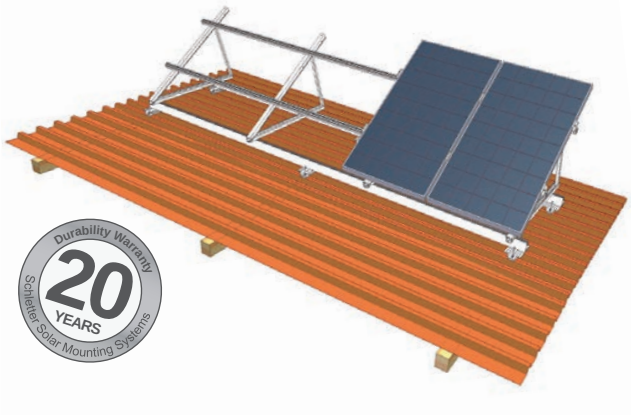
CompactGrid

Features and Benefits

- Solution for east/west roofs and sheet metal roofs
- Fast and easy installation
- Verified structural analysis
- Optimum load transfer—even with big purlin distances



CompactGrid is a tilted mounting system for flat and pitched roofs which are east/west facing. This system is specifically designed to distribute load evenly while spanning large distances between perlins. The Schletter DN rail series is used as a distribution rail below the triangular supports, which hold the array in place.

Load Optimization

Two DN rails, which run below each row triangle-shaped supports, are mounted at optimized distances on the roof . The occuring loads are safely and evenly transferred by the DN rails into the roof clamps and thereby into the roof cladding. In ideal cases, the DN0-beams are installed without profile connectors at distances of about 2 cm in order to avoid tensions caused by linear expansion.

Please consider that with this kind of mounting, the roof cladding must safely absorb the occuring wind loads and transfer them into the substructure! This has to be verified on site by all means! In case of doubt, a fixation to the substructure is always preferable to a fixation to the roof cladding.

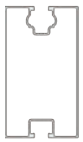
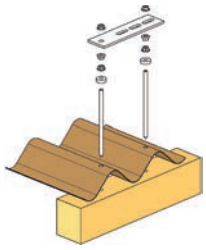
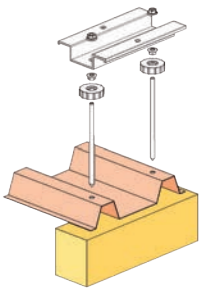
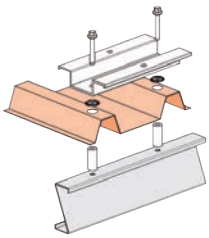
Inclined elevations

In case of south-west or south-east roofs, often an exact orientation of the module rows to the south is desired - here CompactGrid offers another option besides CompactVario to adapt the mounting rack to the local requirements in an ideal manner (for example elevations on trapezoidal sheet metal wit FixT fixation, elevations on standing seam roofs with KalZip clamps, for example). For an even more flexible mounting, we recommend the application of the mounting claw in combination with FixT (see FixT product sheet).

Your advantages

Due to the system compatibility of the Schletter components, which have been proven in thousands of applications, the CompactGrid system can be mounted swiftly and easily. The mounting beams are equipped with convenient shift grooves, so that the number of drillings required on the installation site can be reduced to a minimum. Like in the case of CompactVario, the connection to the substructure is carried out by means of well-proven FixT connectors or sheet metal roof clamps. Please especially pay regard to our FixT product sheet and the general mounting instruction.

Technical data

Material	Fixation elements are selected according to the respective roof covering, the thickness of the fixation elements is mainly determined by the purlin distances. Main beam (aluminium) are selected according to the span width (DN0 to DN2.5). Support attachments made of aluminium are fastened to the bottom beams in a freely shiftable manner.
Structural analysis	**Statics project planning program according to DIN 1055, part 4, part 5, EC1, EC3** Every plant can be structurally analyzed with individual parameters (local roof height, wind loads, snow loads); a special structural analysis program helps choosing the most cost-efficient profiles and the most suitable connection to the substructure and optionally indicates the power vectores at the load application spots for the integration in the structural analysis of the building.
Ground beam examples	   The lower side of the mounting beam is designed as a shift groove for M10 bolted connections. There is a Klick groove on the upper side. A M10 square nut is clicked into place into this Klick-groove by means of the M10 Klick-component. After this, supports and other connection elements are screwed into this square nut.
Connector examples Double set for corrugated roofs FixT wood/steel Sheet metal roof clamps Roof hooks, etc.	   Double set for corrugated roofs FixT wood FixT steel **Please also pay regards to our product sheets FixT, CompactVario, Roof System Overview.**

DN0	b	h
mm	40	40
inches	1.57	1.57

DN1	b	h
mm	40	80
inches	1.57	3.15

DN2.5	b	h
mm	50	110
inches	1.97	4.33

I400038US, 092013

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mail@schletter.us • www.schletter.us