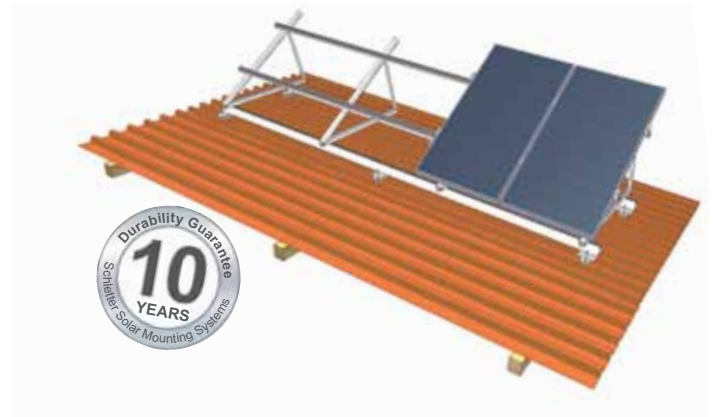


CompactGrid

The solution for east/west roofs and sheet metal roofs

- Fast and easy mounting
- Program-generated structural analyses
- Optimum load transfer even with big purlin distances



Description

With the CompactGrid system (formerly: Standard + continuous beams), we offer an optimum solution for the mounting of elevated PV-plants, for example on roofs inclined to the east respectively to the west. Without according elements for load distribution, only a direct mounting of triangle supports onto the purlins would be possible, especially with big purlin distances and heavy snow loads, the load limits of supports and cross beams are often reached. The application of our well-proven double groove mounting beams makes it possible to optimize the support distances and to distribute the arising loads evenly and safely into the roof cladding or into the substructure.

Application examples

Elevation on east/west roofs and south roofs

In such cases of applications, the beams run pairwise below the module rows (from the ridge to the eaves resp. horizontal), for example mounted onto FixT- connections (onto purlins resp. onto rafters). The supports are fixed onto the mounting beams at optimized distances. By means of the installation of diagonal strut kits, a warping of the modules is avoided.



Elevation with fixation to system sheet metal coverings or to trapezoidal sheet metal.

In case of elevations parallel to the ridge on standing seam roofs respectively on trapezoidal sheet metal roofs, two mounting beams run below each row (usually DN0-profile), onto which the triangle-shaped supports are mounted at optimized distances. The occurring loads are safely and evenly transferred by the mounting beams into the sheet metal 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 occurring 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 with 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

<p>Material</p>	<p>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.</p>																											
<p>Structural analysis</p>	<p>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 vectors at the load application spots for the integration in the structural analysis of the building.</p>																											
<p>Ground beam examples</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <table border="1" style="margin-right: 20px;"> <thead> <tr><th>DN0</th><th>b</th><th>h</th></tr> </thead> <tbody> <tr><td>mm</td><td>40</td><td>40</td></tr> <tr><td>inches</td><td>1.57</td><td>1.57</td></tr> </tbody> </table> <table border="1" style="margin-right: 20px;"> <thead> <tr><th>DN1</th><th>b</th><th>h</th></tr> </thead> <tbody> <tr><td>mm</td><td>40</td><td>80</td></tr> <tr><td>inches</td><td>1.57</td><td>3.15</td></tr> </tbody> </table> <table border="1"> <thead> <tr><th>DN2.5</th><th>b</th><th>h</th></tr> </thead> <tbody> <tr><td>mm</td><td>50</td><td>110</td></tr> <tr><td>inches</td><td>1.97</td><td>4.33</td></tr> </tbody> </table> </div> <p>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.</p>	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
DN0	b	h																										
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inches	1.97	4.33																										
<p>Connector examples</p> <p>Double set for corrugated roofs FixE FixT wood/steel Sheet metal roof clamps Roof hooks, etc.</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> </div> <p>Double set for corrugated roofs FixE steel FixT wood FixT steel</p> <p>Please also pay regards to our product sheets FixT, CompactVario, sheet metal roofs overview.</p>																											

Get all system prices fast and easy with our auto-calculator!