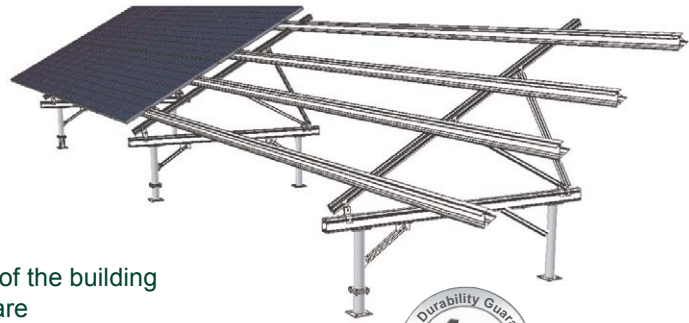




IsoTop

A system for membrane roofs of industrial buildings and special constructions



- Spans up to 10.0 m are possible
- Reduced load onto the roof substructure
- Direct load transfer into the supporting structure of the building
- Object planning by using individual statics software
- Improved connection details
- Optimization and minimization of the number of roof penetration points

Areas of application

Membrane roofs of industrial buildings are usually made of a substructure with big grid distances (5 to 8 meters) and a relatively soft roof covering. Both the statical dimensioning of the roofs and the maximum allowable pressure load are mostly so low that loading solutions for the fixation of the modules are ruled out in the first place.

Schletter IsoTop is a unit assembly system with details and solutions for supporting structures on membrane roofs of industrial buildings. IsoTop offers suitable solution options for any roof - depending on the respective object picked from the usual system unit assembly component range up to completely customized solutions. In the offer creation stage we grant you individual consulting for the planning of the photovoltaic supporting structure, in order to determine the most economic solution for the respective roof construction. Usually the constructions are optimized in such a manner that only a few penetration points in big distances are required. These penetration points can be welded by the roofer reliably and inexpensively; thereby the liabilities are clearly separated.



- For individual planning we work with internal product-specific statics programs, in order to be able to offer solutions quickly and inexpensively
- Complete series of special profiles offer suitable possibilities for the most different requirement
- As a qualified vendor of standard solar fastening technology with wide experience in the metal construction and sector and welding licences according to DIN 18800, we are also the right partner for customized constructions.

Hints for the static dimensioning

- Solutions with loading elements are usually out of the question, because usually neither the roof substructure nor the roof covering can bear additional loads.
- If you choose an IsoTop solution, the roof covering usually is not additionally loaded!
- In any case it has to be checked, if the substructure has a bearing capacity reserve to bear the weight of the mounting rack plus the photovoltaic modules plus portions of external load impacts (for example snow loads).



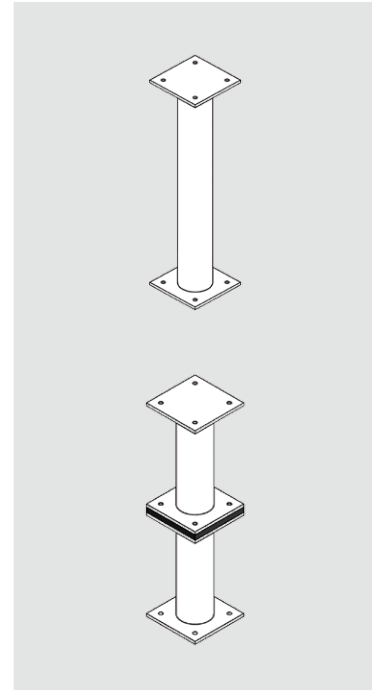
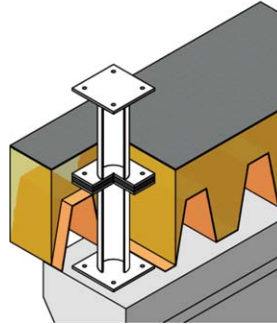
Perforations

Cold perforation

- ☑ Screwing onto the primary supporting system of the building
- ☑ For example applicable with warehouses
- ☑ Material quality steel
- ☑ Also available as rectangular tube
- ☑ Individual connector plates for the given constructional situation - optional
- ☑ Dimensioning takes place during the system planning

Warm perforations

- ☑ screwing onto the primary supporting system of the building
- ☑ Support is thermally separated
- ☑ For example applicable with cold storage houses
- ☑ Material quality steel
- ☑ Also available as rectangular tube
- ☑ Individual connector plates for the given constructional situation - optional
- ☑ Dimensioning takes place during the system planning



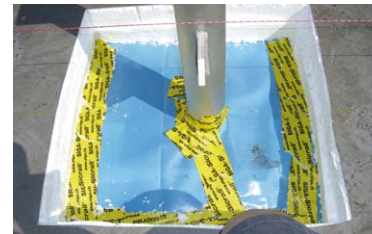
Mounting



① Opening of the roof cladding

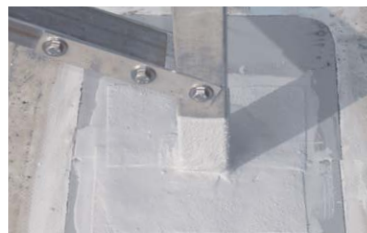


② Fastening of the support



③ Sealing of the support

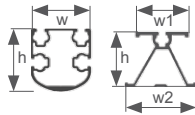
Perforation examples





The supporting structure

In most cases steel girders are not necessary because of our big range of load distribution beams. For this reason, aluminium is preferably used for the supporting structure. Thereby, the self-weight of the structure is reduced to an absolute minimum. Furthermore, all components are compatible to each other. Please also take a look at our overview of special profiles on the internet. The module bearing rails can be clamped individually and are equipped with our well-proven **Klick-system**. The system components are connected by means of according accessories.



Load distribution profiles



BF0	w	h
mm	80	85
inches	3,15	3,35
Item no.	440 120	



BF1	w	h
mm	80	133
inches	3,15	5,24
Item no.	440 121	



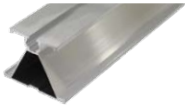
BF2	w	h
mm	80	161
inches	3,15	6,34
Item no.	440 122	



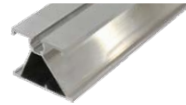
BF3	w	h
mm	80	200
inches	3,15	7,87
Item no.	440 123	

Module bearing profiles

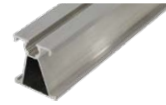
S0	w1	w2	h
mm	62	83	65
inches	2,44	3,27	2,56
Item no.	440 130		



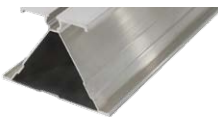
S1 In	w1	w2	h
mm	69	80	60
inches	2,44	3,27	2,56
Item no.	440 131		



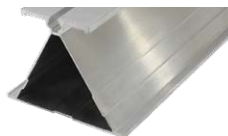
S1 Out	w1	w2	h
mm	49	54	60
inches	2,44	3,27	2,56
Item no.	440 135		



S2	w1	w2	h
mm	87	146	105
inches	3,42	5,75	4,13
Item no.	440 132		



S3	w1	w2	h
mm	87	160	125
inches	3,42	6,30	4,92
Item no.	440 133		



S4	w1	w2	h
mm	103	200	187
inches	4,06	7,87	7,36
Item no.	440 134		



Connection components



Joint	
Item no.	440 156



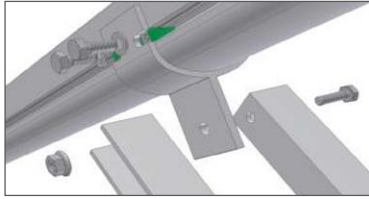
Mounting claw	
Item no.	440 157-80



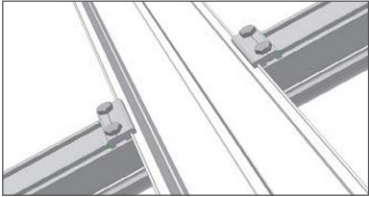
Lug angle reinforcement	
Item no.	440 151



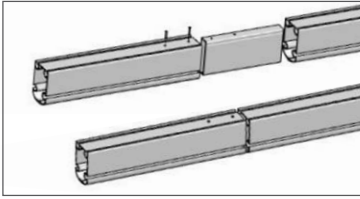
Mounting



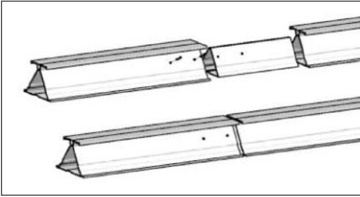
Connecting of struts



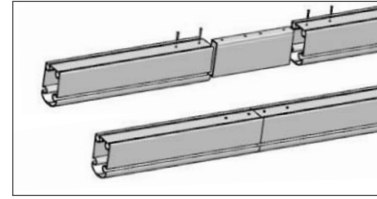
Connecting of purlins



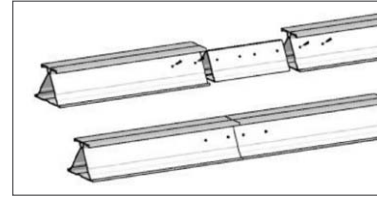
Connecting of insertion connector - with thermal separation



Connecting of insertion connector - with thermal separation



Connecting of insertion connector - fixed joint

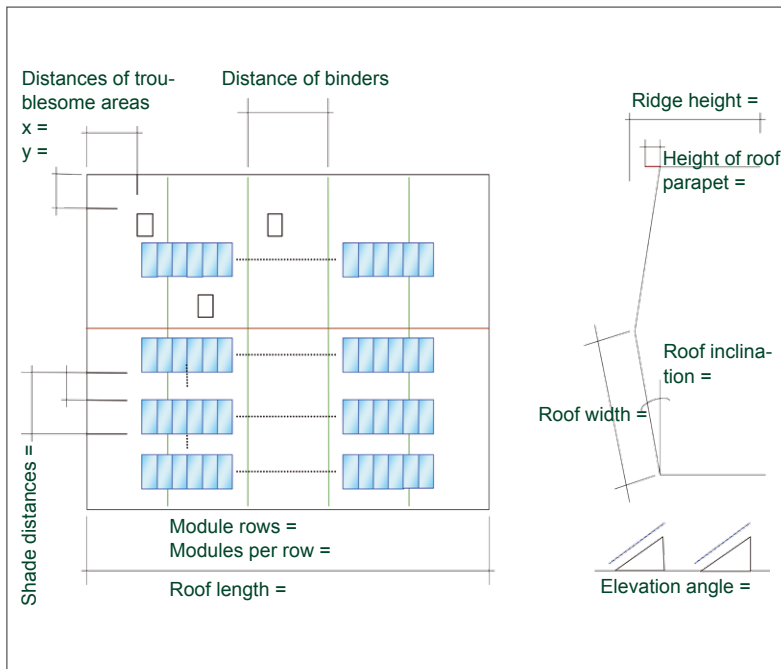


Connecting of insertion connector - fixed joint

Project planning examples

In order to be able to offer you the optimum system and thereby the most economic alternative, we always ask you to communicate us your desired module arrangement plan. If the information is complete, we will have the best basis to create quick solutions in your interest. The example on the following page is supposed to help you to focus your expenditure of time on the focal points and to make use of your advantage of planning in advance in case of an order.

The basic information needed for your planning is also to be found on the internet. Here data like location, height of the building and further details have to be entered.



Especially in case of wider spans, the determination of specific load application spots or special constructions we would like to ask you for an illustration of your inquiry. The picture shows one illustration possibility.

By giving us an illustration plus the IsoTop check list, you optimize your time effort, obtain important interfaces for the further planning of the desired construction and have an optimum basis for the dialogue with your customer.

We are looking forward to your inquiry