



SOLAR CONSTRUCT

NEDERLAND

RoBoost

MANUAL FOR ROBOOST ON STEEL AND BITUMEN ROOFS STEEL ROOF BRACKET - PORTRAIT LAYOUT

! OBSERVE THE APPLICABLE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS AT ALL TIMES

PREPARATION

Required tools:

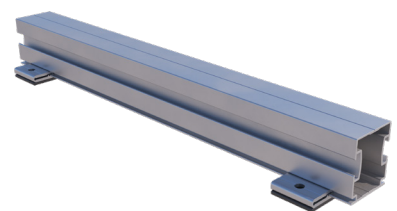
- Tape measure
- Hex key, 5mm
- Ratchet wrench, size 8mm and 13mm

1. Check that the roof subsurface is sufficiently strong (*replace if necessary*).
2. To ensure that the steel roof bracket is secured firmly, a steel roof must have a minimum plate thickness of 0.5mm.
3. Observe the NEN standards at all times.

STEEL ROOF BRACKET 250/400

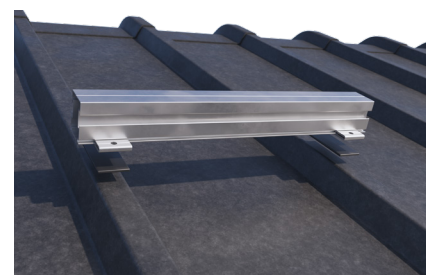
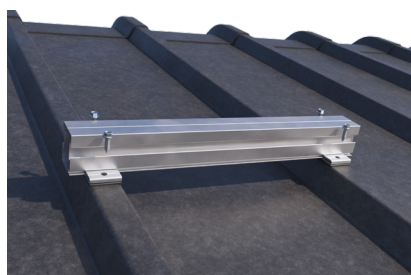
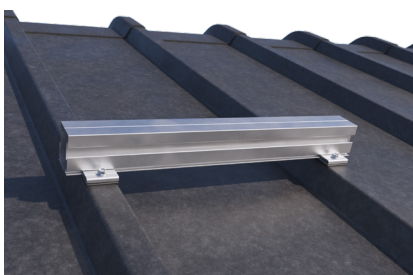
Step 1

Install the steel roof brackets by spacing them according to the results of the Solar Construct Nederland calculation tool. Bear in mind that the distance between the solar panels and the edge of the roof should be 500mm at all times.



Step 2

Secure the bracket with self-tapping sheet-metal screws with a neoprene ring.



SOLAR PANELS

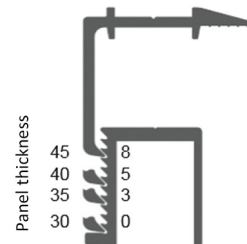
Step 3

Place the first panel onto the steel roof brackets. Ensure that the distance between the panel and the roof edge is 500mm.



Step 4

Attach an end clamp to the ends. **Caution!** The tightening torque of the screw connection is 9 Nm.

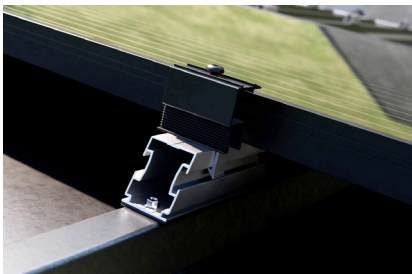


Step 4.1

Hook in the universal clamp behind the lip on top of the hammer-head chamber (see illustration).

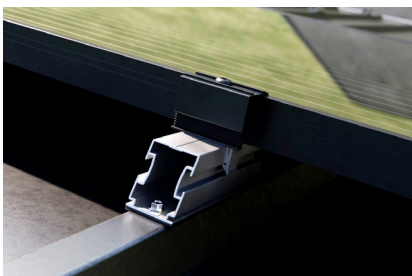
Step 4.2

Twist the clamp smoothly over the rail until it clicks into place on the other side of the hammer-head chamber.



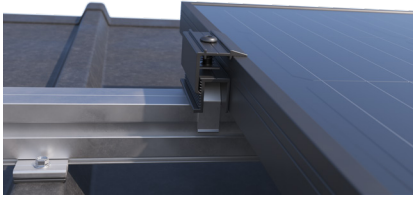
Step 4.3

Check that the clamp is securely in place, as illustrated.



Step 4.4

Slide the clamp towards the panel.



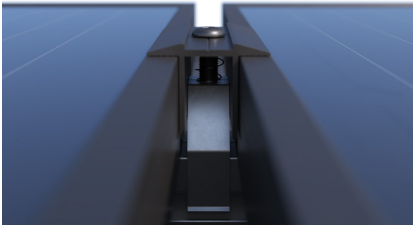
Caution! Mount the clamps in the centre of the mounting profile where possible.

The end clamp is positioned correctly if it rests against both the panel and the mounting bracket.



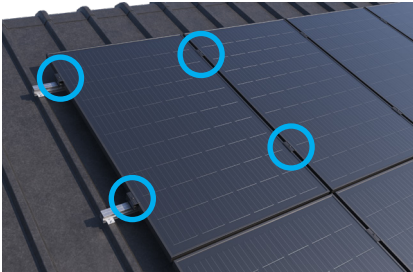
Step 5

Place the second panel on top of the steel roof brackets.



Step 6

Install an intermediate clamp in between the panels. Press the panels tightly against the intermediate clamp. **Caution!** The tightening torque of the screw connection is 9 Nm.



All panels are clamped at four points.

DISCLAIMER

Solar Construct Nederland

- This manual is a general guide (and is therefore not specific to one project) for the straightforward and efficient installation of solar panels using the Solar Construct Nederland mounting system. No rights may be derived from this manual.
- For the installation of the Solar Construct Nederland RoBoost mounting system the buildings should have a height of max. 12 metres. If the building is taller, please contact Solar Construct Nederland in advance for a project-specific, customised solution.
- If a flat roof is sloping more than four degrees, the Solar Construct Nederland RoBoost mounting system must be secured/anchored to prevent movement.
- An online calculation tool is available for the ballast calculation. Although this tool was developed in collaboration with the TNO Bouw research organisation according to NEN 7250, the results should be used as a guideline only. Solar Construct Nederland does not supply any ballast material.
- Please follow the general terms and conditions of Solar Construct Nederland dated January 2018.

Important

- Installing solar panels on an existing building will change its structural load and/or construction. We therefore recommend that the structural calculations for an existing building are updated by a specialist, taking into account the solar panels to be placed and current regulations such as NEN6702, NEN7250, NEN1991-1-4+A1+C2:2011/NB:2011 and NPR 6708:2013 in particular for wind, snow and water loads.
- The building insurer must be contacted in advance.
- The following building-related elements should be checked and approved in view of the existing structural arrangements:
 - The additional weight load of the entire PV system that will be installed
 - Geometry change of the roof surface
 - Wind pressure, snow load and water load, with simulation of accumulations
 - The loads for the structure, roof coverings and insulation during the installation
 - The suitability of the roof covering and insulation (point pressure) at the contact points between the mounting system and the existing construction
 - The consequences of the thermal interaction between the building and the PV system
 - The consequences of any vibrations of the building and/or PV system