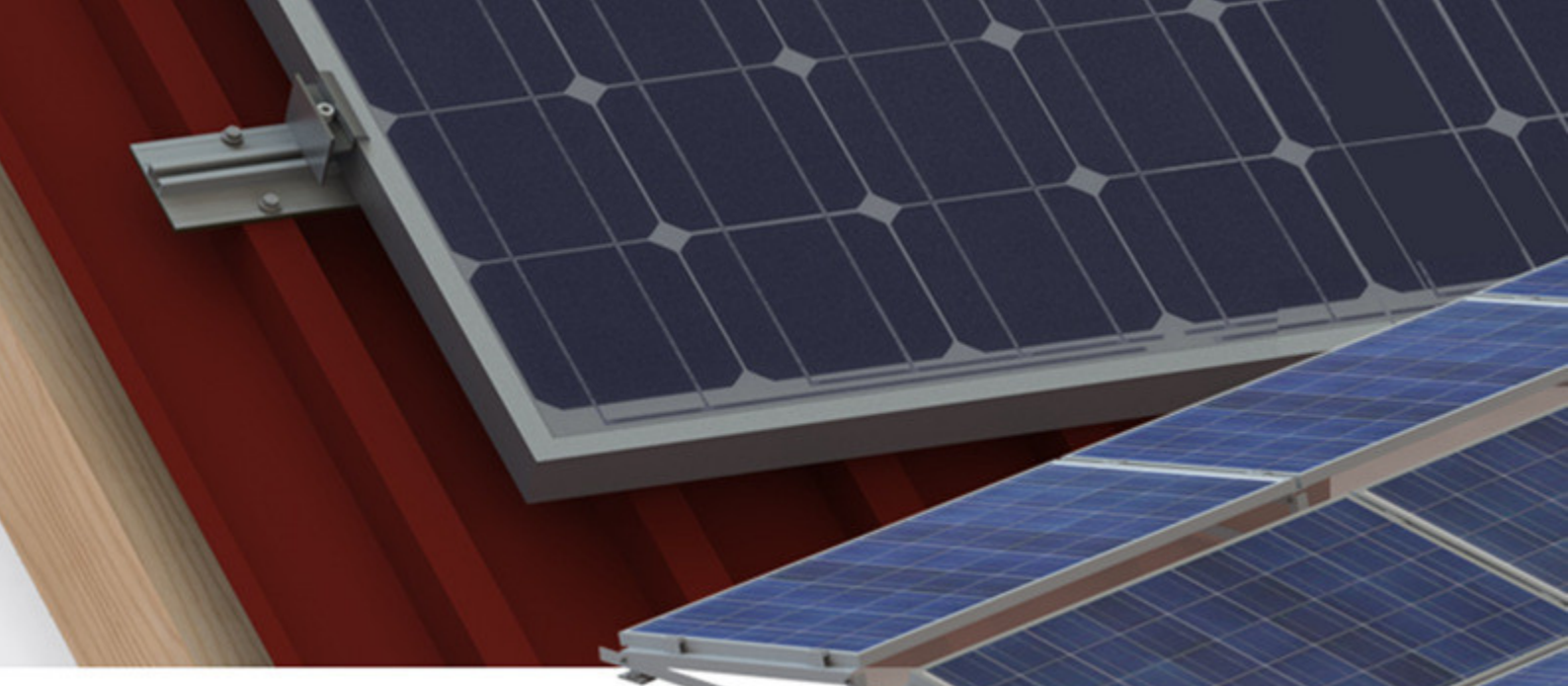

PROFINESS

VERBINDUNGS- & MONTAGESYSTEME

Mounting systems for photovoltaics

Product range

DEKRA INDUSTRIAL

BAUART GEPRÜFT

info@profiness.de
Onlineshop unter www.profiness.de

Profiness GmbH Broicher Waldweg 42 45478 Mülheim a.d. Ruhr

PROFINESS
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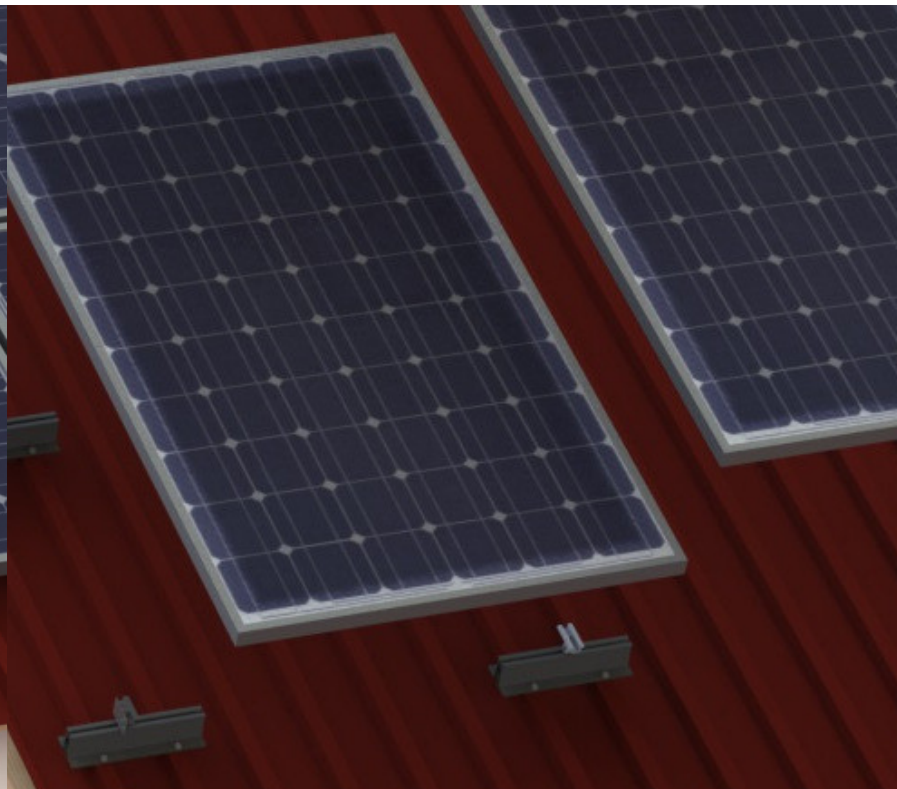
Dated: 02/2019 • Subject to change

Installation example trapezoidal rail



We are delighted that you have chosen a PROFINESS system and thank you for your confidence.
Please check, before construction starts, the completeness of the components based on our delivery note.
Condition for any warranty claims is the observance of these installation instructions.

Observe the following instructions regarding laws, regulations and technical rules

When setting up solar energy installations applicable laws and regulations at regional, national and European, and international level have to be observed for the respective country.
It generally apply the general accepted rules of technology that have been usually formulated in the form of standards, guidelines, rules, regulations and technical rules by state and federal agencies, utility companies, and trade associations and committees in the relevant fields.
The entire PV system must be installed in accordance with generally accepted engineering standards.
Please observe the accident prevention regulations of the professional associations (trade association regulation for safety and health at work), in particular:

BGV A1 General regulations
BGV A2 Electrical systems and equipment
BGV A3 Electrical systems and equipment
BGV C22 Construction work
BGV D36 Ladders and steps

Please note all public regulations and standards, DIN standards, TAB (technical connection conditions), accident prevention regulations, the guidelines of the Association of Property Insurers (VDE guidelines for fire protection), the technical rules of the German Roofing Trade and General guidelines (eg timber structures, roof Overlap - and roof sealing work) in the planning, construction, operation and maintenance of grid-connected PV systems.
These are in particular (not exhaustive):

DIN / VDE 0100 part 712 in particular (construction of power plants with
Rated voltages up to 1000V)
DIN / VDE 0289 (Electrical cables)
VDI 6012 (Decentralized energy systems in buildings - Photovoltaics)
DIN / VDE 0185 Part 1- 4 (lightning protection)
DIN 1055 Part 4 (wind)
EN 1991-1-4 (wind loads Euro Code 1)
DIN 1055 Part 5 (snow load)
EN 1991-1-3 (snow loads Euro Code 1)
DIN 18338 Roofing and roof sealing works
DIN 18451 Scaffolding work
DIN 1052 Part 2 and Part dimensioning of the substructure (wooden structures)
TAB (technical connection conditions of the power company)
DIN 18015 (design and construction of electrical installation in residential buildings)
VDEW guidelines concerning the connection and parallel operation of generators in the public Low voltage network)
DIN 4108 Thermal insulation
Energy Saving Regulation (EnEV)

Attention

Unauthorized modifications and inappropriate use of our components in assembly and construction of the system for all liability claims.
We would like to point out once again that when working on the roof, to observe accident prevention regulations (UVV) are (among others VBG 37 Construction work, § 12 Fall Protection).
Furthermore, we point out that before the planning and construction of the installation of the building (structural, rafters, battens), or the roof cladding or foil on the roof serviceability and tightness must be checked.
In foil roofs is to ensure that the compatibility of the roof sheet with the coating of the support surface used by Profiness tolerated.

It is to ensure that distances to the roof end / Attica on each plant site are respected. If this border area is too small, so this affects possibly negative effect on the static and must be considered accordingly.
The modules, the dimensions are gem. Data observed in order to ensure the ventilation of the PV system. (See data sheet).

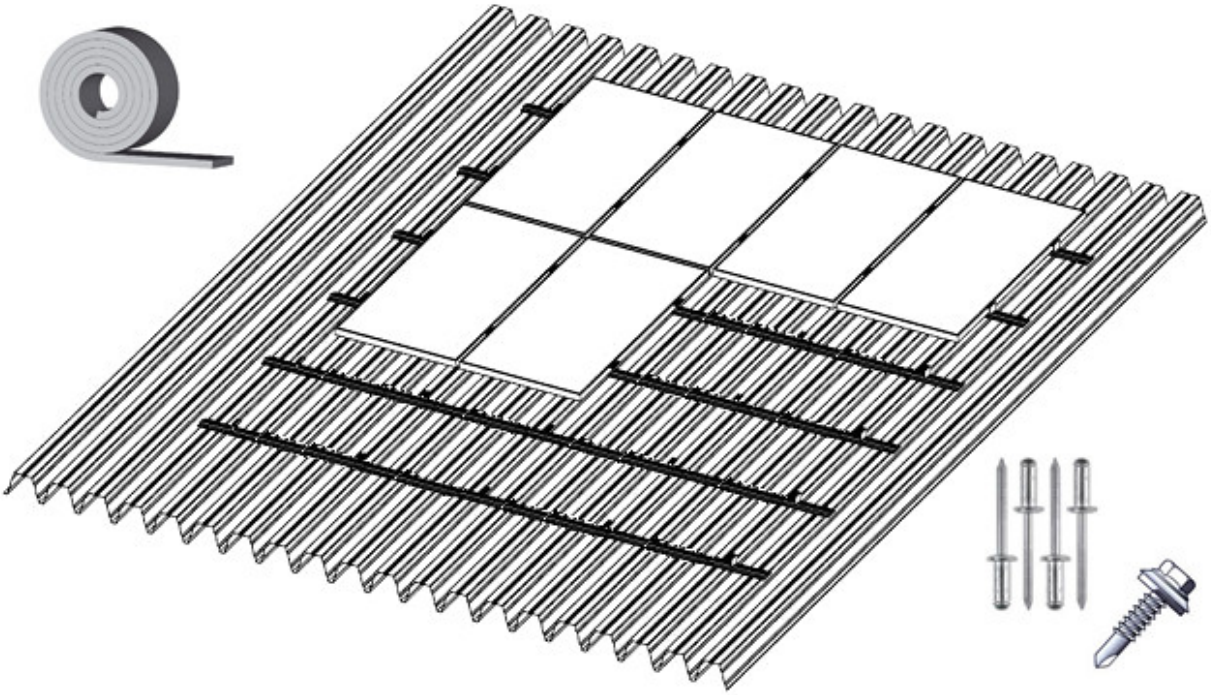
Work and knowledge requirement of processors and installers

PROFINESS assumes that the assembly will be done only by competent personnel with a recognized qualification -or- (by a state or federal organization) appropriate knowledge - carried out the relevant technical area.

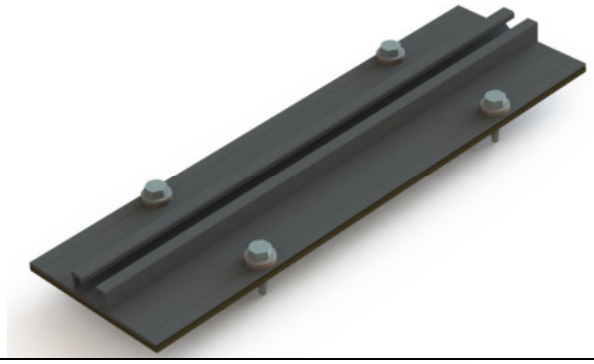
Overview mounting system for

Roof constuction

The trapezoidal rails Profiness31 (1.3cm height) and Profiness31-60 (6cm height) are the connecting piece between the roof and the module. First, the EPDM sealing tape is adhered to the beads or to the rail, then the profile is placed. The connection to the roof is mady by self-drilling screw or rivet with building approval.



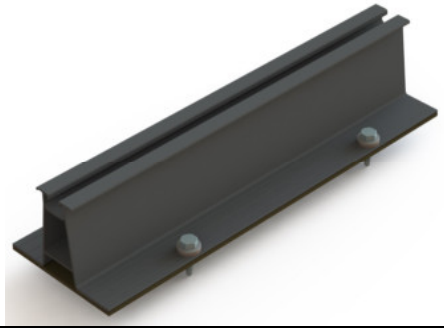
Components



PROFINESS31 rail with module end and clip (alternatively with sliding nut)

PROFINESS31
Length 6.1 meters or cut to bridge for 2 grooves

Drilling screws 6x25 with building approval. We recommend screwing with longer drill screws at the points where the substructure is palpable.



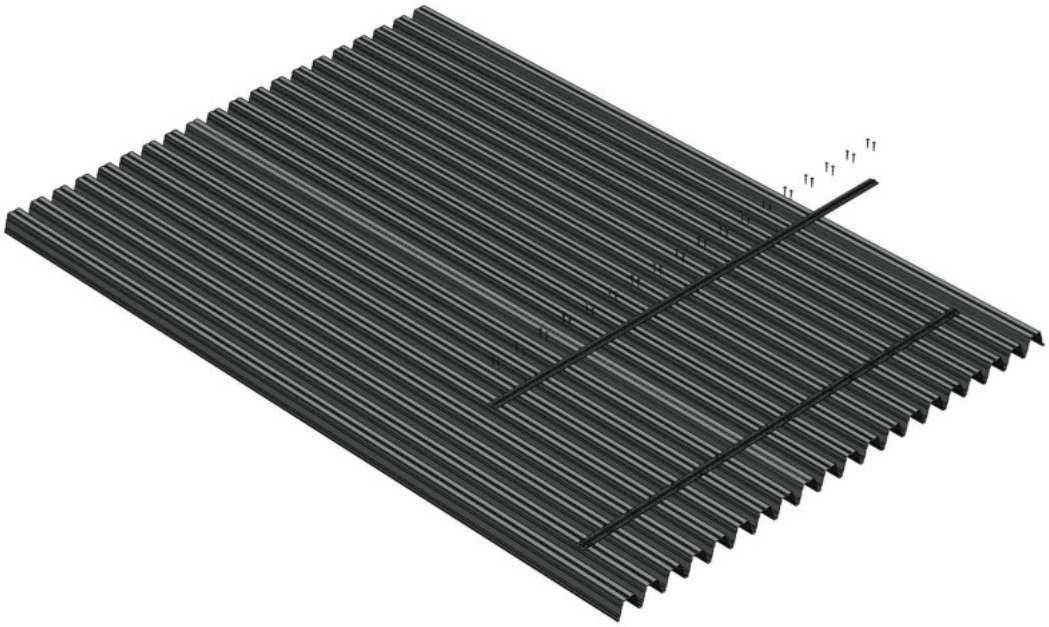
PROFINESS31 rail module middle clamp and clip (alternatively with sliding nut)

PROFINESS31
Length 6.1 meters or cut to bridge for 2 grooves

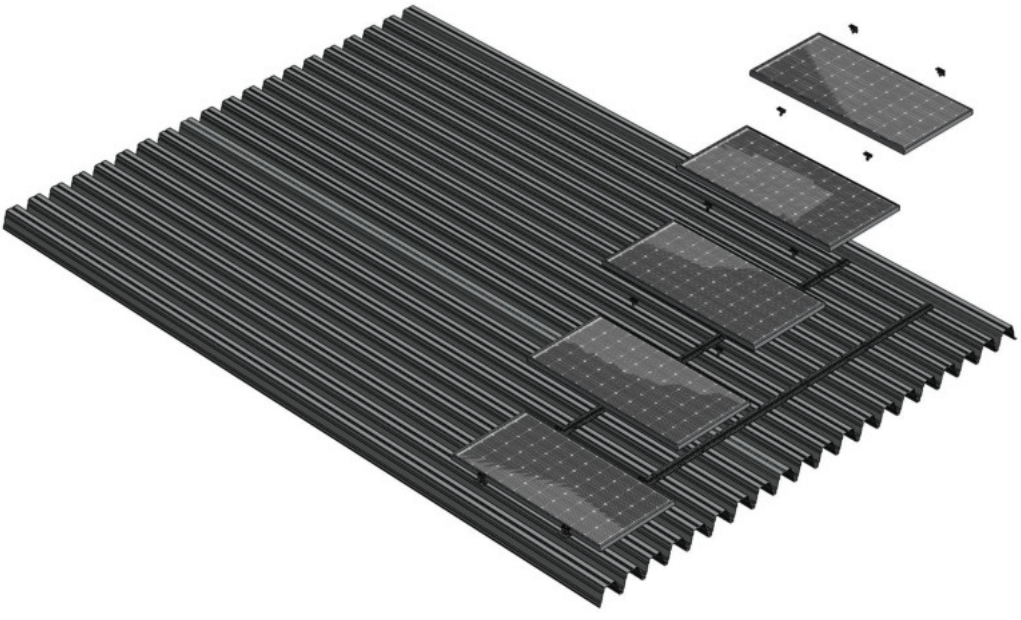
Drilling screws with building approval

It must be ensured that the adjacent components and mounting materials also have sufficient strength, absorb and forward the loads. The number of mounting points and the static of the substructure in conjunction with the local conditions on have to be checked on site.

Mounting sequence for continuous profile-laying



*Isometrisch



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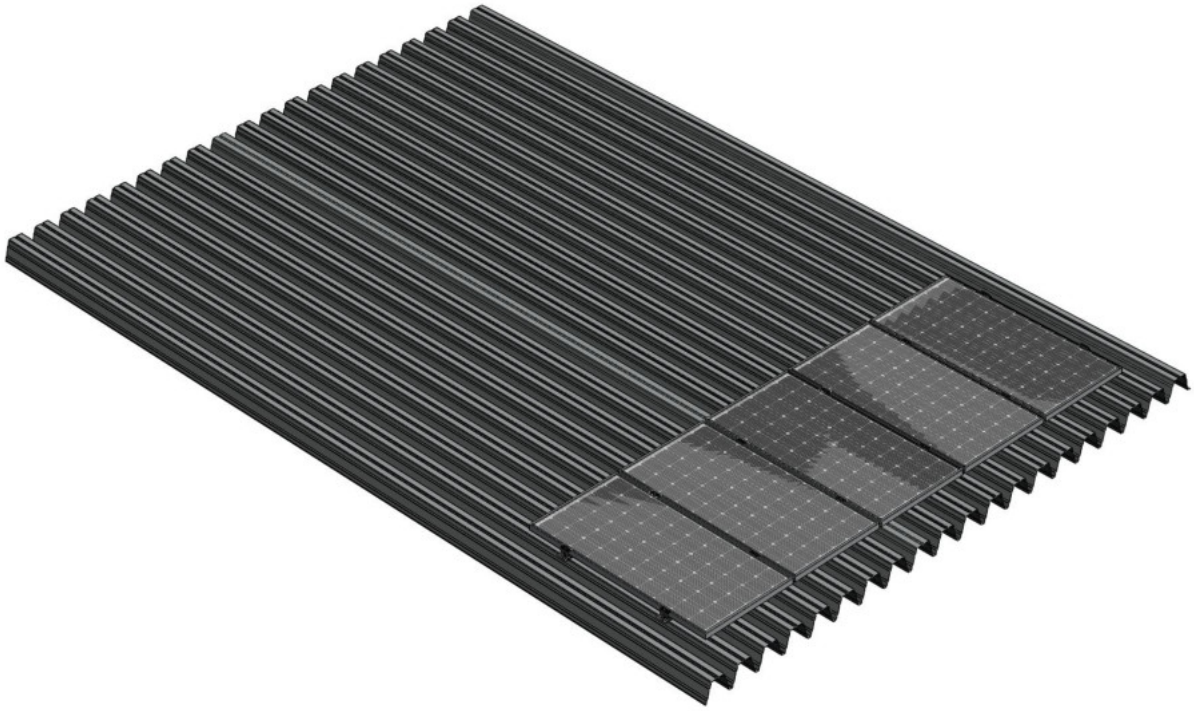
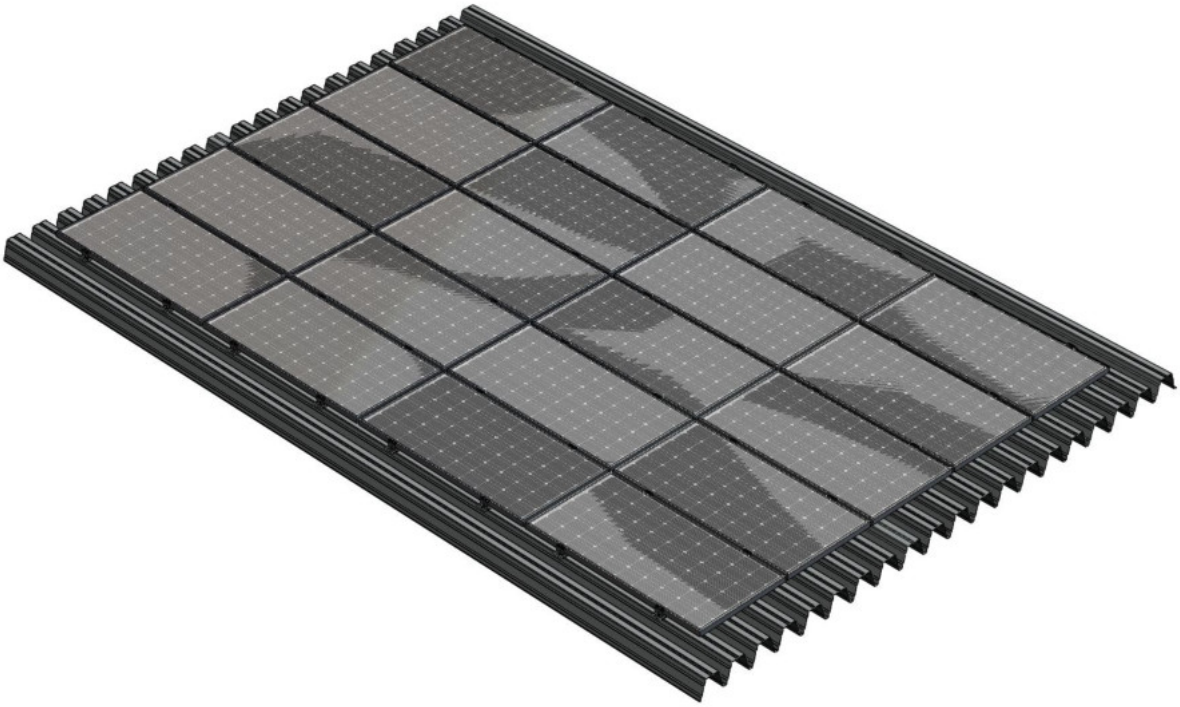
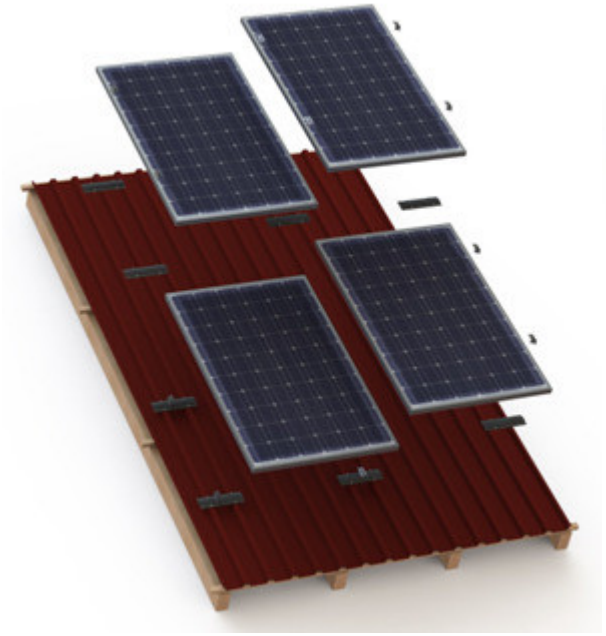
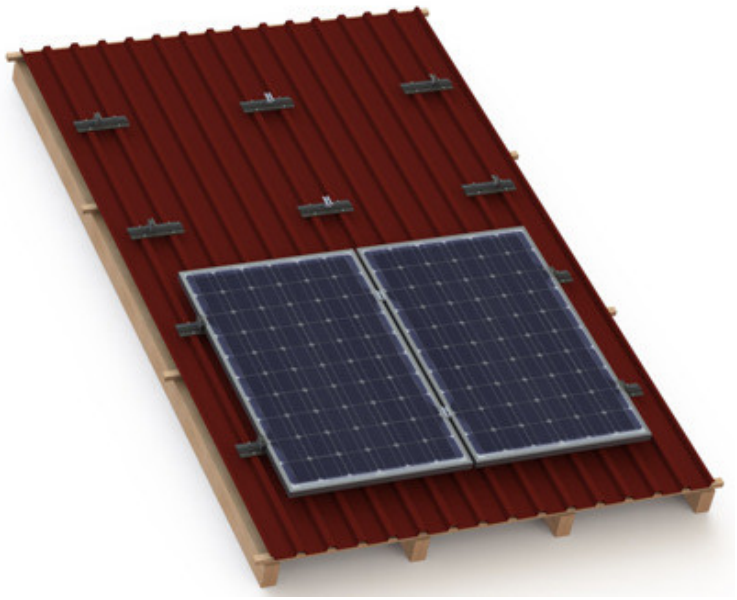
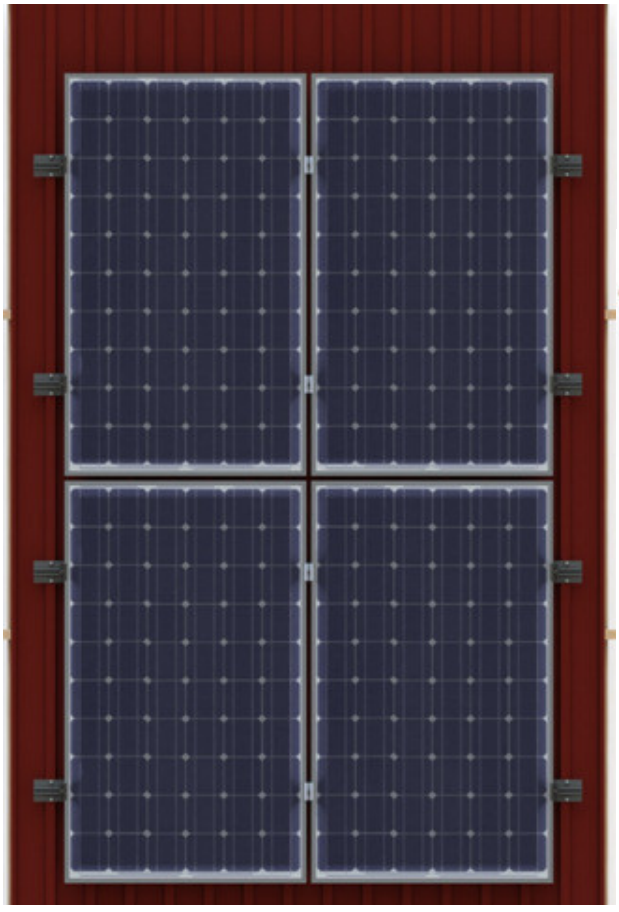


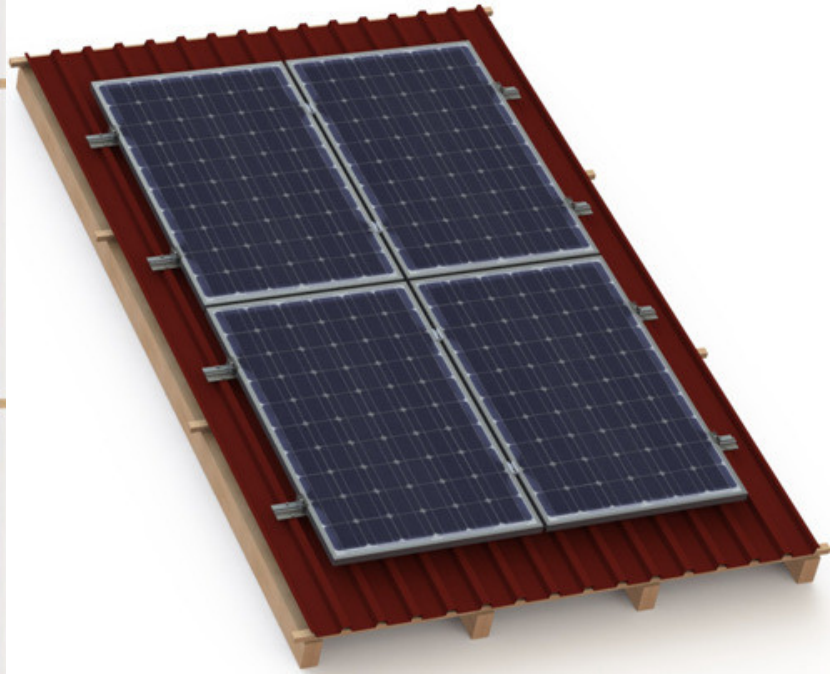


Mounting sequence for profile-laying in pieces (each about 2 beads)









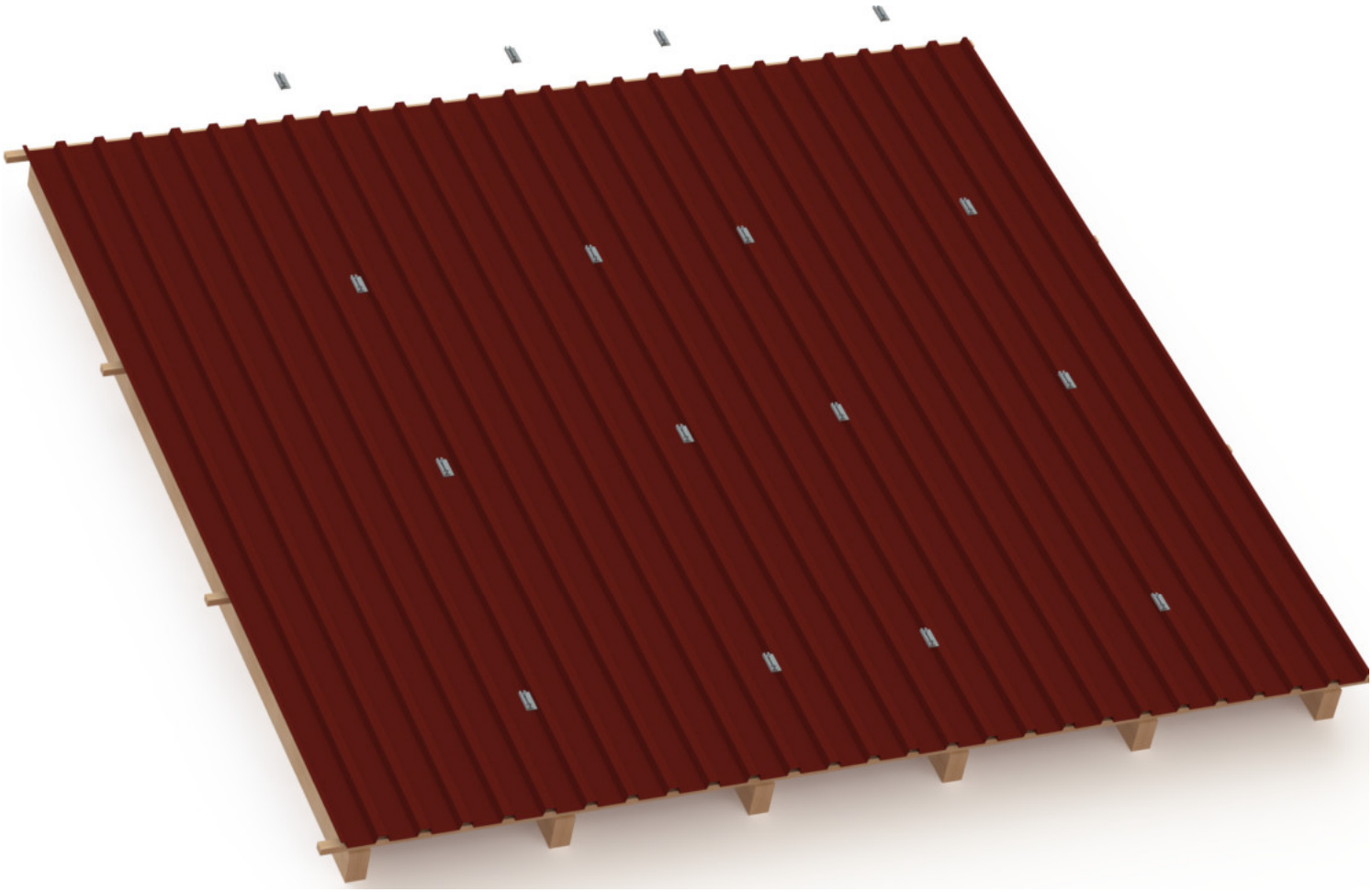
New version for landscape mounted modules (and clamping on the long side of the frame)

Thus modules landscape mounted not need to be clamped to the short side, we have developed a new profile, which is mounted only on the upper bead and towards this. Fixing is by two self-drilling screws, which are sufficient in most sheet constellations. In borderline cases, the lateral wing provides an additional area for receiving drilling screws.

The fastening of the modules is analogous to that in the previous pages, only that the modules are landscape that clamping is also on the long module frame side.

Our structural engineers can assist with the development of a single static.

Assembly sequence:



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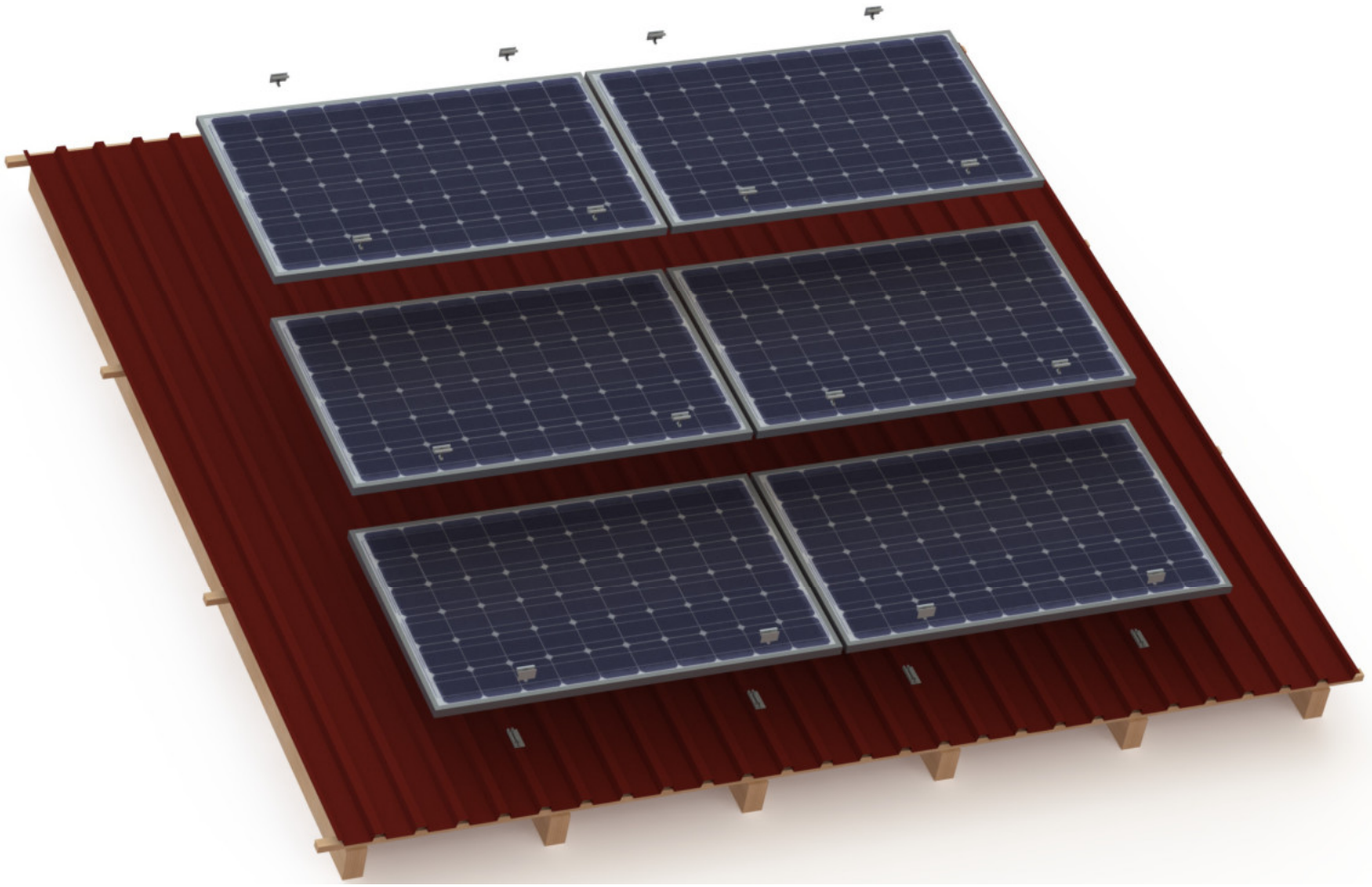

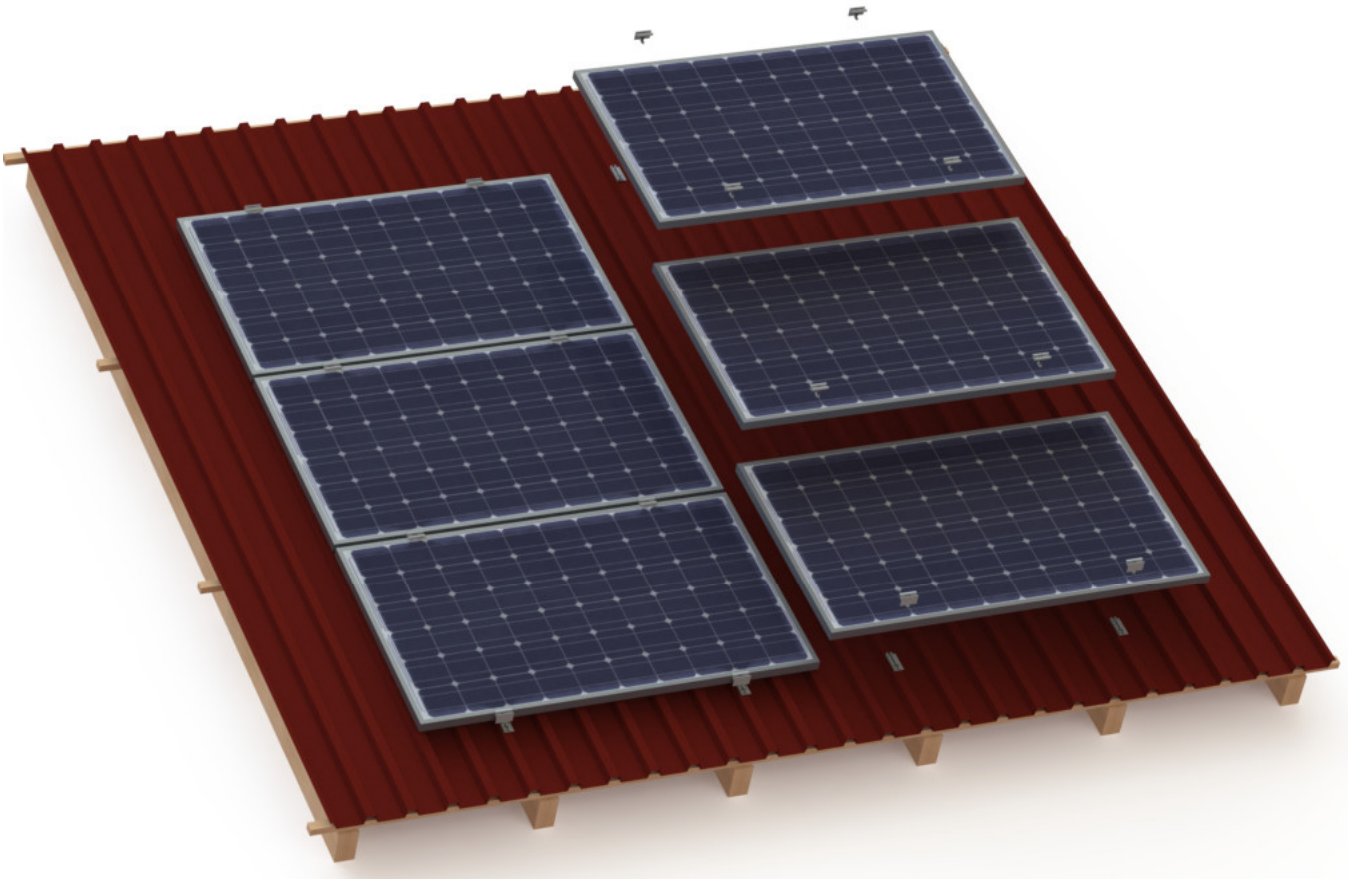

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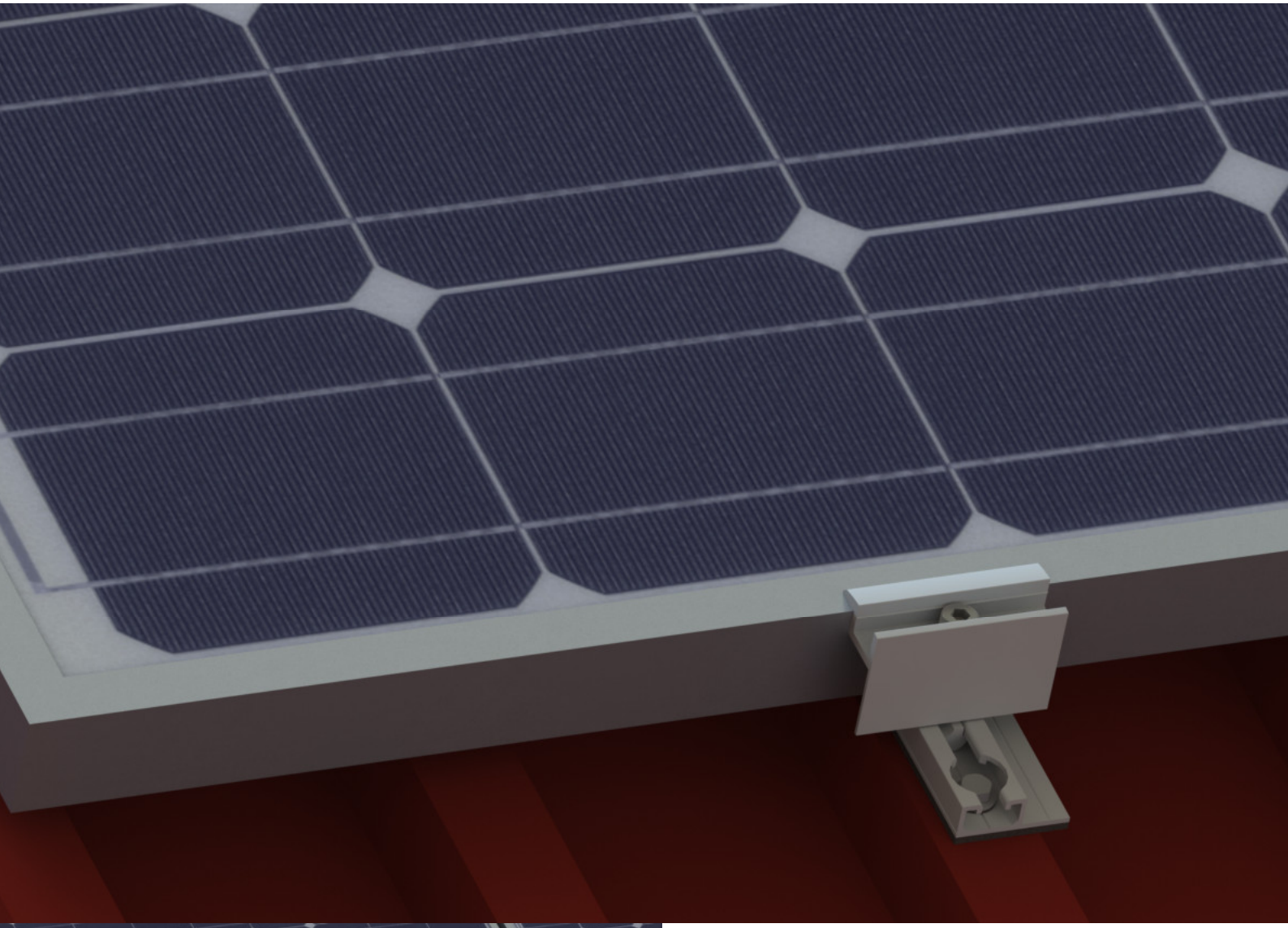

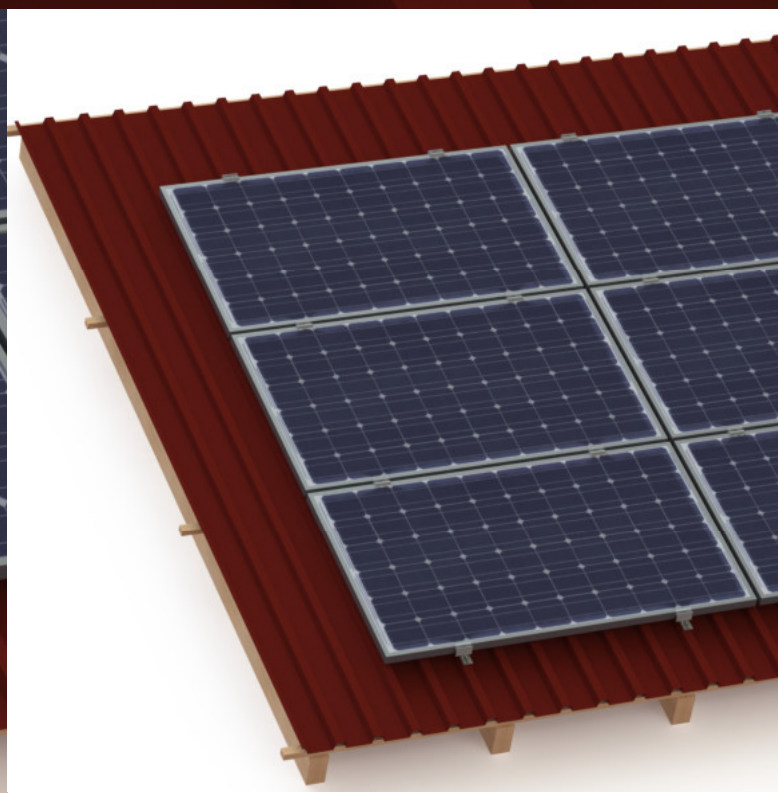

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