



FLECK Solar support tile



X-dimensions as per tile type

PRODUCT INFORMATION

The fully integrable, TÜV-tested solar support tile by FLECK with adjustable VA bracket is delivered completely pre-assembled and matches the existing roofing and can be inserted into the roof independently of the rafters, which makes 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°) and the height of the VA support 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 at least to the roof battens is also required. Note: The desired roof batten size (30 × 50 mm or 40 × 60 mm) must be specified when ordering. Recommended for roof pitches from 15° to 60°*.

Also available as alternative:

Slate/shingle

Material

- Tile material made of highly weather-resistant, durable special rigid PVC
- 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 high-strength VA stainless steel**

Construction material (fire reaction) class

- B2 as per DIN 4102-4 (PVC-U tile)
- A1 as per DIN 4102-4 (all load-bearing metal components)

Statics

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.

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.

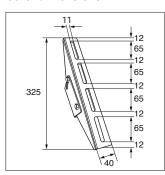






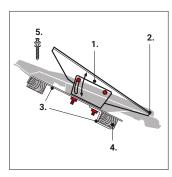
TECHNICAL NOTES

Other dimensions

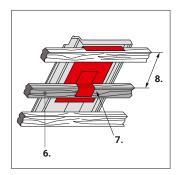


in mm

Installation note



- 1. Adjustable bracket
- 2. Solar support tile
- 3. Support plate with Z-profile
- 4. Roof batten dimension $(3 \times 5 \text{ or } 4 \times 6)$, 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

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 (QR code).



Find out more at fleck-dach.de/verlegehinweis

LOAD TABLE			
Roof pitch in degrees	in kN		
	N _{Rd} max	V _{Rd} max	F _{Rd}
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

$$F_{\rm Rd} = \left[\left(\frac{\cos \alpha}{N_{\rm Rd}} \right)^2 + \left(\frac{\sin \alpha}{V_{\rm Rd}} \right)^2 \right]^{-0},$$

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 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 screws to fix the product.

Source: TÜV-SÜD



Subject to technical changes | Dated 09/2023 | 6.01