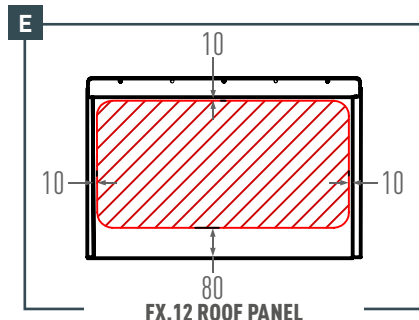
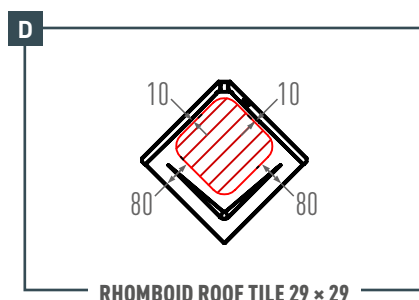
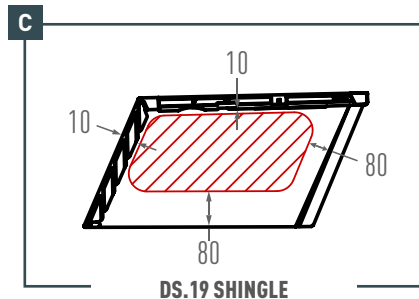
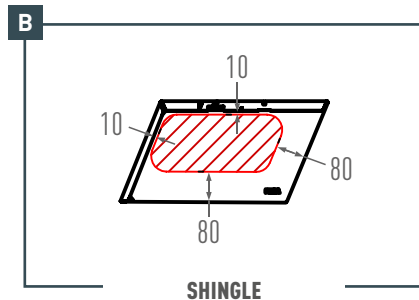
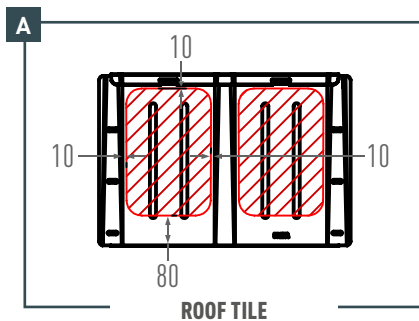




THE ROOF  
AS STRONG AS A BULL

# PREFA SUNNY SOLAR BRACKET

## INSTALLATION INSTRUCTIONS



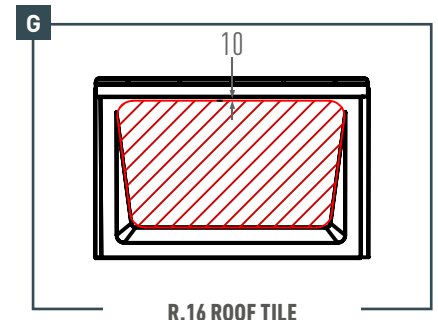
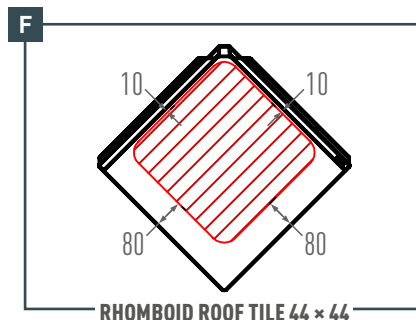
### SUNNY PRODUCT FEATURES

Easy installation and secure hold on Prefalz double-lock standing seams and all PREFA small format coverings. The expansion range of the Sunny solar bracket is suitable for Prefalz sliding clips. Tightening the Sunny solar bracket does not affect the expansion range of Prefalz strips with a strip length of up to 12 m. If using the PREFA preformed long sliding clip (strip length of up to 15 m), please contact PREFA application engineering.

As can be seen in figures A to F, the installation area of the PREFA Sunny solar bracket is limited with small-format PREFA products. The PREFA Sunny solar bracket is generally mounted on level surfaces. As the Sunny solar bracket has a slight sealing effect, it can be moved closer to the seams.

### TOOLS REQUIRED

Ratchet, wrench socket (9 mm), tape measure, drill, drill bits ( $\varnothing$  8 mm and  $\varnothing$  13 mm), combination spanner (18 mm), PREFA special adhesive kit and angle grinder (if applicable).





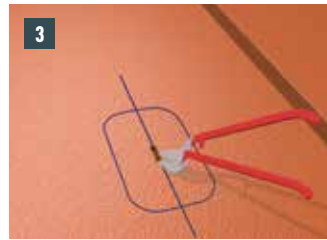
# SUNNY SOLAR BRACKET INSTALLATION INSTRUCTIONS



1 Mark the outline and oblong hole.



2 Pre-drill the oblong hole ( $\varnothing$  13 mm) in the Prefalz strip (a single hole is sufficient on small-format products).



3 Cut out the oblong hole in the Prefalz strip (not necessary on small-format products).



4 Pre-drill a hole with  $\varnothing$  8 mm in the centre of the oblong hole or in the single hole.



5 Roughen the bonding surface on the roof covering and Sunny solar bracket.



6 Flare the oblong hole or single hole.



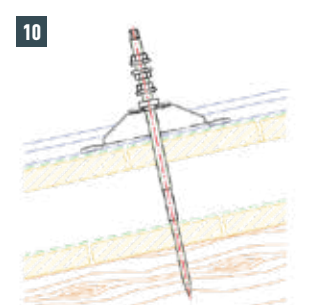
7 Clean the roughened bonding area with adhesive cleaner.



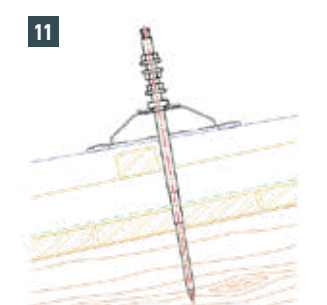
8 Apply beading ( $\varnothing$  10 mm) to the roughened and cleaned solar bracket.



9 Press down the Sunny bracket in the centre.



10



11

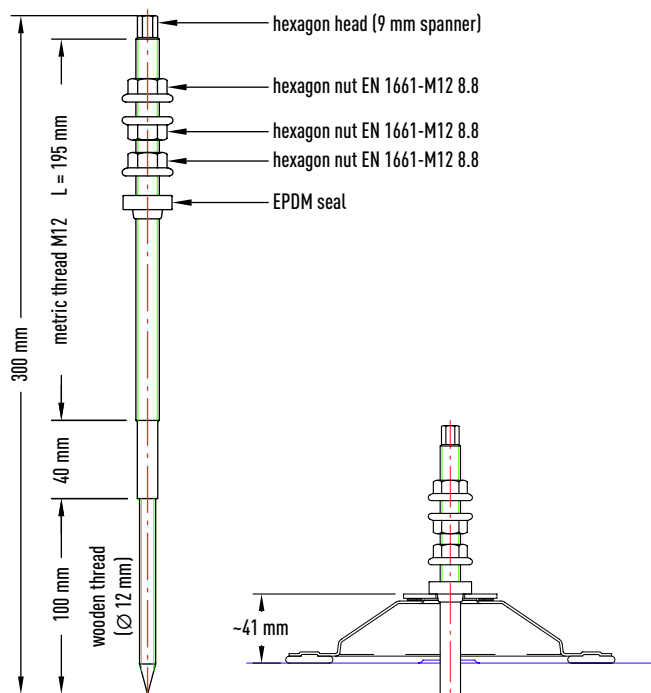


12 Screw on the flange nuts to tighten the solar panel.

Place the screw with the protective cap in the pre-drilled hole and tighten with a 9 mm combination spanner until the neoprene seal is clamped across the entire surface between the Sunny solar bracket and the protective cap. When installed correctly, the glue seeps out around the solar bracket, and the seal on the sealing washer bulges outwards. Penetration depth in the supporting substructure (rafter): min. 80 mm to max. 100 mm. The distance between the top edge of the rafters and the bottom edge of the cross connector must not exceed 130 mm. If the connection of the counter batten to the rafters is dimensioned for the same horizontal force, this distance may be measured from the top edge of the counter batten.

Fig. 10: double-skin roof structure with sheathing | Fig. 11: two-layer roof structure with skip sheathing

**IF THE RUBBER SEAL IS NOT LYING ON THE SMOOTH SHAFT OF THE HANGER BOLT BUT ON THE M12 THREAD, TAKE ADDITIONAL MEASURES TO SEAL THE JOINT BETWEEN THE SCREW AND THE RUBBER SEAL.**



13



14

**NOTE:** With small-format PREFA roof elements, it may be necessary to install a base plate in order to mount the Sunny solar bracket—e.g. if a seam is lying above a rafter in the installation area.

Fig. 13 and 14: example with the PREFA shingle

If an overlap rib or centre rib of the PREFA roof tile is lying directly above the rafter (in the hanger bolt installation area), the PREFA Sunny special can be used instead of installing a base plate.

## INFORMATION ABOUT THE M12 × 350 HEXAGON HANGER BOLT FOR THE SUNNY SOLAR BRACKET

**Name:** A2 M12 × 350 mm hexagon hanger bolt **Tensile strength:** 595 N/mm<sup>2</sup>

**Material:** 1.4301 / X5CrNi 18-10 **Length | diameter:** 350 mm | 12 mm

**Note:** the permanent loads (dead weight) and variable loads according to EN 1991-1-3 (snow) and EN 1991-1-4 (wind) must be taken into account appropriately. Proof must be provided by the project's structural engineer.

**Calculation standards:** timber construction EN 1995-1-1; steel construction EN 1993-1-1

During installation, observe PREFA's installation instructions and the current professional standards and safety regulations.