Windsafe
Load-optimized unit-assembly-systems by Schletter

- Considerable reduction of the required loading
- Simple and swift loading
- Considerably reduced load onto the roof construction
- Unit-assembly-system for individual project planning

For many years, the Schletter company has been applying the principle of load optimization in numerous projects when there are no fastening possibilities and the remaining load-bearing capacities are limited. By means of an optimization of the module angle, an appropriate interconnection of the rows, wind deflectors on the back side of the module rows and further geometric improvements like wind guiding plates and a defined guidance of the air flow, loadings of less than 30kg/m² are possible. From our point of view, completely load-free plants are technically unfeasible at the moment, if all relevant standards are applied. In order to minimize the loads as far as possible, Schletter works together with leading wind dynamics research institutes and develops specific simulation software for project processing.

We will compile individual load-optimized systems for your projects using components from our optimized unit-assembly-system according to your individual requirements and we will calculate the required loads on the basis of the normative requirements of the DIN 1055, part 4 (03/2005) and the Eurocode 1 (06/2002) and also on the basis of further findings gained from wind-dynamic simulations. The basis of a substantiated consulting is always the remaining load-bearing capacity of the whole roof, as well as a potential limit of the load-bearing capacity in certain roof areas due to insulations and roof coverings, which definitely has to be clarified by the customer beforehand. We will be glad to compile individually optimized systems for you on the basis of all these data. You will receive the accordant structural documentation as part of your project documents.

Support constructions and standard supports

Loadings and standard fasteners.

And if you want to keep the superimposed loads as low as possible, we recommend our AluLight system with a fixed elevation angle of 12°.

Please note
For roof systems that do not allow any loading of the roof covering, the IsoTop system may be a suitable alternative. With this system, all loads are directly transmitted into the roof structure.
Technical data

<table>
<thead>
<tr>
<th>Material</th>
<th>The wind deflectors are made of aluminium, the fastening elements are made of VA 1.4301</th>
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</thead>
<tbody>
<tr>
<td>Structural analysis</td>
<td>According to system structural analysis acc. to DIN 1055 and Eurocode 1</td>
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<tr>
<td>Application</td>
<td>As a loading solution for PV - plants on flat roofs</td>
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</tbody>
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Reference examples