Photovoltaic Mounting Systems



Technical Data

MOUNTING SYSTEMS FOR STANDING SEAM SHEET METAL ROOFING

for framed modules



Mounting the module directly on to the roof – without penetrating the roof

The S:FLEX clamp for sheet metal/standing seam is the innovative solution to mount PV modules on pitched roofs with seamed roofing.

The framed modules can be mounted quickly and safely directly on to the roof membrane using proven click technology and without penetrating the roof. The process is cost-efficient thanks to minimised material usage, transport costs and warehouse space. The complete substructure for 1 kWp of PV capacity can fit into a shoe box.

For roofs which do not allow for the direct mounting of modules, the clamp for sheet metal/standing seam can be used in combination with the S:FLEX rails and cross adapter clamps.

Advantages of the S:FLEX Standing Seam Clamp

- Fastening the modules directly on to the standing seam with the S:FLEX clamp and clickable mid clamps
- Fastening in the cross rail installation is also possible
- When fitted directly there are no additional loads on the roof membrane caused by thermal length changes
- No roof penetration no leakage
- Wide clamp style ensures the distributed application of force in the seam
- With edge clip, cable routeing directly on the clamp possible
- Module inverter can be attached directly to the clamp using hammer-head bolt
- Low logistics costs thanks to few components and compact construction without lengthy items
- Manufactured from weatherproof aluminium and stainless steel

MOUNTING SYSTEMS FOR STANDING SEAM SHEET METAL ROOFING

Direct installation





Standing Seam Clamp 2.1

End clamp AK II Klick 30-50 A





Mid clamp AK II Klick 30-50 A

Fastening:

Non-penetrative

Substructure material:

Seamed roofing

Module type:

Framed modules

Module orientation:

Landscape / portrait (clamping on the short side)

Layers of rails:

Single layer

Advantages:

- No rails necessary
- Low material/logistics/installation costs
- Quick mounting
- No roof penetration

Note:

The respective clearances between the raised corrugations required for optimum fastening of the modules must be adhered to

MOUNTING SYSTEMS FOR STANDING SEAM SHEET METAL ROOFING

Installation with single layer substructure





Standing Seam Clamp 2.1

End clamp AK II Klick 30-50 A





Mid clamp AK II Klick 30-50 A







Rail ST-AK 13/60

Fastening:

Non-penetrative
Substructure material:
Seamed roofing
Module type:
Framed modules
Module orientation:
Prtrait / landscape (depending on approval from the
module manufacturer)
Layers of rails:
Single/double layer, cross rail installation
Advantages:
- Low material/installation costs
- No roof penetration
- Length of rails 3150 mm to 6200 mm

- High rigidity rails suitable for heavier loads

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Flexible application:

The carrier rails of the S:FLEX systems are available in lengths of 3150 and 6200 mm. Therefore, you are able to select the economically optimal solution for every project.

Simple, customised planning:

Our planning tool allows you to create an exact, specific plan for each installation site. Wind and snow loads applicable to the existing roofing are always also taken into account.

Safety for the roof:

The installation of thermal expansion joints prevents tension damage to the roof and modules.

Fast installation:

The easily accessible screwed connections allow you to lay modules on the roof in a very short time using the prefabricated components.

The modules can be fitted vertically or horizontally.

| Module types | Framed solar modules with frame thicknesses of 30 to 50 mm (others on request) |
|---|--|
| Applications | Standing seam Round seam Angle seam |
| Recommended sheet metal thickness | Seam thickness 0.6–16 mm Width of seam head 58 mm max. Height of seam head 25 mm max. (titanium zinc not recommended) |



| Module orientation | Portrait and landscape |
|-----------------------|--|
| Alignment | Parallel to the roof |
| Material | High grade aluminium Stainless steel EPDM seals (optional) |
| Colour | Natural, extruded finish |
| Special features | Particularly quick installation |