

1 General

Dear Customer,
Thank you for choosing Schüco Solar. Should these installation and operating instructions not answer all your questions, please contact your Schüco specialist.

Prior to your first installation, we recommend that you attend a training course at our training centre in Bielefeld or, if this is not possible, that you take advantage of on-site training from one of our service technicians.

2 PV Light flat-roof installation

Please read the following information on installation and operation thoroughly to avoid damage to the installation which could arise from incorrect handling. Generally applicable as well as regional regulations, specifications and DIN norms must be observed for planning, construction and commissioning. Inappropriate use of the design and changes that are not permitted to the installation invalidate all claims as to liability.

Any electrical work must be carried out by a qualified electrician and must conform to the relevant standards, specifications, safety regulations, accident prevention regulations and the requirements of the local electricity supplier. As a rule, accident prevention regulations and the following norms must be observed:

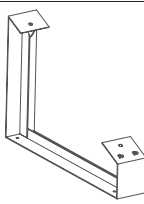

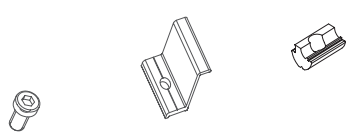

If the structural integrity of the flat-roof assembly brackets is secured by the use of loads, the following weights must be available on site:

Installation height of up to 8 m:
130 kg/m² module area

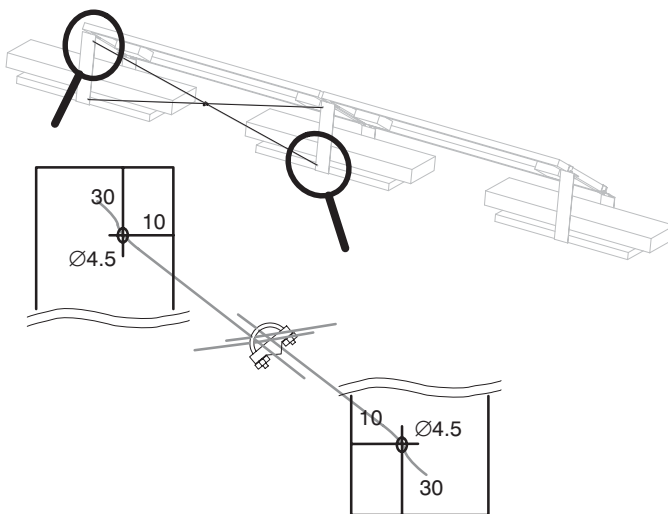
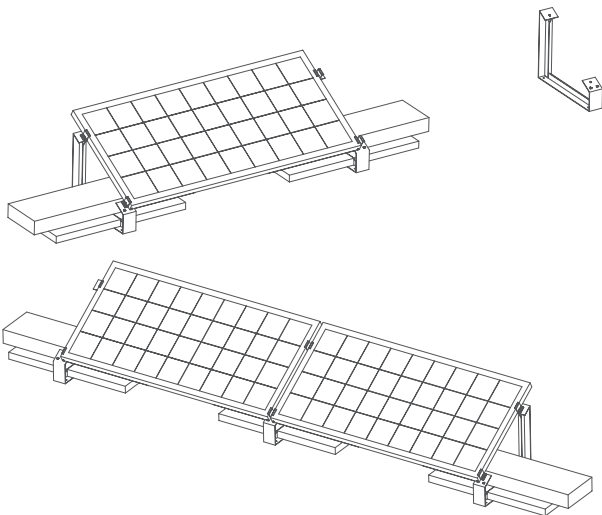
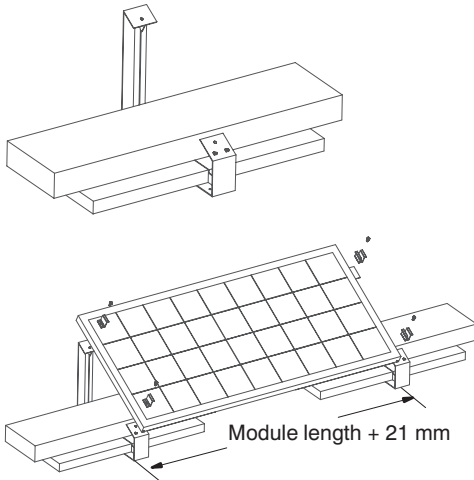
Installation height of up to max. 20 m:
215 kg/m² module area

DIN 18299	General regulations governing all construction
DIN 18338	Roofing and roof weather-proofing
DIN 18360	Metal fabrication and fitting
DIN VDE 0100-540	Selection and construction – earthing, earthed lead wires and potential equalisation
DIN 57185 VDE 0185	Constructing a lightning conductor
DIN 4102	Fire behaviour of building materials and building components

The above fittings are not part of the flat-roof assembly brackets.

	Description
	Flat roof brackets/10 - PU = 10 Module width: 530 - 803 Art. No.: 221 076 803 - 1000 Art. No.: 221 204
Accessories	
	Securing cruciform set Art. No.: 221 207 - 4 x securing braces - 1 x clamp for wire ropes DIN1142-S5
	Retaining clip set 1 - 50 M8x14 mm universal screws, (hexagon socket, 6 mm) - 50 end fixing brackets, (module-specific) - 50 anchor blocks (not necessary for 221076/221204)
	Retaining clip set 2 - 50 M8x14 mm universal screws, (hexagon socket, 6 mm) - 50 intermediate retaining clips, (module-specific) - 50 anchor blocks (not necessary for 221 076/221 204)

Ensure that the base layer is flat and sound without any incline. To prevent damage to the roof covering, it may be necessary to use protective mats.



Permissible roof load must not be exceeded. Avoid aggregation of loose material on gravelled roof areas. You may need to consult a structural engineer.

Align the first flat-roof assembly bracket at its final location. Secure the structure by fixing onto the substructure. Avoid damage to the roof covering. Alternatively, secure the flat-roof assembly brackets using loads (e.g. edging stones). The additional weight must be taken into account when calculating the roof load.

Fix the second flat-roof assembly bracket. It must be parallel to the first flat-roof assembly bracket. Place the module on the flat-roof bracket and attach it to the first flat-roof assembly bracket using the end fixing bracket.

Screw the intermediate retaining clips loosely onto the second flat-roof assembly bracket.

Align the next flat-roof assembly bracket so that it is parallel to the proceeding bracket and fix it. Position the next module and tighten the universal screws for the intermediate retaining clips on the first module.

Attach the relevant retaining clip to the flat-roof assembly bracket.

If required, install further modules in the same fashion.

A maximum of 9 modules can be mounted as a continuous module array.

The outer modules are fixed to the outer sides of the module array using two end fixing brackets.

One cruciform per module array (row) must be installed in order to meet structural norms and guidelines. The cruciform must be installed in the flat-roof assembly brackets of the central or an adjacent module.

Insert the securing braces into the pre-drilled holes and secure it at the intersection using the clamp for wire ropes.

The electrical installation of the system must be carried out by a qualified electrician.