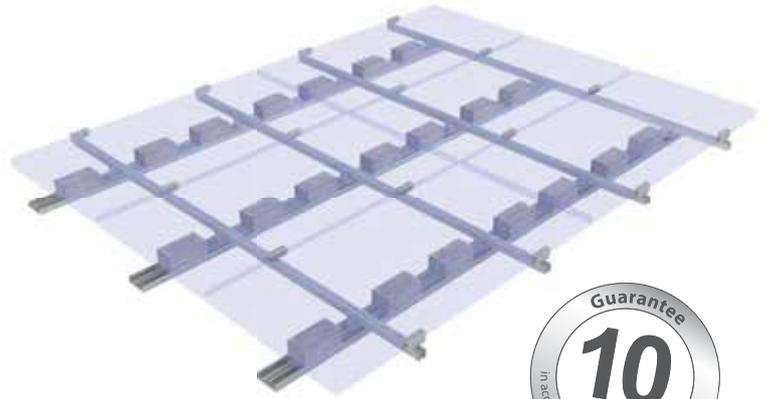


## FlatGrid

### The new flat roof system

- Fastening of solar plants parallel to the roof
- Only little superimposed loads required
- No perforation of the roof
- For slightly inclined flat roofs
- Integrated surface protection mat
- Less material and lower cost
- Unit assembly system that can be combined with numerous Schletter components
- Schletter Configurator
- Maximum admissible roof inclination: 10°

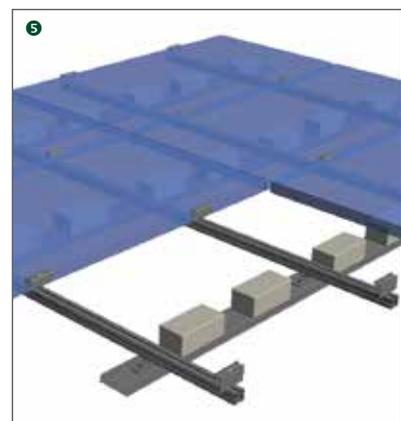
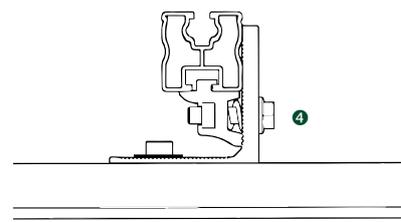


FlatGrid is a cost-efficient system for slightly inclined flat roofs. It has been developed in order to mount solar modules parallel to the roof without creating roof perforations. However, it is essential that the system can be fastened. This can be done using a ridge connector connecting two solar plants on opposing sides of the roof. It is also possible to fasten the solar plant at suitable structurally loadable points, like for example purlins and girders. Structural suitability must be verified in each case!

FlatGrid is a unit assembly system with base rails (profiles) transferring the loads. The surface protection mat is integrated into these profiles. The height-adjustable angle allows height equalizations of up to 30 mm on uneven roofs. Moreover, the module-bearing profiles can be fastened at any desired position on the base rail (profile). All standard rails of the 05 profile series are suitable for this purpose.

Before mounting the system rails ❶, arrange them according to the structural requirements. The surface protection mats made of rubber granulate serve as an underlayment and a surface protection ❷. The lamination on the underside is equipped with a triplex aluminium foil and thus prevents plasticizer migration between non-rubber-compatible sealing foils (e.g. soft PVC) and the protective layer. After that, the Rapid<sup>2+</sup> L angles ❸ are to be mounted onto the system profiles (rails). Due to the proven Schletter Klick system, these angles can be fastened at the respective points along the Klick groove. After that, fasten the Schletter standard rails (for example Solo Light) to the L angle with a Rapid<sup>2+</sup> attachment ❹ and the system rails with pavement stones (usually 20 x 10 x 8 cm) ❺. Now you can start mounting the modules.

If increased loading should be required due to extraordinarily high wind loads (especially in the corner and edge areas of the solar plant) and these extra superimposed loads cannot be put on the system rail, additional superimposed loads can be put into extra trays. There are also suitable surface protection mats for these extra trays. These surface protection mats can be fastened easily with lugs.



\*The terms of guarantee can be referenced at [www.schletter.de/AGB\\_en](http://www.schletter.de/AGB_en)

**Ridge connector to avoid sliding down**

Usually, both halves of the roof are used. Thus, the solar plants on both sides of the roof are connected using a ridge connector which reliably prevents the solar plants from sliding.

**Project planning**

With any flat roof system, the following edge parameters must be considered in the planning:

- Distributed pressure on the roof cladding and the insulation underneath
- Thermal separation of individual mounting units
- Fastening on the roof and connection of the blocks depending on the roof pitch

The maximum length of the base profile (rail) is 6 m. With extra big projects, the length can be extended in individual cases after consulting Schletter.

**Components**



**FlatGrid base profile (rail) for surface protection mat strips**

128039-001	Base rail for FlatGrid custom cut
128039-006	Base rail for FlatGrid 6 m
129078-000	Interior connector FlatGrid kit
169004-004	Surface protection mat strip 10 m 110/8 mm with alum. lamination



**Angle connector Rapid2+ L and accessories**

119026-001	Angle connector Rapid2+ L
943308-120	Socket head screw M8x20
943922-008	Washer M8
943914-008	Square nut M8
129010-008	KlickIn click component for nut M8



**Tension connector**

129062-001	Tension connector with accessories
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**Extra load tray**

169017-000	Extra load tray
169004-007	Surface protection mat 230x160 with retaining flaps



**Accessories**

You will find a selection of suitable module-bearing profiles (rails), module clamps and further mounting accessories in our component overview.

**Technical data**

<b>Material</b>	Surface protection mat: Rubber granulate with aluminium lamination; Fasteners: High-grade steel 1.4301 or higher quality; Other system components: Aluminium EN AW 6063;
<b>Structural analysis</b>	Structural analysis in accordance with current national standards (in Germany DIN EN 1991, EC1). Structural analysis annex for the dimensioning of the amount of required superimposed load. Please make sure you observe the structural analysis information in each case!

Further information at: [www.schletter.eu](http://www.schletter.eu)