

qspv

Flat Roof East-West Manual

blubaseTM
STRONG IN SOLAR SUPPORT

! OBSERVE THE APPLICABLE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS AT ALL TIMES
! OUR ONLINE CALCULATOR PROVIDES GUIDANCE IN CREATING YOUR INSTALLATION PLAN

PREPARATION

Required tools:

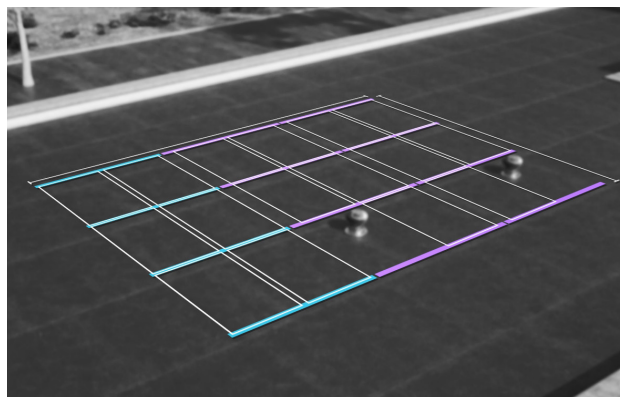
- Tape measure
- Installation batten
- Allen key 5mm
- Socket wrench 8mm
- Open-end wrench 13mm & 15mm

1. Check that the roof surface is sufficiently strong (replace if necessary).
2. Observe the applicable standards at all times (NEN or equivalent).
3. We always advise to consult a roof specialist when installing the QS PV-Anchors.

QS PV-ANCHOR

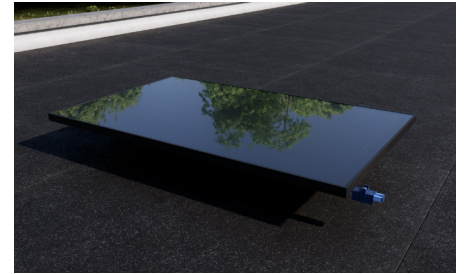
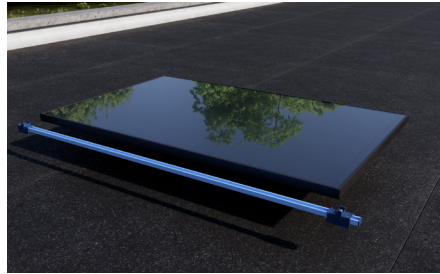
STEP 1

Mark out the substructure to be installed with an intermediate spacings in accordance with the Blubase calculation tool.



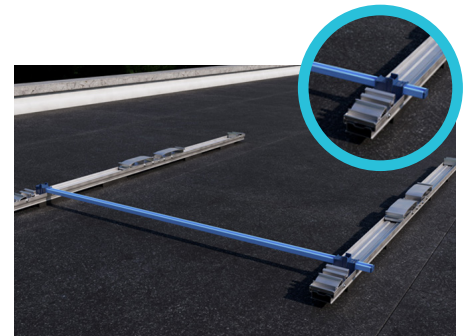
STEP 2

Adjust the installation battens to match the solar panel you will be using. When the installation batten is adjusted to the solar panel it is easier to determine the distance between the various underlying elements.



STEP 3

Place two start profiles in the field at right angles. The distance between the two start profiles is determined with the underside of the adjusted construction batten.



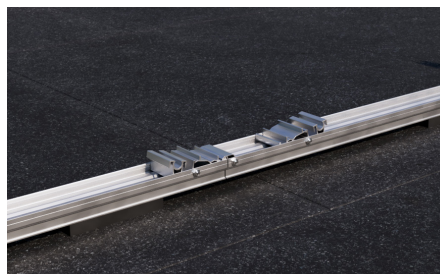
STEP 4

Fold the two uprights upwards and click them into position.



STEP 5

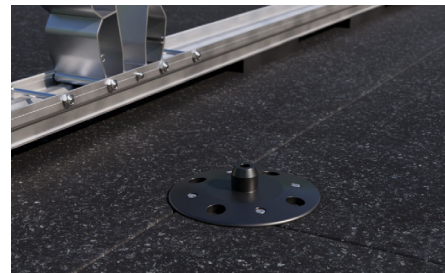
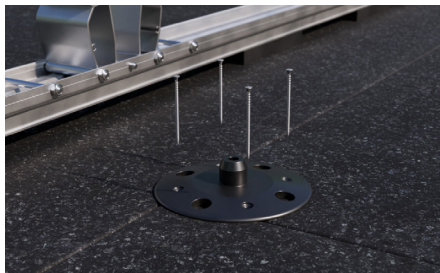
Once the start profiles have been positioned, the intermediate profiles can simply be rotated into the start profiles.



STEP 6

Place the black plastic base plate on the roof covering at the desired location. Fix the plastic base plate with 4 screws.

The screw selected depends on the thickness of the insulation and the roof substrate in which the screw is to be fixed. Blubase does not supply these screws. We advise you to contact Quick Slide in this regard (www.dakverkoop.nl)



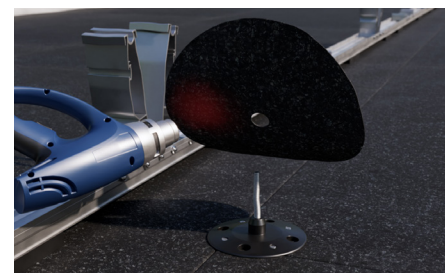
STEP 7

Then screw in the supplied threaded rod until hand tight.



STEP 8.1

Now heat the centre of the underside of the packing seal until the bitumen visibly flows and slip the sealing cuff over the anchor and press it down firmly.



STEP 8.2

The cuff is then bonded to the roof material in a watertight manner. Work from the inside out.

Ensure that a watertight bond is created all around the cuff (can also be applied with a bristle burner).

Is the roof material made of PVC or EPDM? Then go to www.dakverkoop.nl for installation instructions.



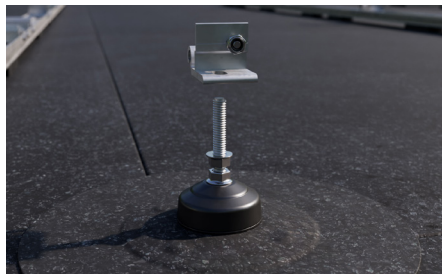
STEP 9

Install the special black EPDM sealing ring and cover. Then screw on the 1st locknut and tighten it.



STEP 10

Screw on the 2nd locknut and lower it to the top of the 1st locknut. Then fit the rotation adapter and screw on the 3rd locknut on top. Do not fully tighten the 3rd lock nut yet, so that the mounting rail can easily be screwed on later.



MOUNTING PROFILE

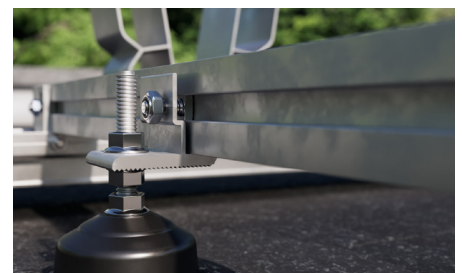
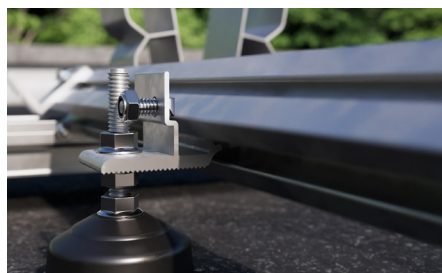
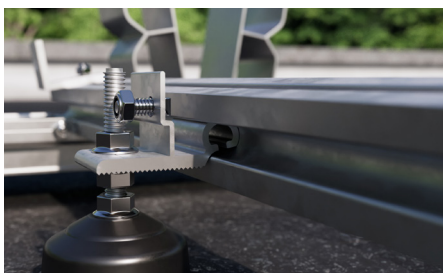
STEP 11

When all anchors have been fitted, the mounting rail can be attached. Make sure the anchors are aligned straight.



STEP 12

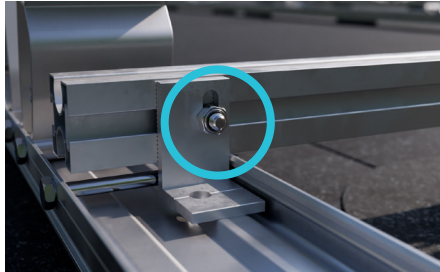
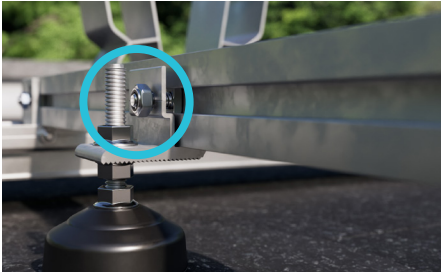
Place the mounting profile against the rotation adapter and rotate the mounting profile around the rotation component of the QS PV-Anchor. Ensure that the profiles left and right are aligned. Now tighten the 3rd locknut securely.



STEP 13

Secure the rotary adapter with a hammer head bolt and nut, and tighten securely.

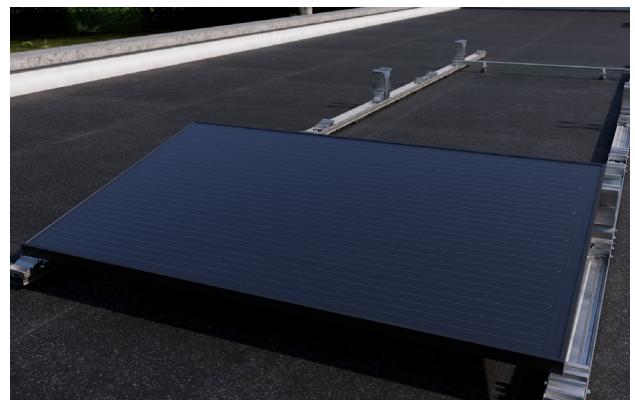
Then attach the angle adapter to the mounting rail with a hammer head bolt and nut. Then fix the angle adapter to the RoFast profile with a self-tapping screw.



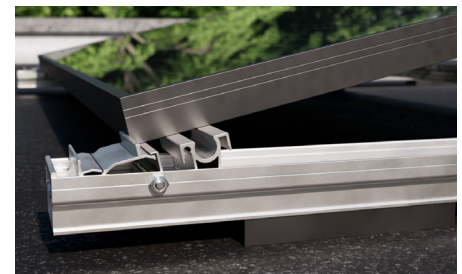
SOLAR PANELS

STEP 14

Place the solar panels on the (extended) profiles of the underlying elements. Position the panel in the middle, so that both sides are equal.

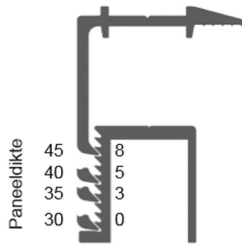


Panels with a width between **990mm and 1034mm** are placed against the plastic lip.



Panels with a width between **1035mm and 1070mm** fit against the aluminium bottom profile, which pushes away the plastic lip. A special part is available for panels with a width between **1071mm and 1150mm**.





STEP 15

Attach an end clamp to the ends.

Caution! The tightening torque of the screw connection is 9 Nm.



STEP 15.1

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

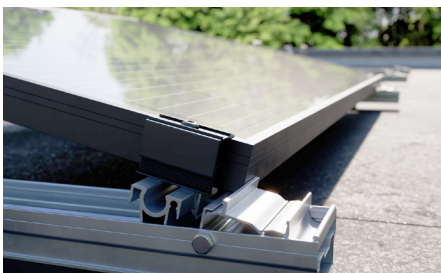
STEP 15.2

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



STEP 15.3

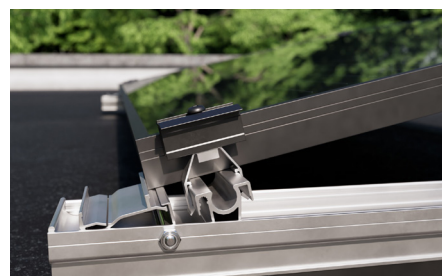
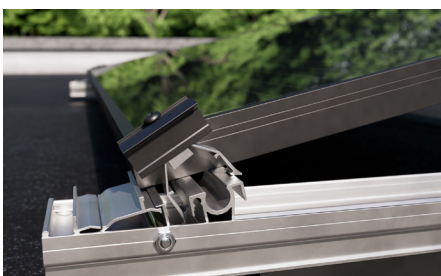
Check that the clamp is securely in place, as illustrated.



STEP 15.4

Slide the clamp towards the panel and then screw it tight. **Caution!** The tightening torque of the screw connection is 9 Nm.

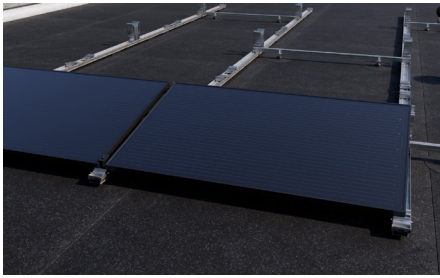
The end clamp is positioned correctly if it rests against both the panel and the profile of the underlying element.



STEP 16

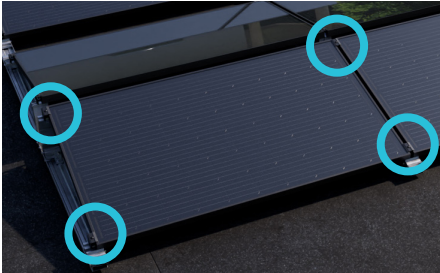
Install an intermediate clamp in between the panels. Press the panels tightly against the intermediate clamp.

Caution! The tightening torque of the screw connection is 9 Nm.



STEP 17

Place the second panel on top of the mounting profiles.



All panels are clamped at four points.

SIDE PANELS (OPTIONAL)



STEP 18

The side panels are installed at six points with self-tapping screws.

Caution! Side panels are optional. Side panels are not included as standard.

DISCLAIMER

BLUBASE

- 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 Blubase mounting system. No rights may be derived from this manual.
- For the installation of the Blubase RoBoost mounting system the buildings should have a height of max. 12 metres. If the building is taller, please contact Blubase in advance for a project-specific, customised solution.
- If a flat roof is sloping more than four degrees, the Blubase 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. Blubase does not supply any ballast material.
- Please follow the general terms and conditions of Blubase 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