SP4



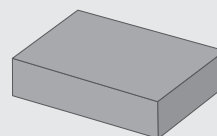
ALT1 - Aluminium tray (0.6mm Al sheet) for concrete balast



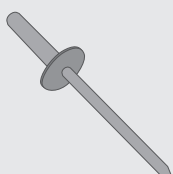
WSH01 - aluminium windshield 0,6mm for 5°

WSH02 - aluminium windshield 0,6mm for 10°

WSH03 - aluminium windshield 0,6mm for 20°



CB1 - Concrete balast 12x20x40cm



Sp17 - Rivet

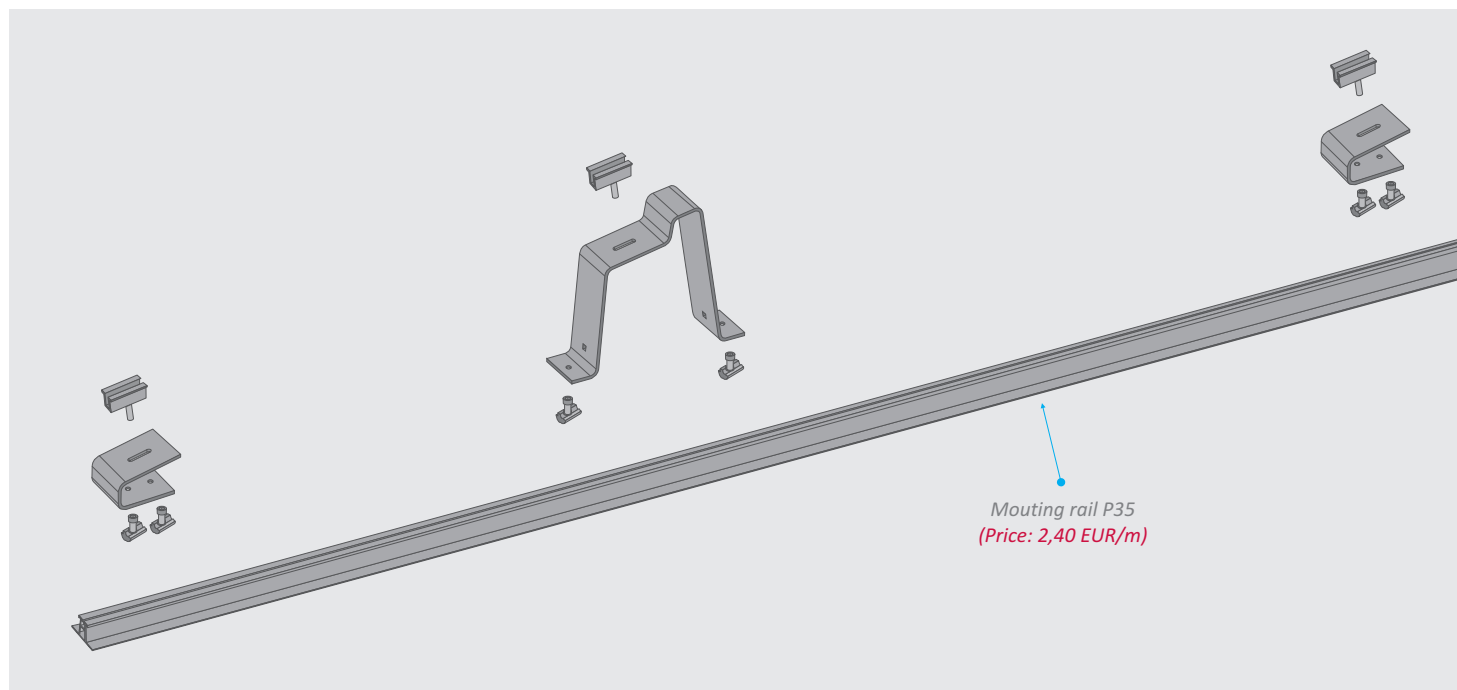


RRS1/RRS2 - Regupol resist solar SK (without Alu foil) or AK SK (with alu foil), special rubber for solar applications, reel dimension 15.000mmx80x6mm. Reels are coming with self adhesive backing, Regupol® resist solar type AK SK is lined with a triplex

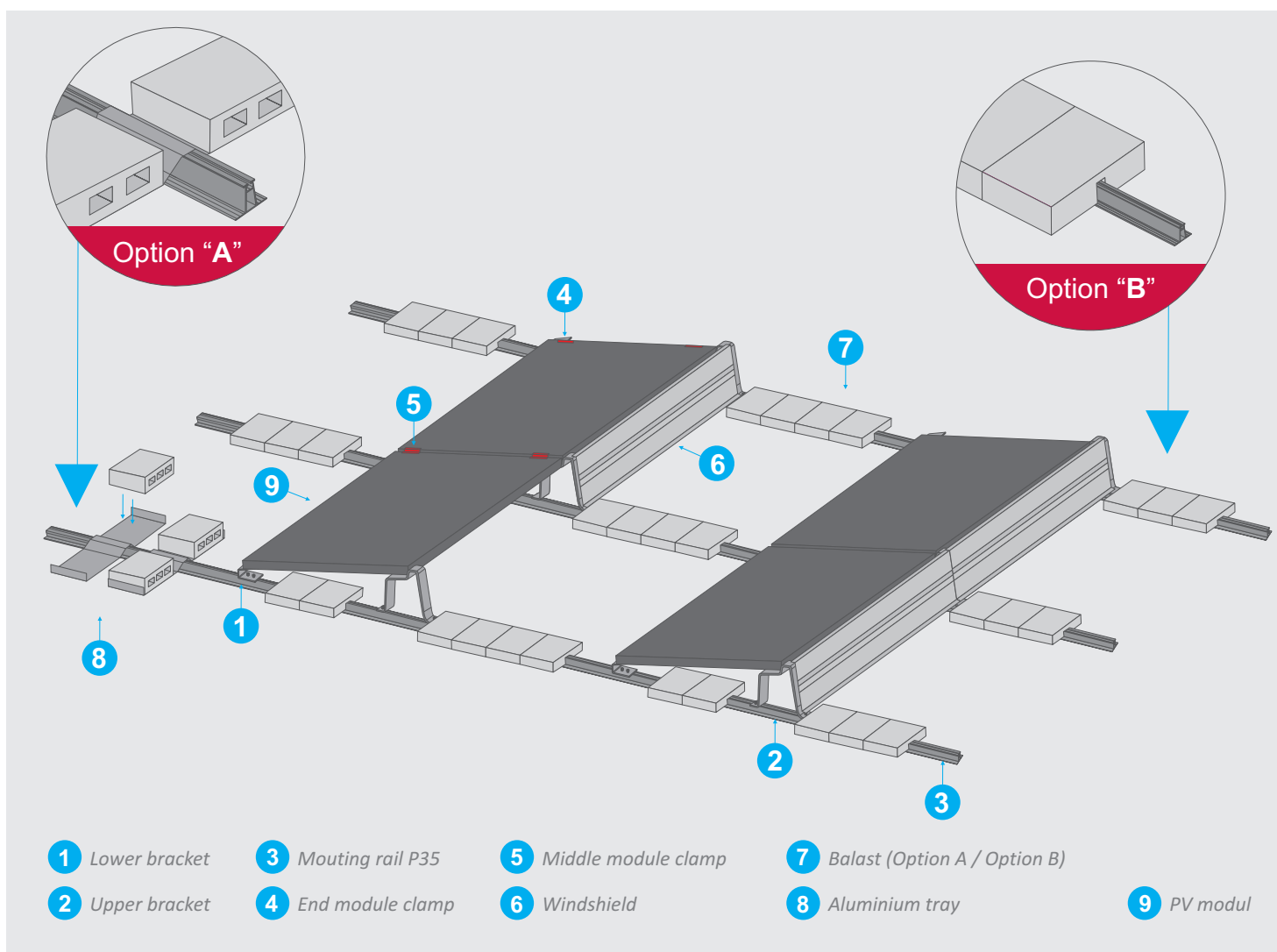
l aluminium foil on its underside. It thus prevents plasticizer migration between non-rubber-compatible membranes (e.g. soft PVC) and the building protection material

Scheme of assembling brackets on P35

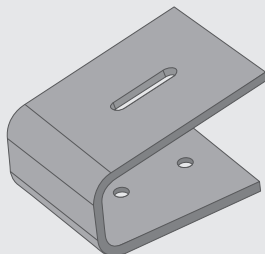
Lower bracket and upper bracket are fixed on P35 with aluminium slot nuts and allen screws. Modules are fixed on brackets with ECL2-C3 and MCL2-C3



Demonstration for BRACKET ON RAIL P35 WITH TILT ON SOUTH for flat roof



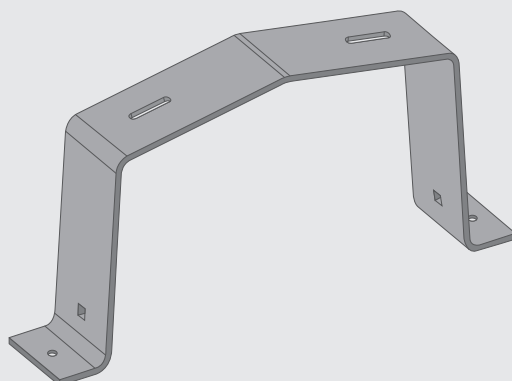
BRACKET ON RAIL P35 WITH TILT 10 ° ON EAST WEST for flat roof



Lower bracket made of aluminium for tilt east-west 10°

Modules are mounted directly on lower bracket and fixed with middle and end module clamps

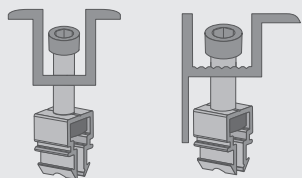
Fr71 - aluminium lower bracket for construction under 10°



Middle bracket made of aluminium for tilt east-west 10°

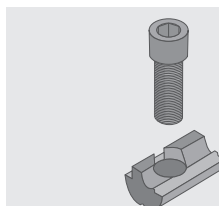
Modules are mounted directly on middle bracket and fixed with middle and end module clamps

Fr81 - aluminium middle bracket for construction under 10°



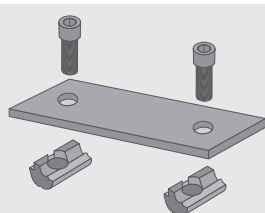
MCL2-C3 - middle clamp set with clip

ECL2-C3 - middle clamp set with clip

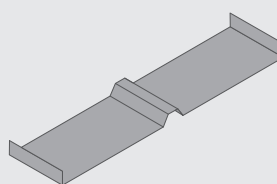


Sp4 - Aluminium slot nut for fixing clamps to rails P1, P2 and P35

M8x16D912A2 - Allen screw M8, DIN912, 16mm



PCON05 - Conector for rail P35, flat bar with 2 pcs of screw and 2 pcs of slot nut SP4

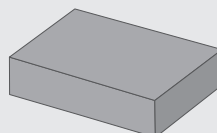


ALT1 - Aluminium tray (0.6mm Al sheet) for concrete balast

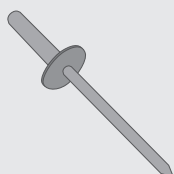


10°

WSH02 - aluminium windshield 0,6mm for 10°



CB1 - Concrete balast 12x20x40cm



Sp17 - Rivet

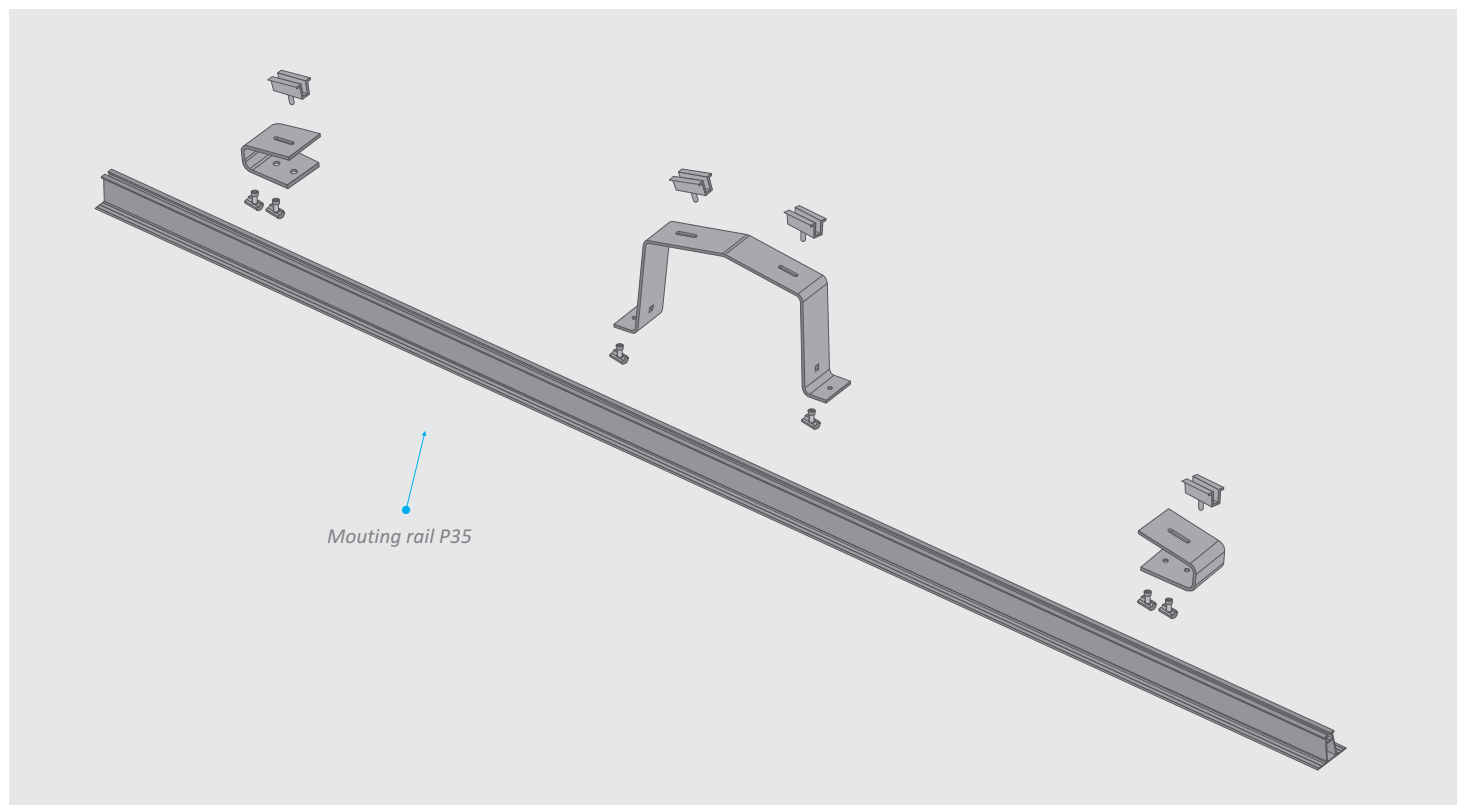


RRS1/RRS2- Regupol resist solar SK(without Alu foil) or AK SK(with alu foil), special rubber for solar applications, reel dimension 15.000mmx80x6mm. Reels are coming with self adhesive backing, Regupol® resist solar type AK SK is lined with a triplex

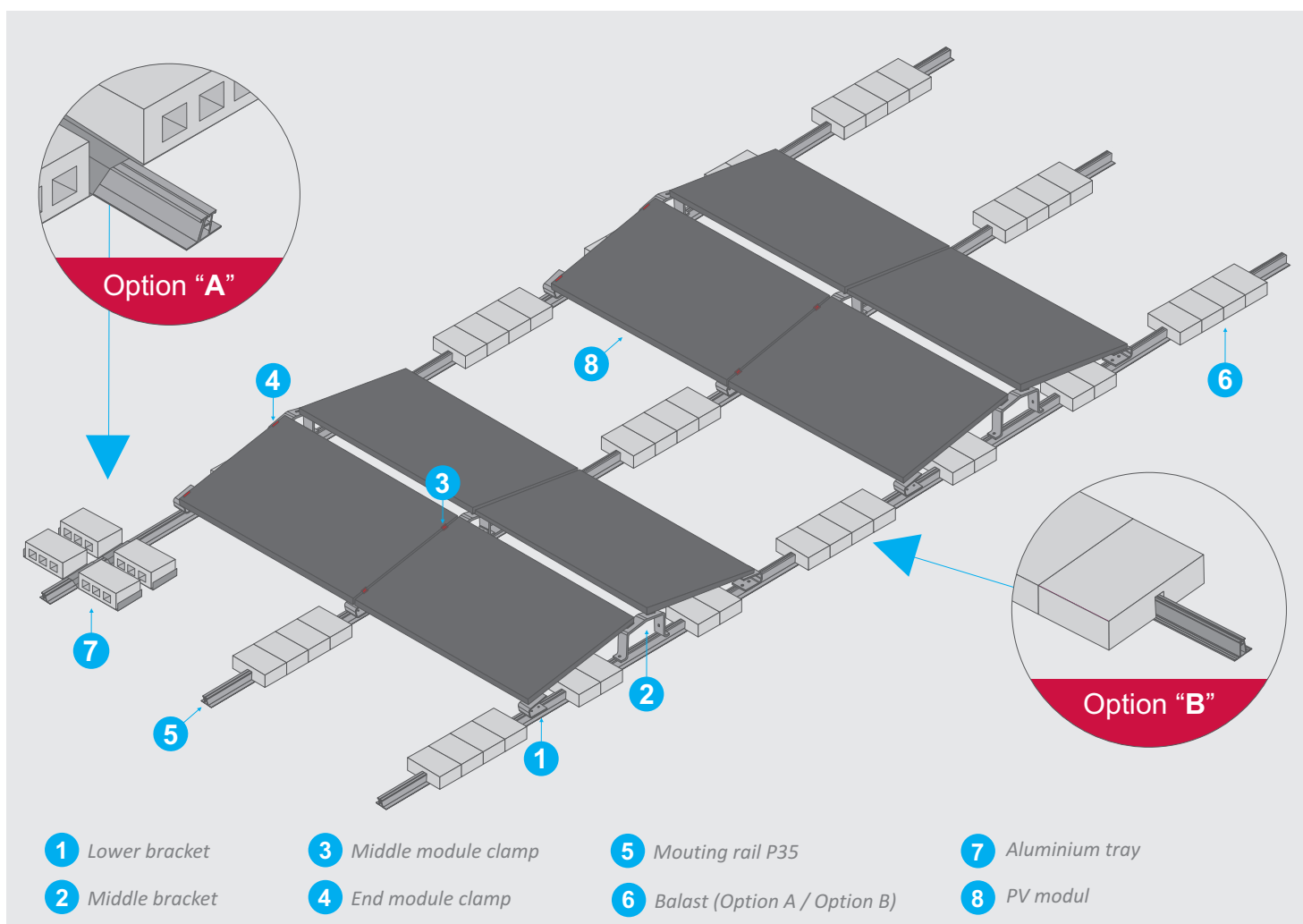
l aluminium foil on its underside. It thus prevents plasticizer migration between non-rubber-compatible membranes (e.g. soft PVC) and the building protection material

Scheme of assembling brackets on P35

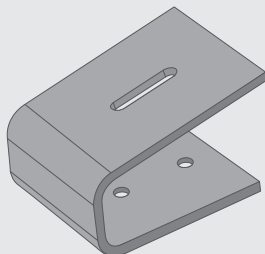
Lower bracket and upper bracket are fixed on P35 with aluminium slot nuts and allen screws. Modules are fixed on brackets with ECL2-C3 and MCL2-C3



Demonstration for BRACKET ON RAIL P35 WITH TILT 10 ° ON EAST WEST for flat roof



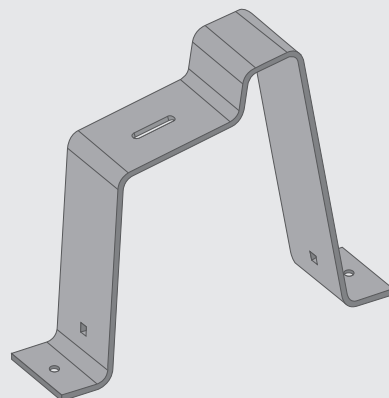
BRACKET ON RAIL P1 WITH TILT ON SOUTH



Lower bracket made of aluminium for tilt south 5°, 10°, 15° and 20°

Modules are mounted directly on lower bracket and fixed with middle and end module clamps

Fr51 - aluminium lower bracket for construction under 5°, 10°, 15°, 20°



Upper bracket made of aluminium for tilt south 5°, 10°, 15° and 20°

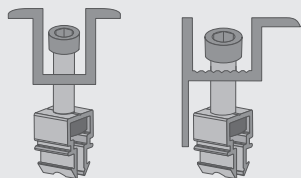
Modules are mounted directly on upper bracket and fixed with middle and end module clamps

Fr61 - aluminium upper bracket for construction under 5°

FR62 - aluminium upper bracket for construction under 10°

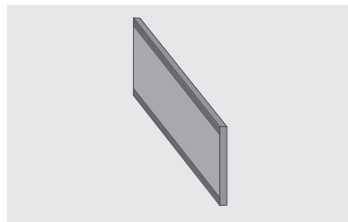
FR63 - aluminium upper bracket for construction under 15°

FR64 - aluminium upper bracket for construction under 20°



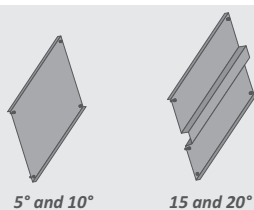
MCL2-C3 - middle clamp set with clip

ECL2-C3 - middle clamp set with clip



PCON04 - Rail connector PCON04 for connection of mounting rail P1

**see more on page 5*



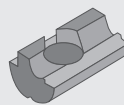
5° and 10°

15 and 20°

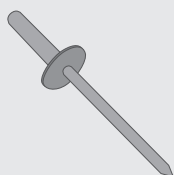
WSH01 - aluminium windshield 0,6mm for 5°

WSH02 - aluminium windshield 0,6mm for 10°

WSH03 - aluminium windshield 0,6mm for 20°



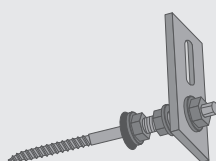
SP4 - Aluminium slot nut for fixing clamps to rails P1, P2 and P35



Sp17 - Rivet



M8x16D912A2 - Allen screw M8, DIN912, 16mm



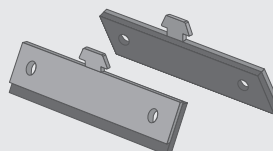
DSW - Hangar bolt with plate

DSW2 (10/180)

DSW3 (10/200)

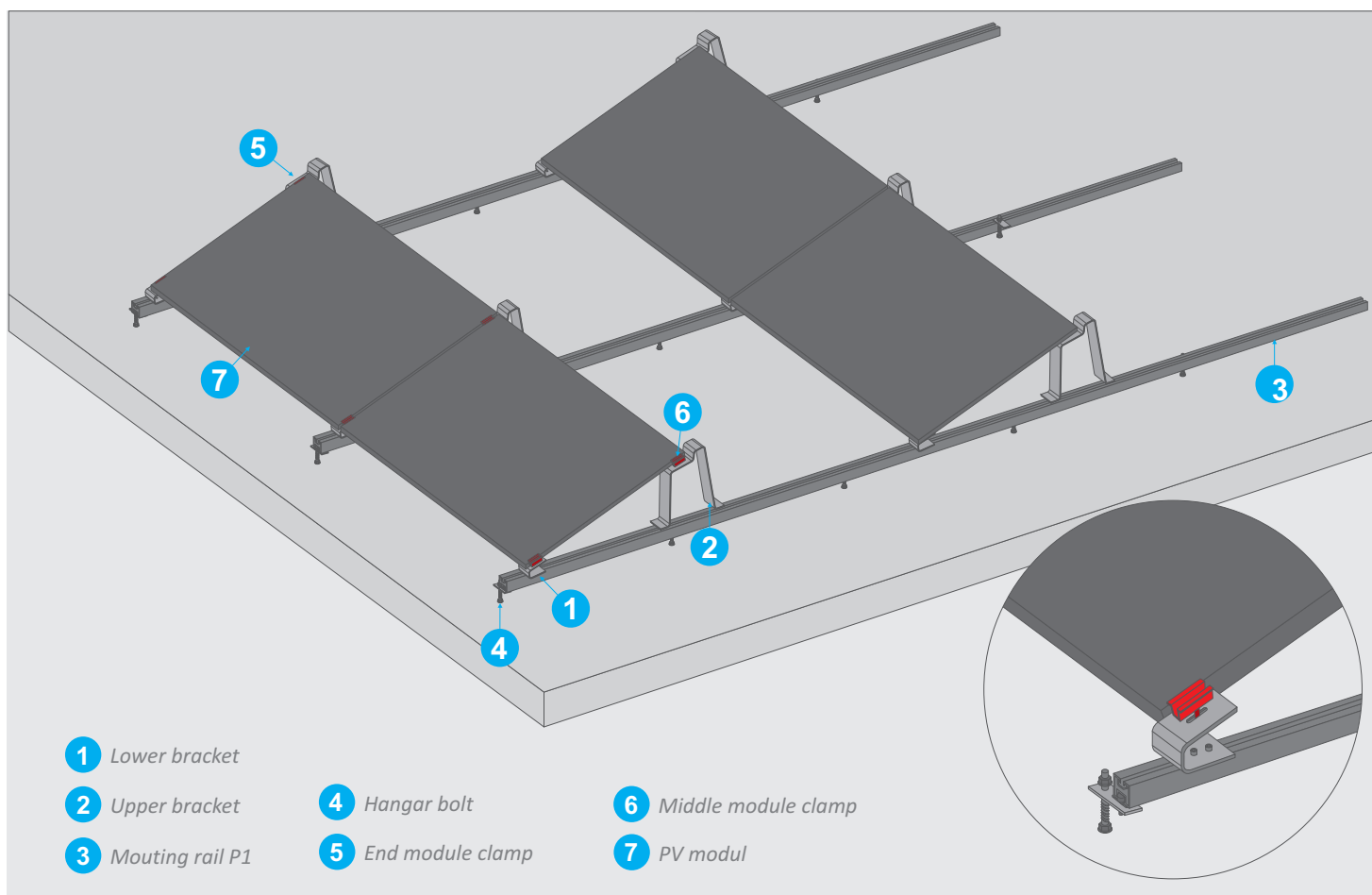
DSW4 (10/250)

DSW5 (12/300)

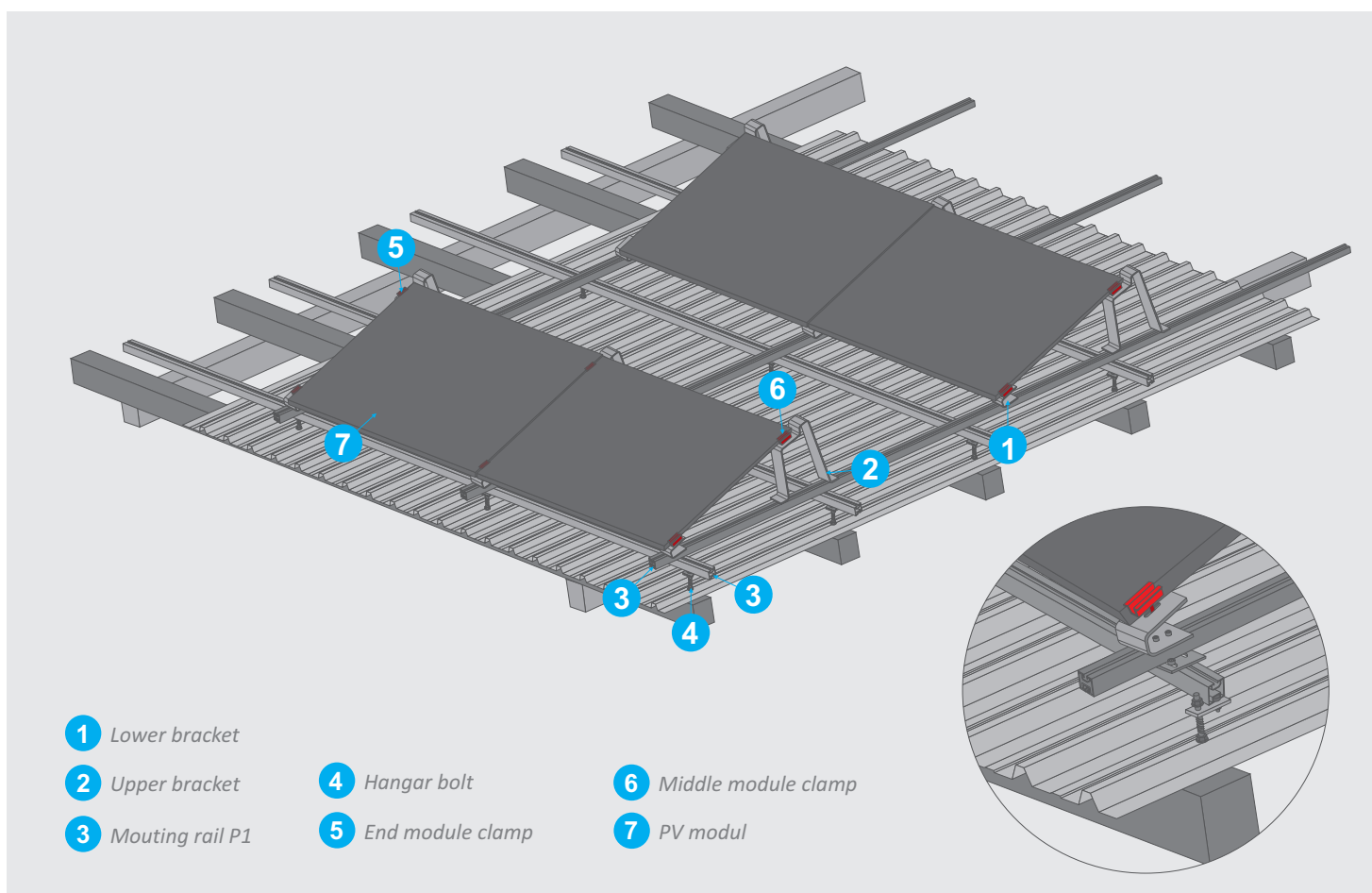


UP1 - Univeras clamp plate for trapezoidal roof

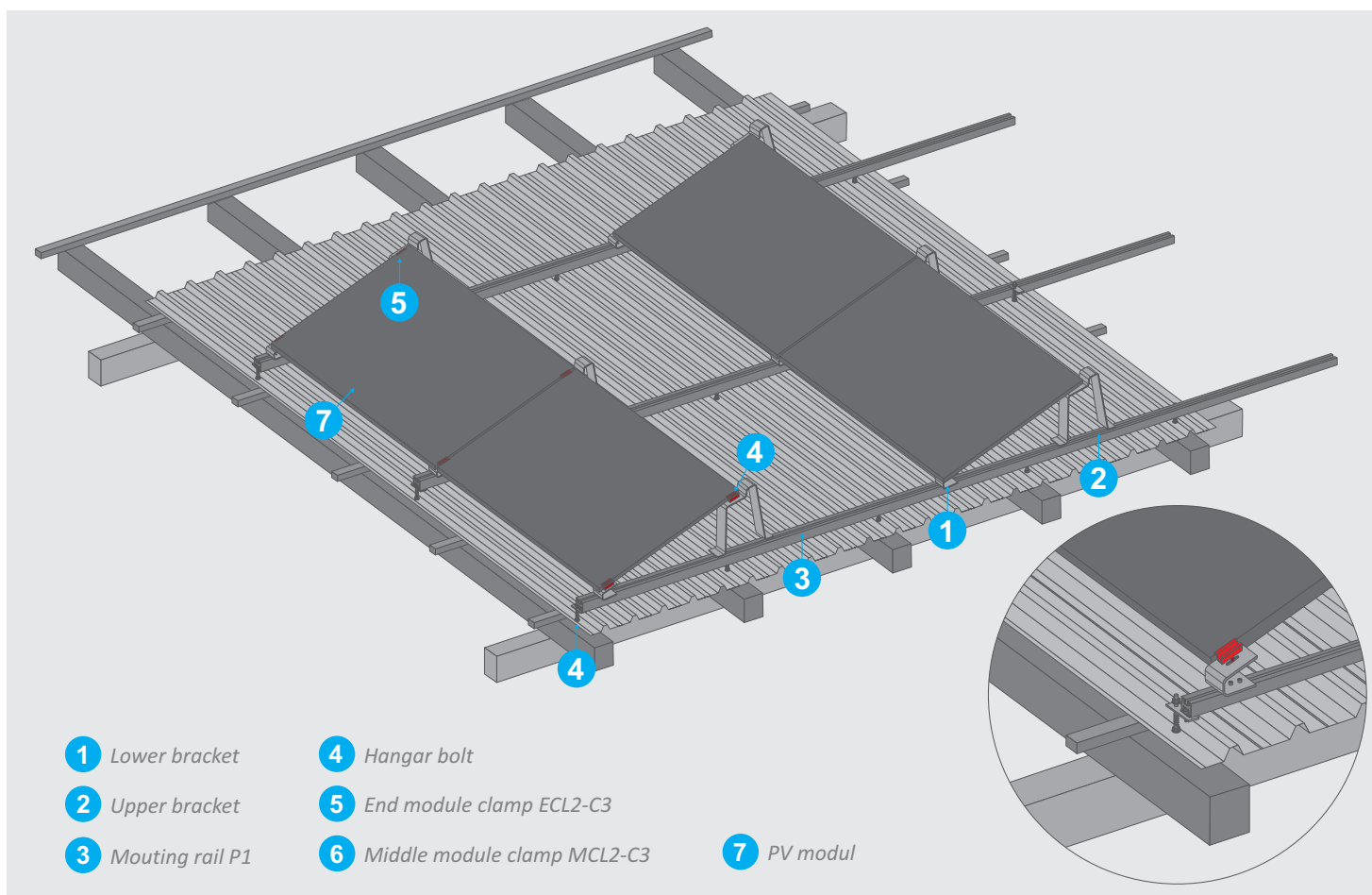
Demonstration for BRACKET on rail P1 with tilt on SOUTH with hangar bolt



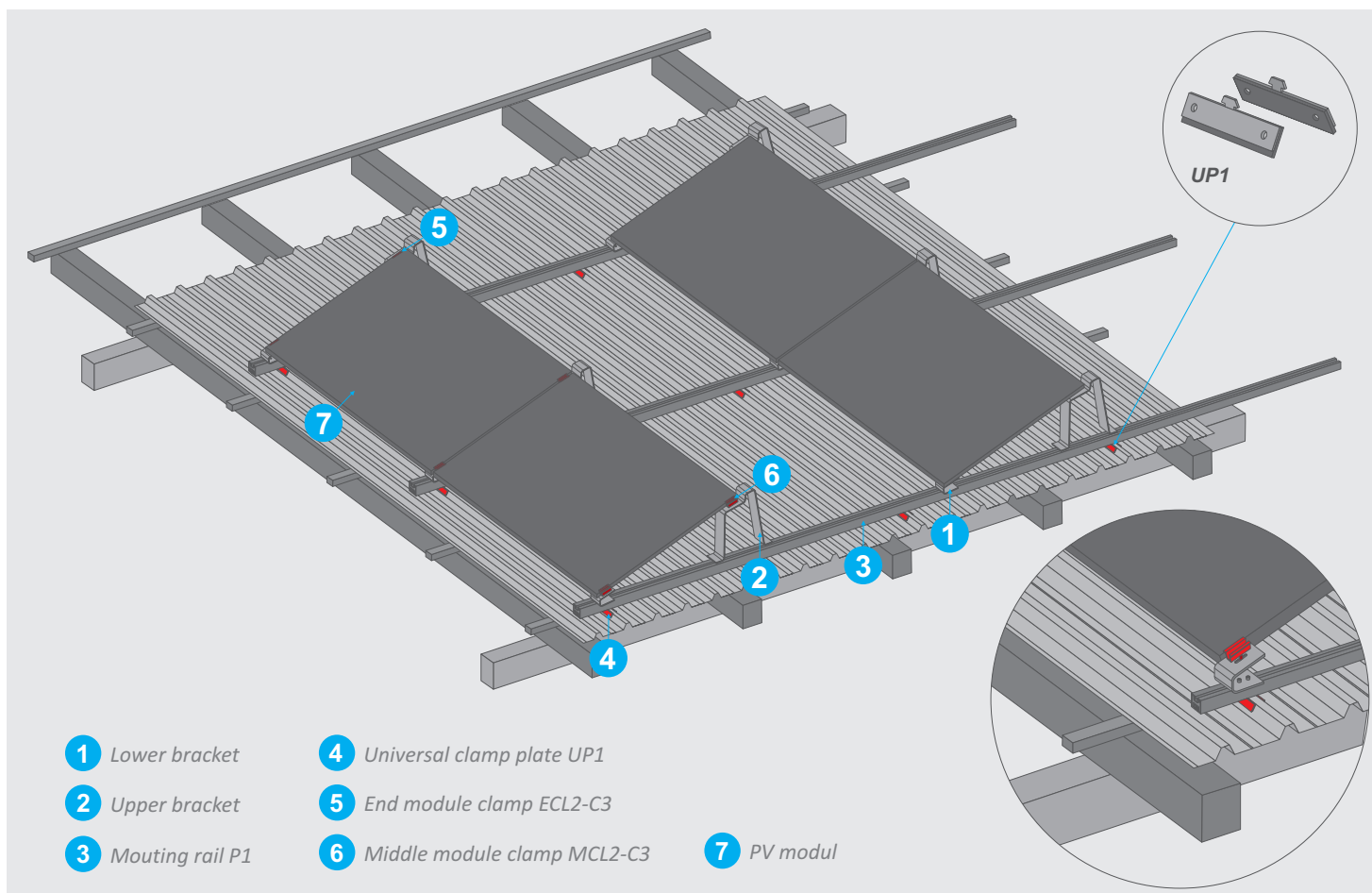
Demonstration for BRACKET ON RAIL P1 WITH TILT ON SOUTH



Demonstration for BRACKET ON RAIL P1 with tilt on SOUTH fixed on hangar bolt



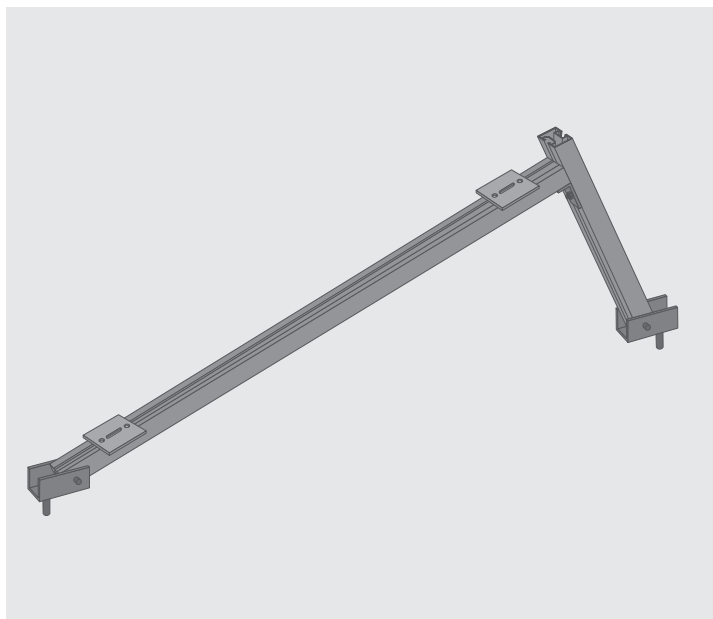
Demonstration for BRACKET ON RAIL P1 with tilt on SOUTH fixed on universal clamp plate for trapezoidal roof



TRIANGL FOR TILT SYSTEMS ON DIFFERENT ROOFS



TRIANGL TYPE 1 - clamps hold module on shorter side



Fixed triangle type 1A

FRT81 - aluminium triangle for construction under 5°

FRT82 - aluminium triangle for construction under 10°

FRT83 - aluminium triangle for construction under 15°

FRT84 - aluminium triangle for construction under 20°



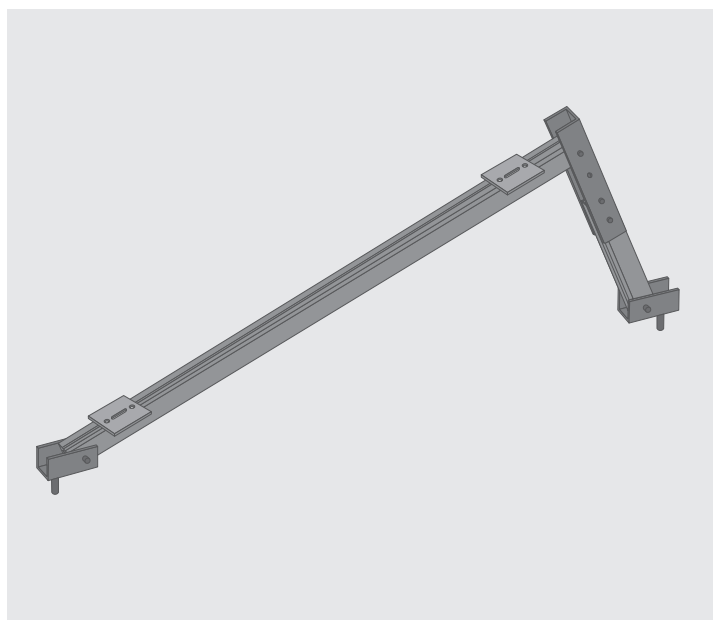
Fixed triangle type 1B

FRT85 - aluminium triangle closed for construction under 5°

FRT86 - aluminium triangle closed for construction under 10°

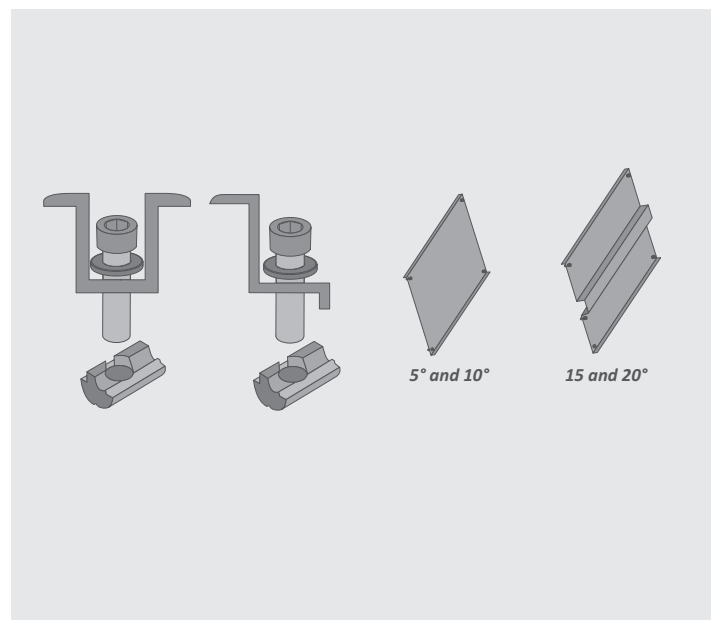
FRT87 - aluminium triangle closed for construction under 15°

FRT88 - aluminium triangle closed for construction under 20°



Adjustable triangle 15-20°

FRT89 - aluminium adjustable triangle for 15° and 20°



MCL1-C1 - middle clamp set

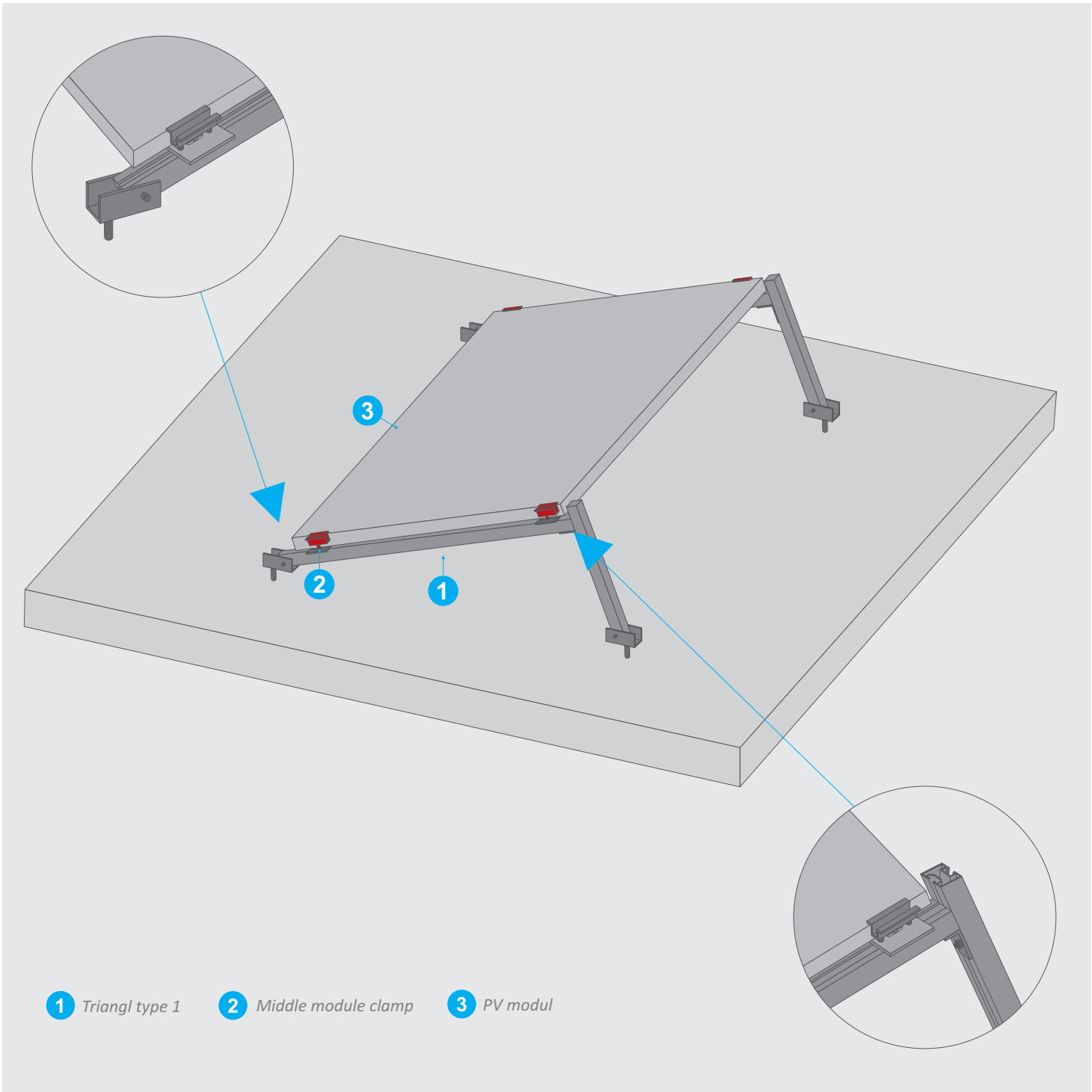
ECL1-C1 - end clamp set

WSH01 - aluminium windshield 0,6mm for 5°

WSH02 - aluminium windshield 0,6mm for 10°

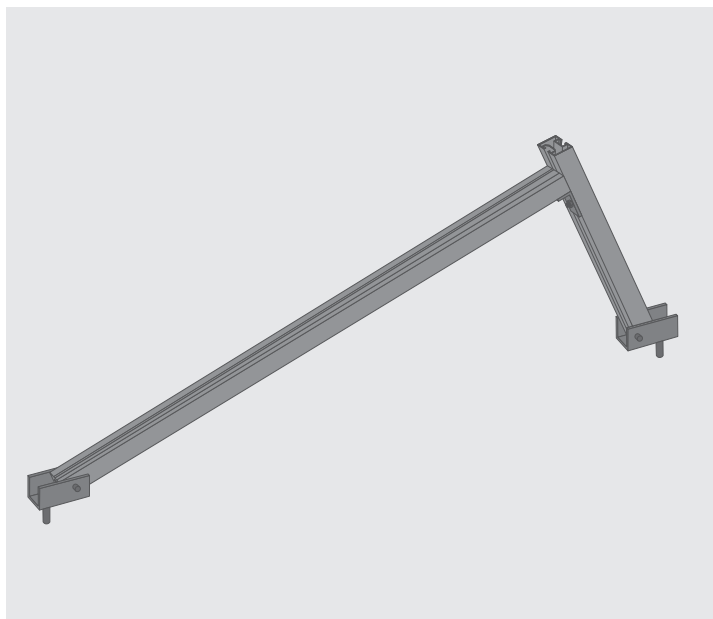
WSH03 - aluminium windshield 0,6mm for 20°

Demonstration for TRIANGL TYPE 1 - clamps hold module on shorter side



■ modules are mounted directly on bracket and fixed with middle and end clamps

TRIANGL TYPE 2 - clamps holder module on longer side



Fixed trianagl type 2A

FRT91 - aluminium trianagl for construction under 20°

FRT92 - aluminium trianagl for construction under 25°

FRT93 - aluminium trianagl for construction under 30°

FRT94 - aluminium trianagl for construction under 35°

FRT94 - aluminium trianagl for construction under 40°



Fixed trianagl type 2B

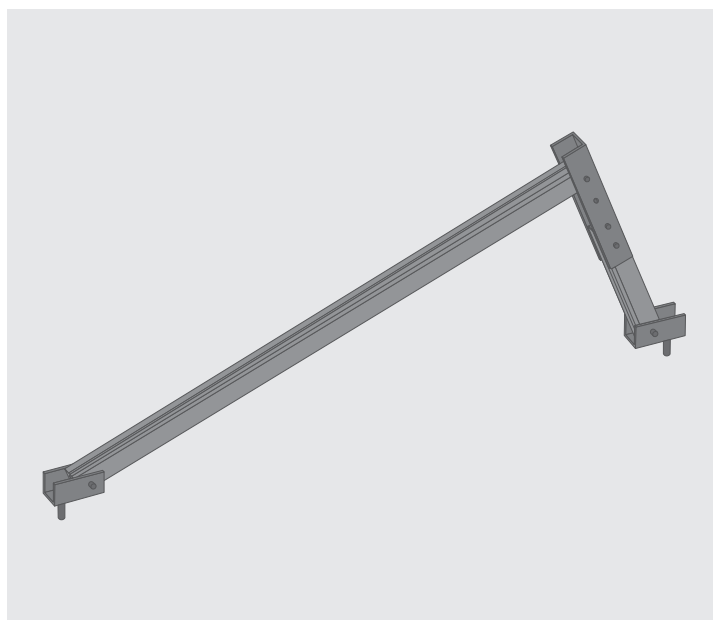
FRT96 - aluminium trianagl closed for construction under 20°

FRT97 - aluminium trianagl closed for construction under 25°

FRT98 - aluminium trianagl closed for construction under 30°

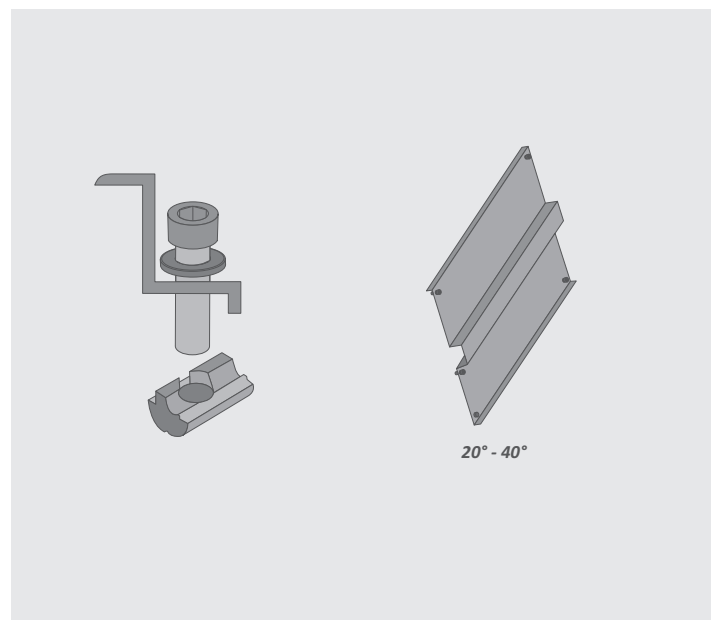
FRT99 - aluminium trianagl closed for construction under 35°

FRT100 - aluminium trianagl closed for construction under 40°



Adjustable trianagl 25-40°

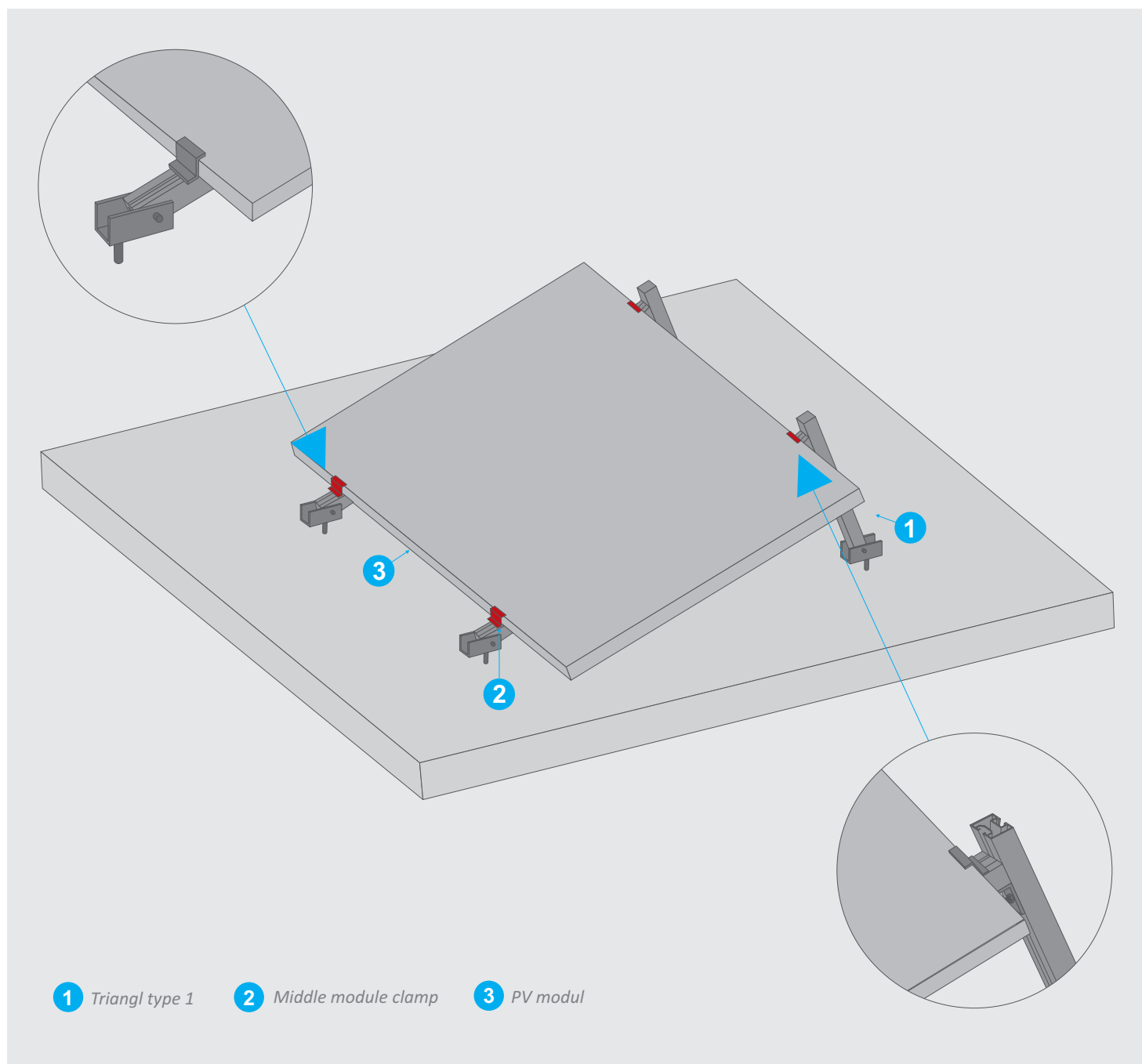
FRT101 - aluminium adjustable trianagl for 25°,30°,35° and 40°



ECL1-C1 - end clamp set

WSH03 - aluminium windshield 0,6mm for 20°

Demonstration for TRIANGL TYPE 2 - clamps holder module on longer side

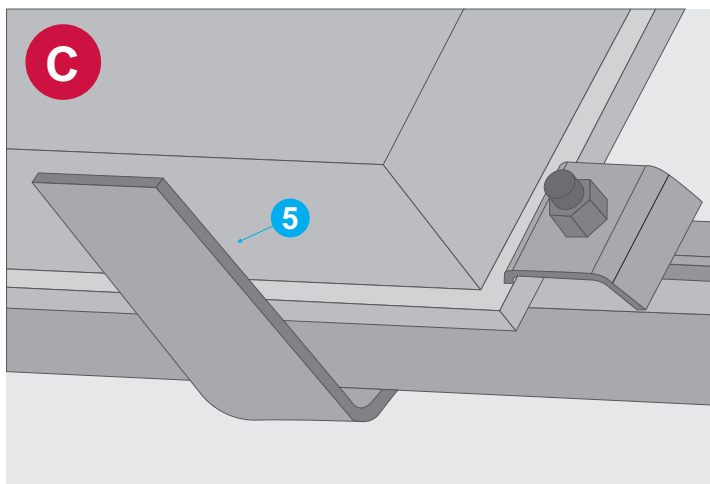
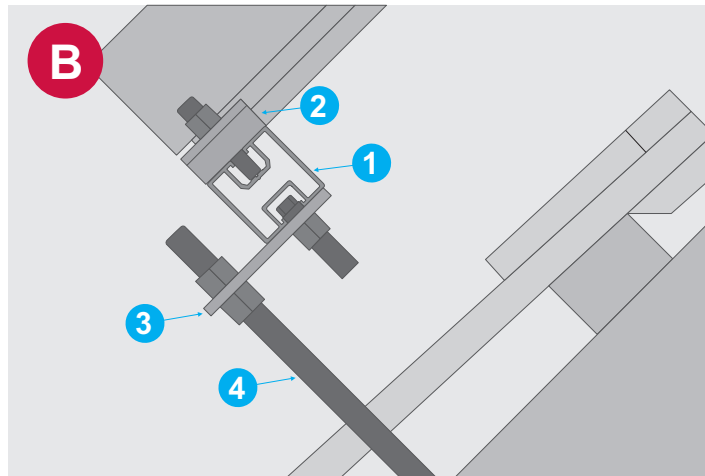
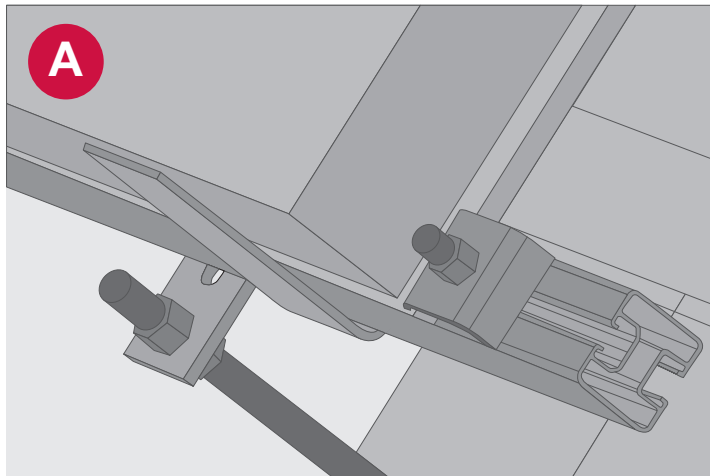
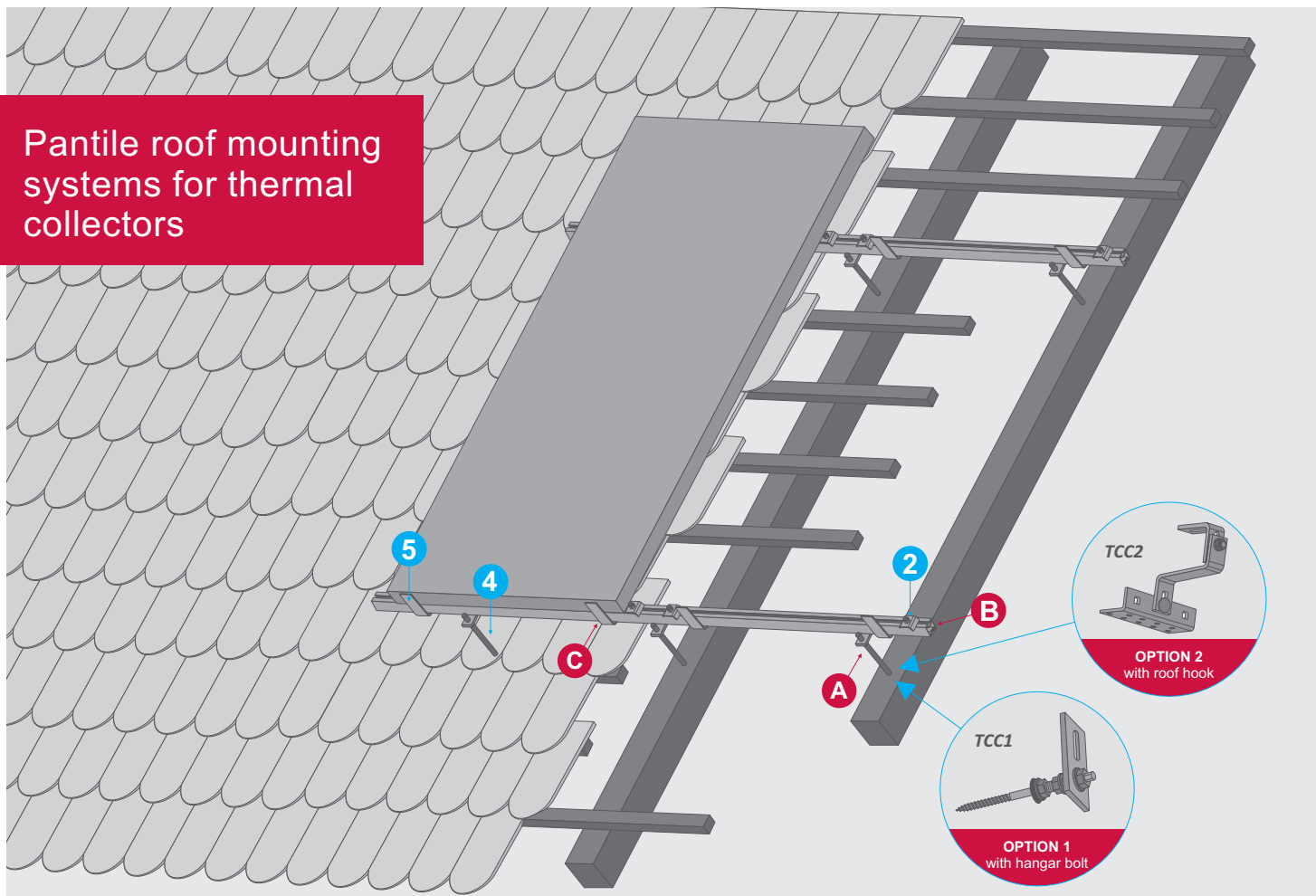


■ modules are mounted directly on bracket and fixed with middle and end clamps

MOUNTING SYSTEMS FOR THERMAL COLLECTORS



Pantile roof mounting systems for thermal collectors



- | | |
|---|--------------------------------------|
| 1 Aluminium rail P1 (40x40mm) | 4 Hangar bolt A2 (10x250mm) |
| 2 Stainless steel connector | 5 Aluminium angle holder (80x40x4mm) |
| 3 Stainless steel adapter plate SP1 (30x80mm) | |

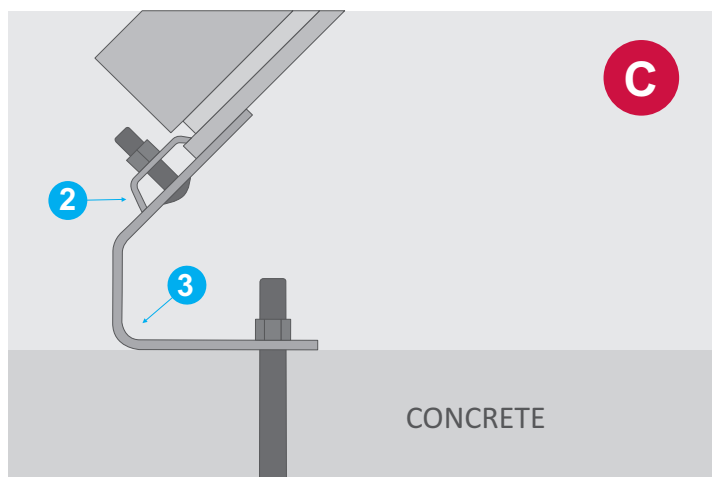
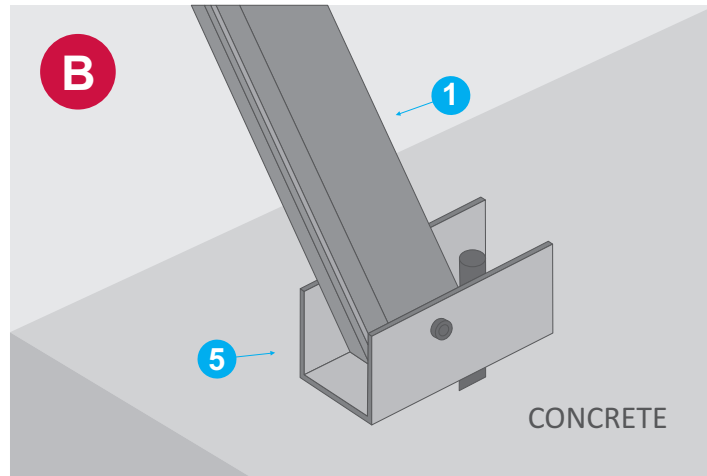
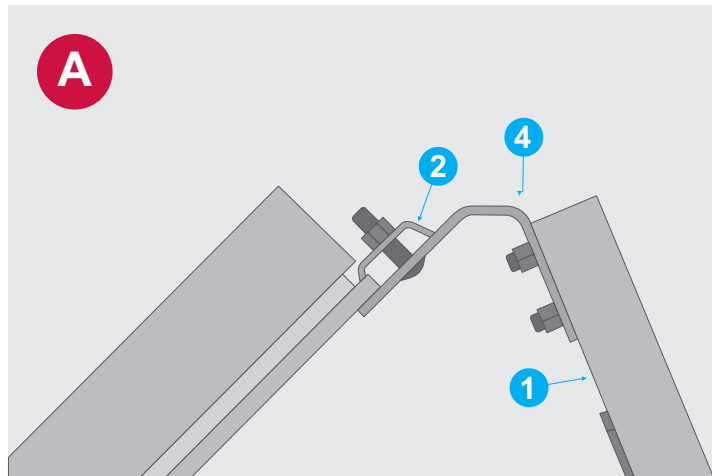
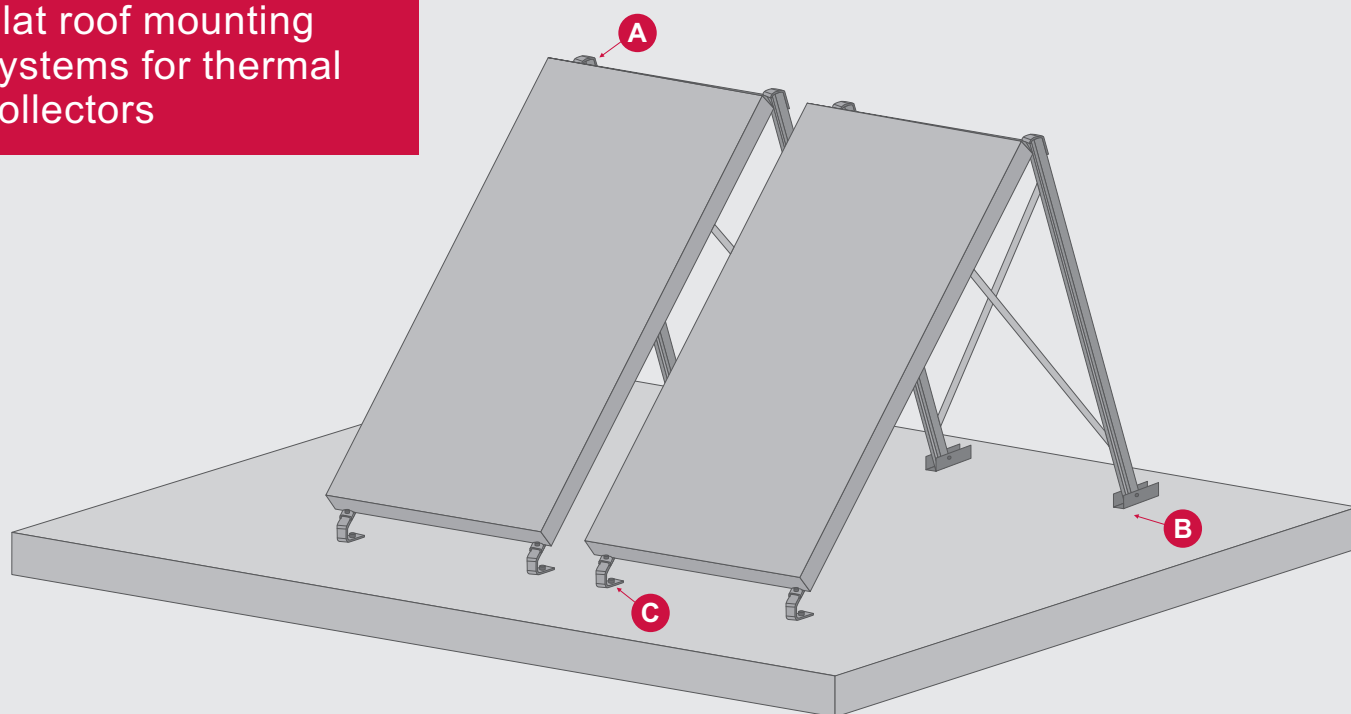
Pantile roof mounting system with hangar bolts for wood 10x250mm Article code: TCC1

Set consists of: 5m P1 rail, Stainless steel connector P1 with collector TCP11 8pcs., Stainless steel adapter SP1 6pcs., Hangar bolt A2(10x250mm) DSW8...6pcs., Aluminium angle holder(80x40x4mm)...4pcs

Pantile roof mounting system with roof hook universal 30x6mm Article code: TCC2

Set consists of: 5m P1 rail, Stainless steel connector P1 with collector TCP11 8pcs., Universal roof hook stainless steel 30x6mm(6 pcs), Hammer head bolt for hooks, Flat head self drilling screw with TX drive 8x80mm A2, Aluminium angle holder(80x40x4mm)...4pcs

Flat roof mounting systems for thermal collectors



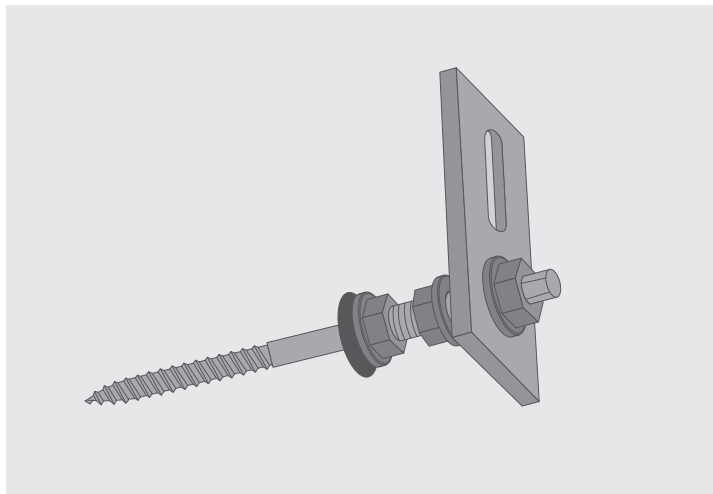
- 1 Aluminium rail P1 (40x40mm)
- 2 Stainless steel connector for collectors
- 3 Front lower holder stainless steel (40x5mm)
- 4 Upper holder stainless steel (40x5mm)
- 5 Back lower holder aluminium U profile

Flat roof mounting system for two thermal collectors Article code: TCC3

Set consists of: 4x1,54m P1 rail, 4pcs. of front lower stainless steel holder TCP13, 4pcs. of back lower stainless steel holder TCP14, 4pcs. of upper stainless steel holder TCP15, ties 1,20m x 2 psc (aluminium L profile 15 x 15mm), stainless steel connector P1 with collector TCP11 8pcs.,

SCREWS AND ACCESSORIES

10



Hanger bolt set for wood with adapter plate with three serrated nuts and EPDM seal

Article code: DSW2 (10/180mm) / DSW3 (10/200mm)
DSW4 (10/250mm) / DSW5 (12/300mm)

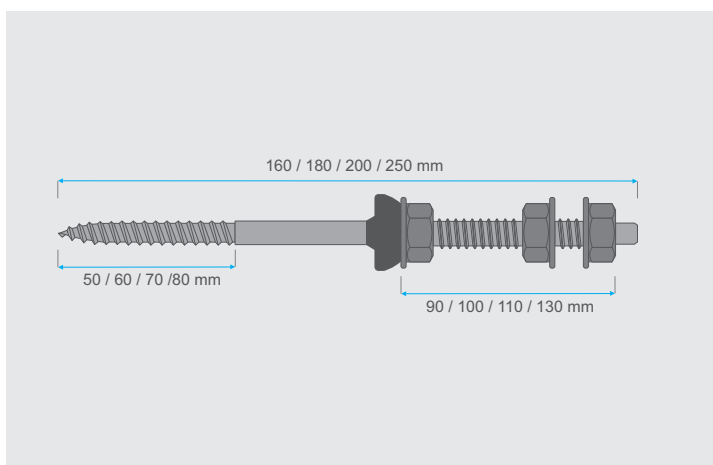
Set of stainless steel screw for wooden substructure. Screw M10, EPDM seal, three serrated nuts, profile plate.

DSW2 (10/180)

DSW3 (10/200)

DSW4 (10/250)

DSW5 (12/300)



Hanger bolt for wood with three serration nuts and EPDM seal

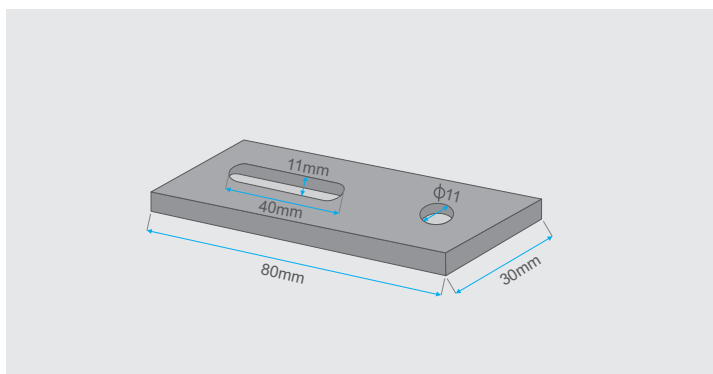
Stainless steel screw for wooden substructure. Not self-drilling. Screw M10, EPDM seal, three serrated nuts. Material stainless steel.

DSW6 (10/180) :

DSW7 (10/200) :

DSW8 (10/250) :

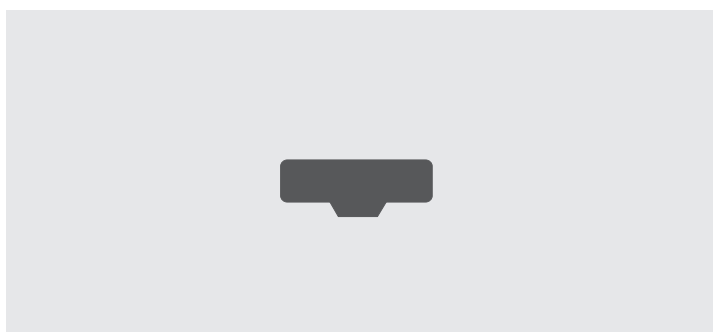
DSW9 (12/300) :



Adapter plate for hanger bolt

Article code: SP1

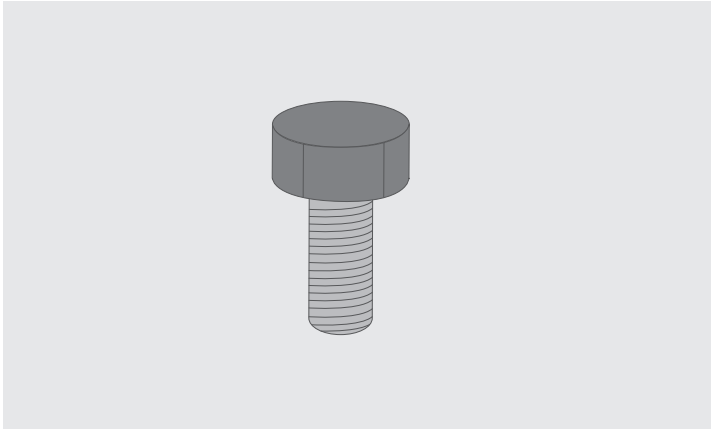
Adapter plate with $\phi 11$ hole and slot 11x40mm, material stainless steel. Dimensions 30x80mm, thickness 5mm



EPDM seal for hanger bolt

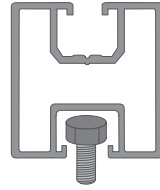
EPDM seal with $\phi 10$ mm hole

Article code: SP8

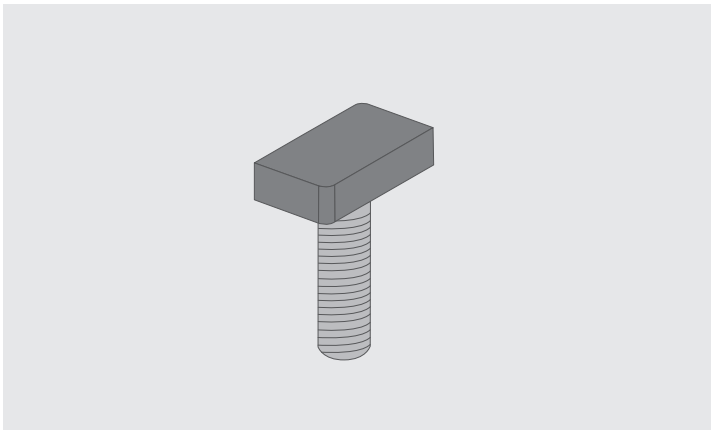


Hexagon head bolt for fixing rail to hook or some other roof clamp

Article code: M10x20D933A2

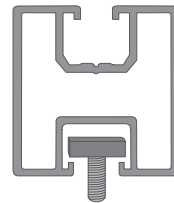


M10 (DIN933) bolt with hexagonal head length 20mm. With this screw you can for example fix the profile on roof hook or some other clamp.



Hammer head bolt for fixing rail to hook or some other roof clamp

Article code: SCT3 / SCT4 / SCT5

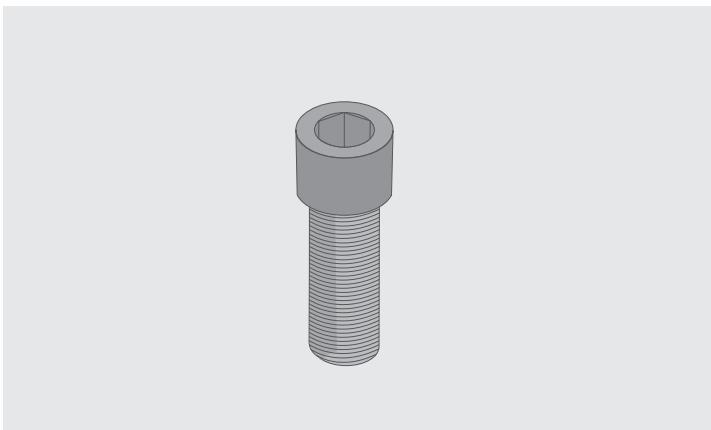


T-bolt M10. With this screw you can for example fix the profile on the roof hook. The advantage of this bolt compared to plain hexagon is that it can be inserted into the slot of mounting rail at any place and do not need to be pushed from start of rail. Material Stainless steel.

SCT3 (M10x25)

SCT4 (M10x30)

SCT5 (M10x40)



Allen screw M8, DIN912

Article code: M8x16D912A2 / M8x20D912A2 / M8x25D912A2 / M8x30D912A2 / M8x35D912A2 / M8x140D912A2 / M8x45D912A2 / M8x50D912A2 / M8x55D912A2

Material stainless steel

M8x16D912A2 - 16mm

M8x20D912A2 - 20mm

M8x25D912A2 - 25mm

M8x30D912A2 - 30mm

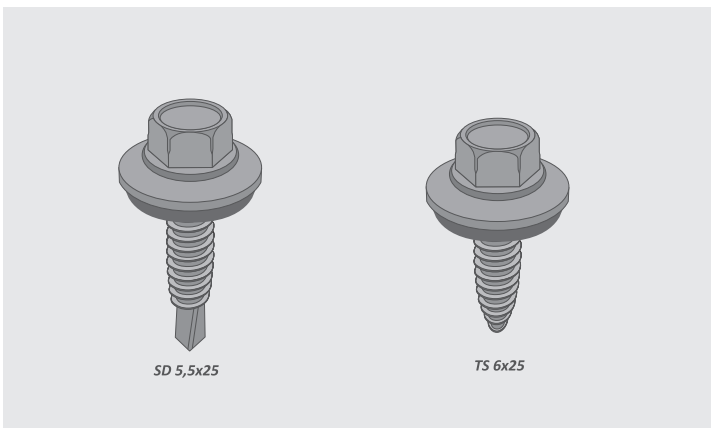
M8x35D912A2 - 35mm

M8x40D912A2 - 40mm

M8x45D912A2 - 45mm

M8x50D912A2 - 50mm

M8x55D912A2 - 55mm



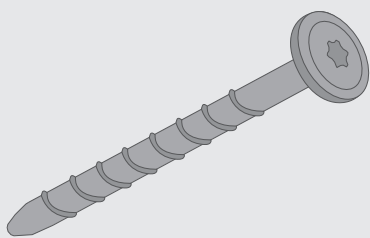
Thin sheet self-drilling bolt

Article code: SD 5,5x25

Self-drilling bolt for trapezoidal roof DIN7504 thickness 5,5mm, length 25mm, A2 stainless steel, with EPDM seal.

Article code: TS 6x25

Special self-drilling bolt for trapezoidal roof with fine thread thickness 6mm, length 25mm, INOX, with EPDM seal.



Flat head self-drilling screw with TX-DRIVE

Article code: Tx6x80A2 / Tx6x100A2 / Tx8x80A2 / Tx8x100A2

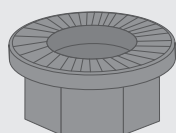
Tx6x80A2....6x80mm - INOX

Tx6x100A2....6x100mm - INOX

Tx8x100A2....8x80mm - INOX

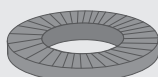
Tx8x100A2....8x100mm - INOX

Screw for wood with wide head , for fixing the hook on roof rafter, with flat TX-drive, self-drilling.



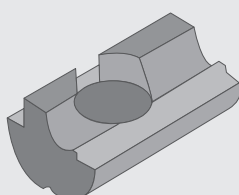
M10 serrated hexagon nut, DIN6923A2, INOX

Article code: SC-NWFM10



„S“ locking washer

Article code: SC-LWM8-01



Aluminium slot nut for fixing clamps to rails P1, P2, P35

Article code: SP4