# **FLECK Solarflex universal support tile**



Dimensions in mm

## **PRODUCT INFORMATION**

The fully integrable Solarflex universal support file by FLECK with adjustable VA bracket is delivered completely pre-assembled and can be inserted into the roof independently of the rafters, making it easier to mount the solar modules vertically or horizontally. It is not necessary to rework the neighbouring roof tiles. The substructure of the solar systems can be fastened directly on the stainless steel bracket. To compensate for slight construction site tolerances, the inclination  $(0-12^{\circ})$  and the height of the VA support profile can be adjusted. The roof tile is supplied with a load-bearing steel plate on the back, to which a Z-profile is attached for wind suction protection. For assembly, a support batten corresponding to the roof battens is also required. Note: The desired roof batten size  $(30 \times 50 \text{ mm} \text{ or } 40 \times 60 \text{ mm})$  must be specified when ordering. Recommended for roof pitches from  $25^{\circ}$  to  $60^{\circ}$ \*.

#### Material

- Tile material: Circumferential flexible skirt made of environmentally friendly lead substitute
- Angled rear support plate made of galvanised steel and an additional Z-profile for wind suction protection
- Stainless steel hexagon bolts (size 13)
- Exterior, multi-slotted solar mounting bracket made of highstrength VA stainless steel\*\*
- · Colours: Black, Red, Brown

#### **Construction material class**

- B2 as per DIN 4102 (circumferential skirt made of lead substitute)
- A1 as per DIN 4102-4 (all load-bearing metal components)

### **Statistics**

The structural verification for a on-roof solar system must be carried out by suitable engineering or structural engineering offices on the basis of the manufacturer's specifications for PV systems or solar heat systems.

#### Note

Where draining copper or bitumen surfaces are exposed to water, the flexible flange must be surface treated. The surface can be treated, for example, with PERFORM Extra Protection.

#### Scope of delivery

Without rail mounting systems and their fastening

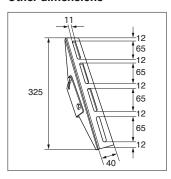
- \* Please contact FLECK for larger or smaller roof pitches.
- \*\* Please note that V2A steel may not be suitable for use in regions with particularly salty air.





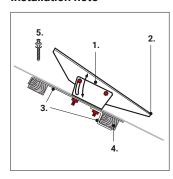
# **TECHNICAL NOTES**

#### Other dimensions

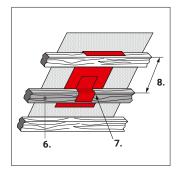


in mm

#### Installation note



- 1. Adjustable bracket
- 2. Solarflex universal support tile
- 3. Support plate with Z-profile
- 4. Roof batten dimension (3x5 or 4×6), please specify when ordering!
- 5. 2× stainless steel metal screw for fixing to the support batten (scope of delivery)



- 6. Additional batten
- 7. Z-profile
- 8. Distance between load-bearing batten – support batten: Batten dimension as per laying instructions (QR code)

#### Attention!

The Z-profile (7) on the support plate is pre-assembled at the factory.

#### Mount the additional batten on site!

The load-bearing capacity of the additional batten must correspond to the load-bearing capacity of the roof battens used! For distances between support batten and additional batten, see laying instructions on our website.



Find out more at fleck-dach.de/verlegehinweis

LOAD TABLE			
Roof pitch in	in kN		
degrees	N <sub>Rd</sub> max	V <sub>Rd</sub> max	F <sub>Rd</sub>
15	4.62	1.48	3.27
20	4.62	1.48	2.90
25	4.62	1.48	2.59
30	4.62	1.48	2.35
35	4.62	1.48	2.16
40	4.62	1.48	2.00
45	4.62	1.48	1.87
50	4.62	1.48	1.77
55	4.62	1.48	1.69
60	4.62	1.48	1.62

NRd = Normal force component (perpendicular to the roof)

VRd = Vertical force component (parallel to the roof)

FRd = Rated value with corresponding roof pitch

$$F_{Rd} = \left[ \left( \frac{\cos \alpha}{N_{Pd}} \right)^2 + \left( \frac{\sin \alpha}{V_{Pd}} \right)^2 \right]^{-0.5}$$

screws to fix the product.

The general technical regulations of the roofing trade must be observed for the substructure. When installing the additional batten in support batten quality, make sure that it receives the Z-profile in a form-fit manner. The minimum batten dimension of the support batten to the load-bearing batten can be taken from the download section www.fleck-dach.de, depending on the selected roofing tiles and cover distances or can also be measured at the construction site. The metal plate angled on the back of the roof tile and the Z-profile

Source: TÜV-SÜD

are hooked form-fit into the load-bearing and support battens, which ensures that the pressure and suction forces to be determined are dissipated. Please use the supplied metal



Subject to technical changes | Dated 09/2023 | 6.07