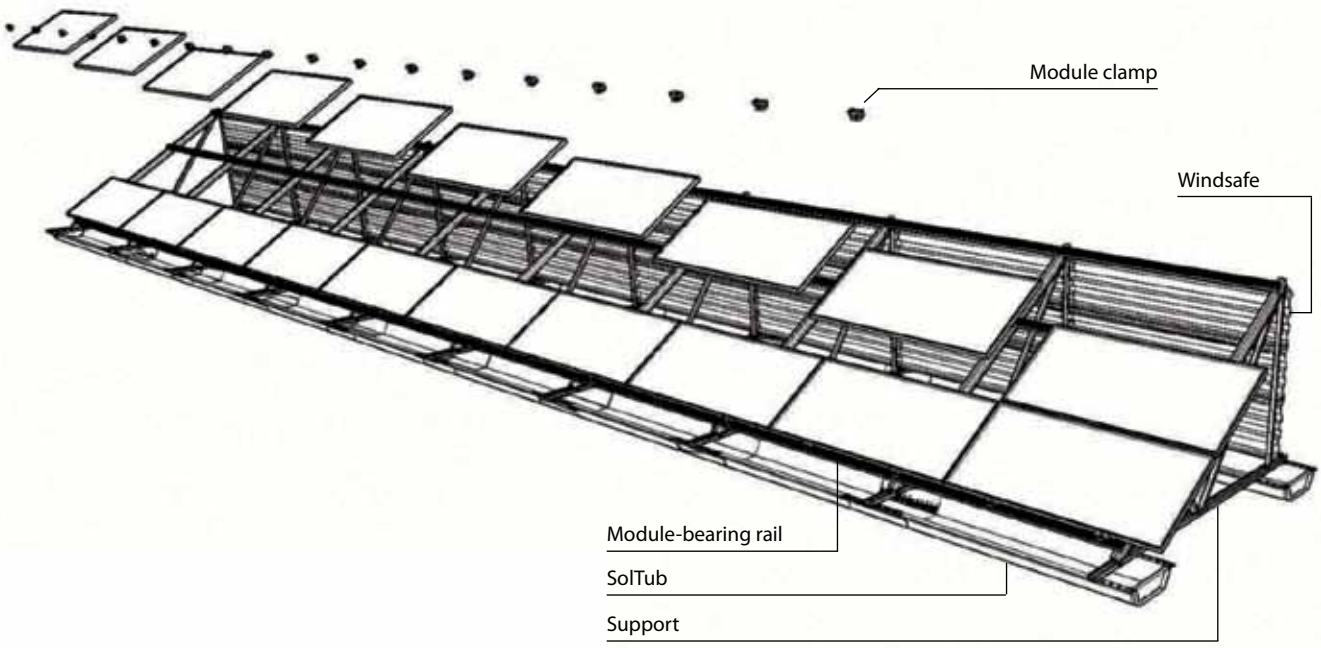
System WS

mounting instructions



Required tools

Screwdriver with bit and socket-wrench insert
Hex bit (wrench size 6)
Socket wrench (wrench size 15, wrench size 17)
Combination wrench (wrench size 13, wrench size 15)

The Schletter-tool kit includes the tools required for all standard systems.

Further required documents

Calculation documents including assembly drawing, piece list and solar plant-specific structural analysis

Tightening torques

M8 bolted connections:	15 Nm
M10 bolted connections:	40 Nm

Safety instructions

Planning, mounting and putting into operation of the solar plant must be performed by qualified personnel only. Poor quality execution can result in damage to the plant and to the building and can present a risk to people.

Risk of falling! There is a risk of falling when working on the roof as well as when ascending and descending the building. Accident prevention regulations must be observed and appropriate safety equipment must be used.

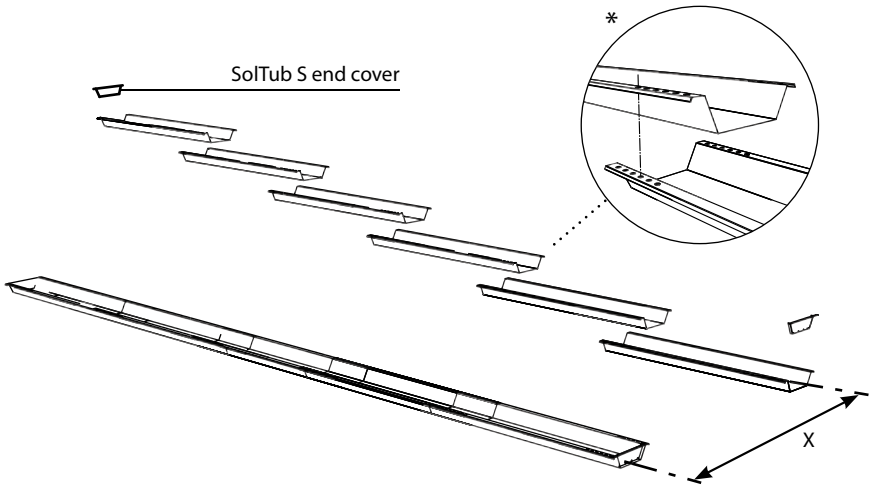
Risk of injury! Objects falling from the roof can cause injury to people. The danger area around the installation site must be secured and people present in the area must be warned of the risks.

Risk of breakage! Never step on PV modules, otherwise they will be damaged.

Risk of electric shock! The mounting and maintenance of the PV modules must be carried out exclusively by qualified specialists. Please observe the all safety regulations issued by the manufacturer!

❶ Arrange the SolTubs

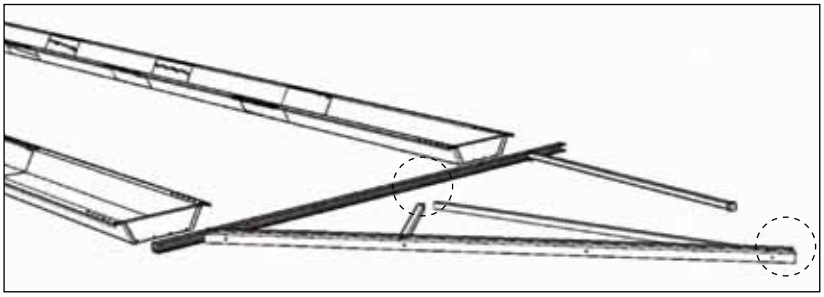
- Arrange the SolTubs above each other so that at least 3 holes* are placed exactly above each other. The other holes are used for adjustments.
- Insert the SolTub end covers.
- The row distance X depends on the hole distances of the bottom beam of the supports that are used.



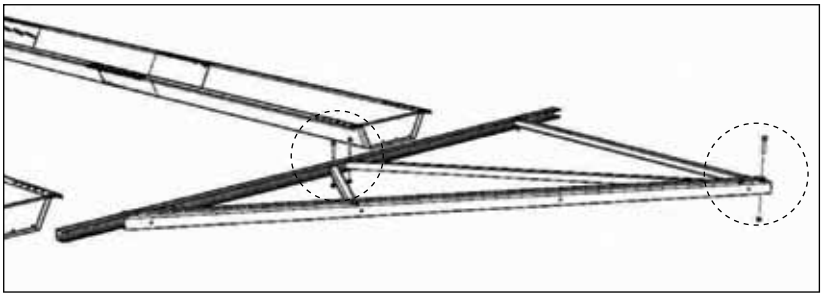
⚠ Please observe the shade distances between the module rows. This distance is a decisive factor for the yield prognosis. You can find a shade distance calculation software on our website.

❷ Assemble the supports

- Unfold the supports
- Loosen the pre-assembled M8 bolts and take them out.
- Insert the support struts into the rails in such a manner that the holes are exactly above each other.
- Insert the M8 bolts in the same way and fasten them.
- Fasten all support bolts.

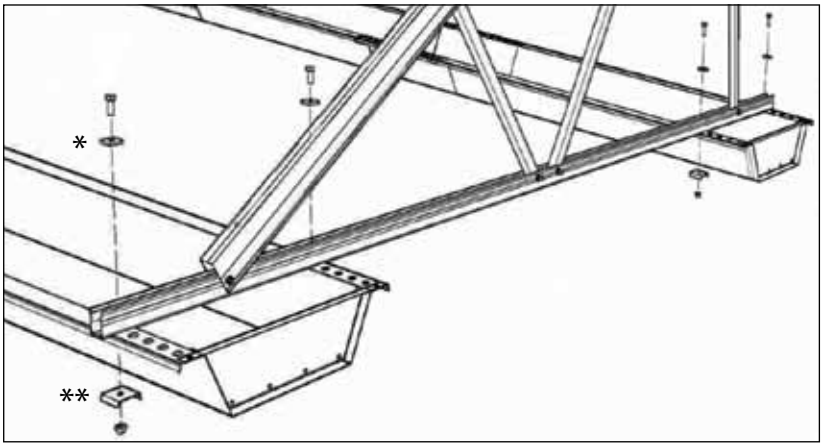


⚠ If the ground beams are long, the supports are not pre-assembled for reasons of transportability.



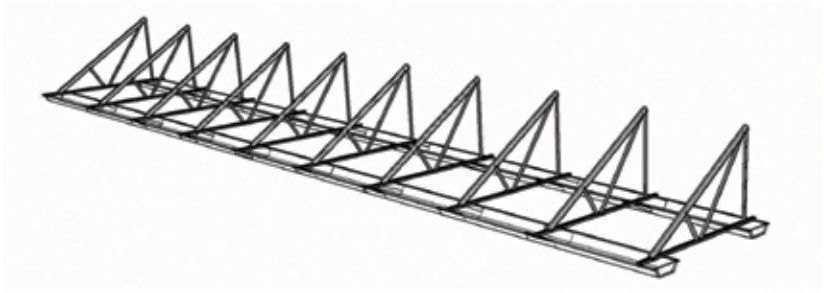
❸ Assembly of the supports

- Put the supports onto the SolTubs in such a manner that the holes exactly overlay each other.
- Put the M10 bolts through the M10* adapter plate, the bottom beam and the SolTub.
- Attach the reinforcement washers** from below and fasten them with M10 serrated flange nuts.



❹ **Assemble all supports**

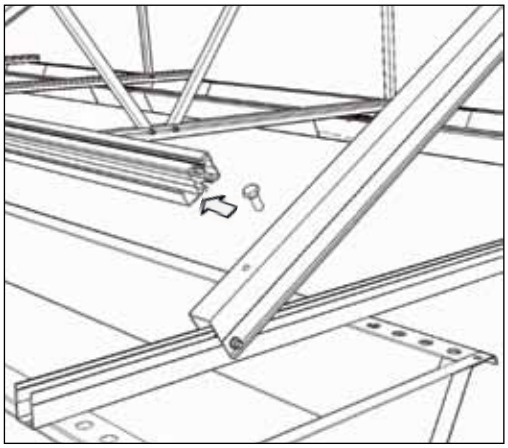
- Arrange all supports as specified in the assembly drawing with dimensions that is included in the scope of delivery.

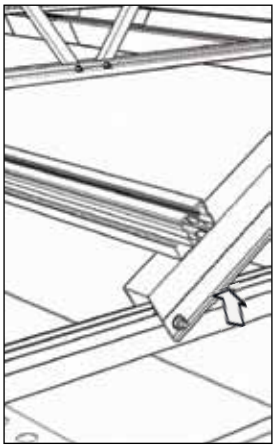


❺ **Assembly of the module-bearing rails**

- Put the square-head screws M10x25 into the lower screw channel of the module-bearing rails and put the screw threads into the holes of the supports.
- Screw the square-head bolts into the M10 flange nuts.

⚠ For this purpose, please observe the specifications in the assembly drawing.

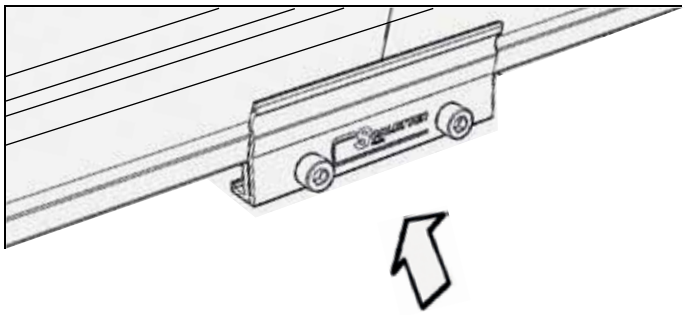


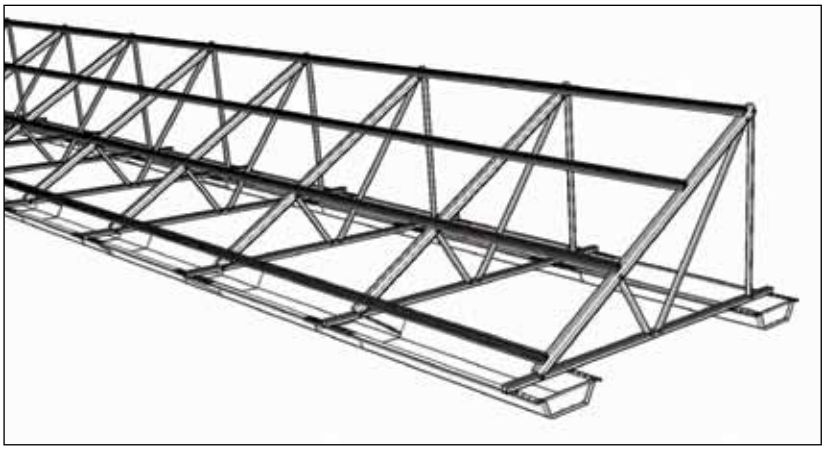


❻ **Extend the module-bearing rails**

- Fit the E connector from below.
- Fasten the pre-assembled bolts.

⚠ The purlin separations specified in the assembly drawing definitely have to be adhered to.

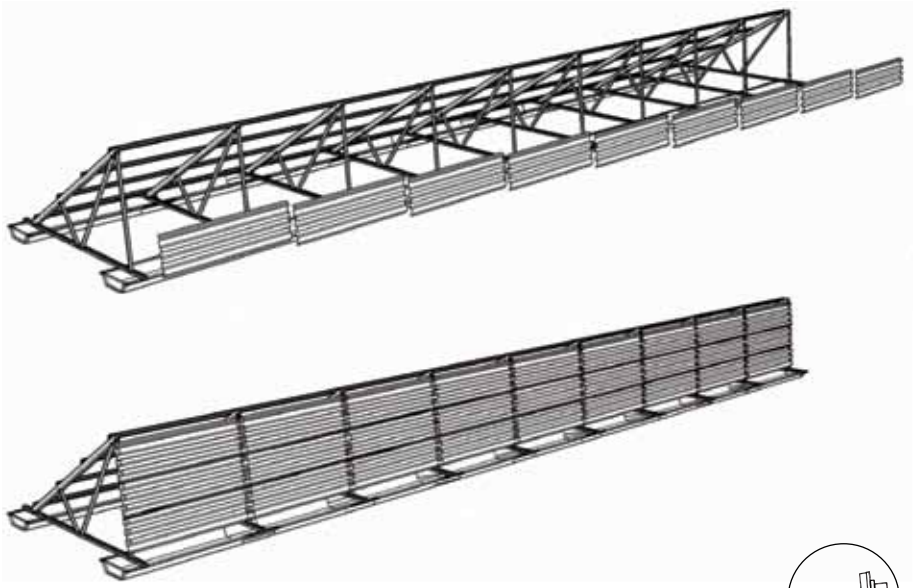


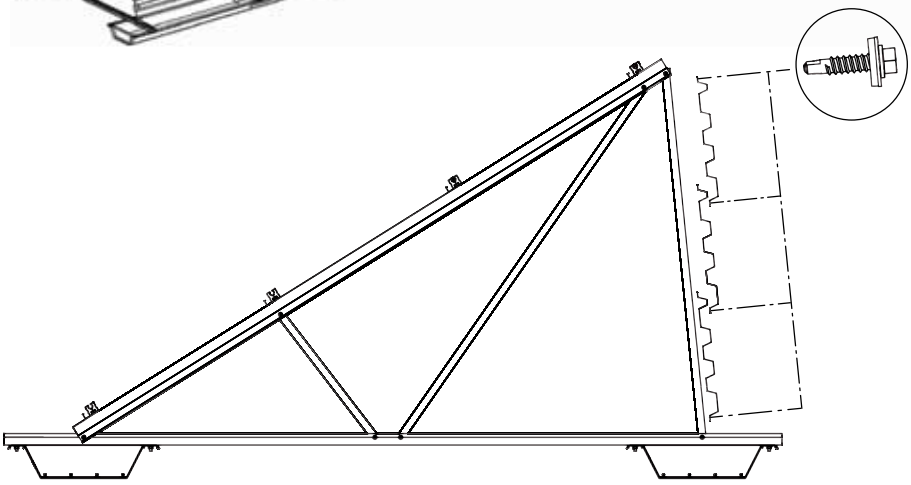


❼ **Fasten the Windsafe metal sheets**
- Lay on the Windsafe Sheet metal.
- Fasten each metal sheet with 2 self-drilling screws per support.

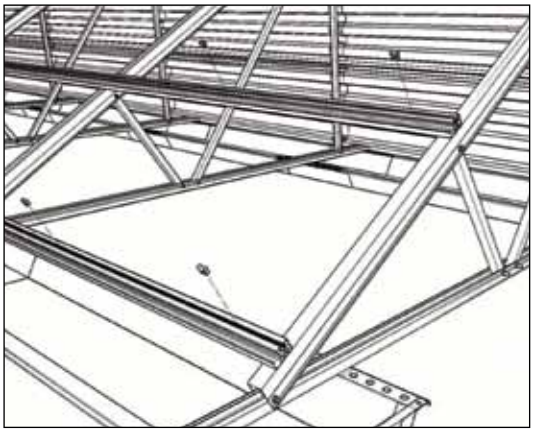
⚠ Always mount the Windsafe metal sheets between two supports as shown in the drawing.

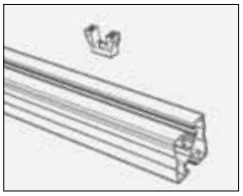
⚠ At the sides, there must be an overlap of the metal sheets of at least 50 mm.

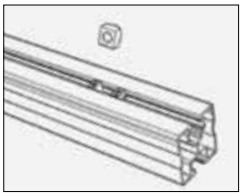




❽ **Insert the square nuts**
- Push the green click components into position.
- Feed the square nuts vertically into the green click components and rotate them through 90° so that the rounded side faces downwards.

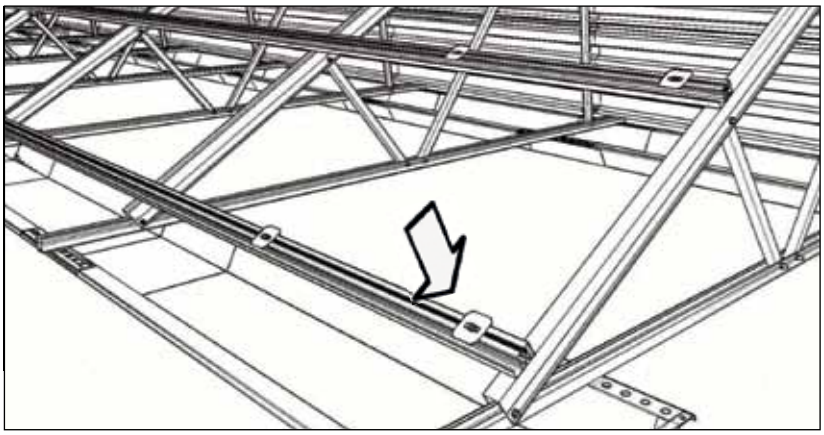






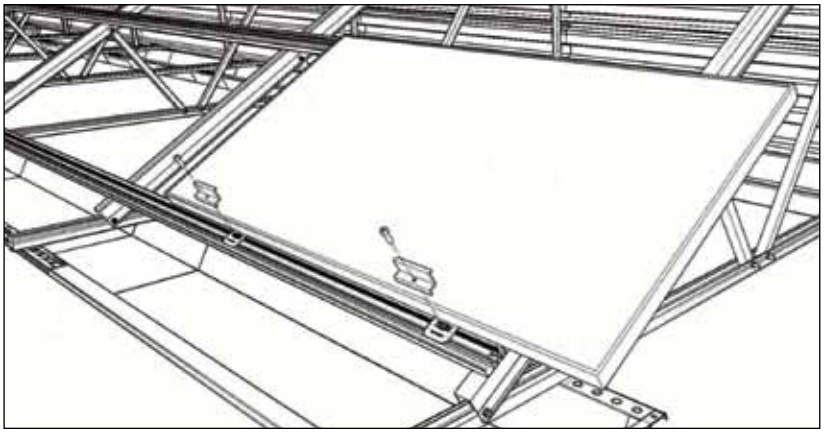
❾ **Positioning of the bearing plates**

- Insert the bearing plates centrally at the selected positions (as specified under ❽).

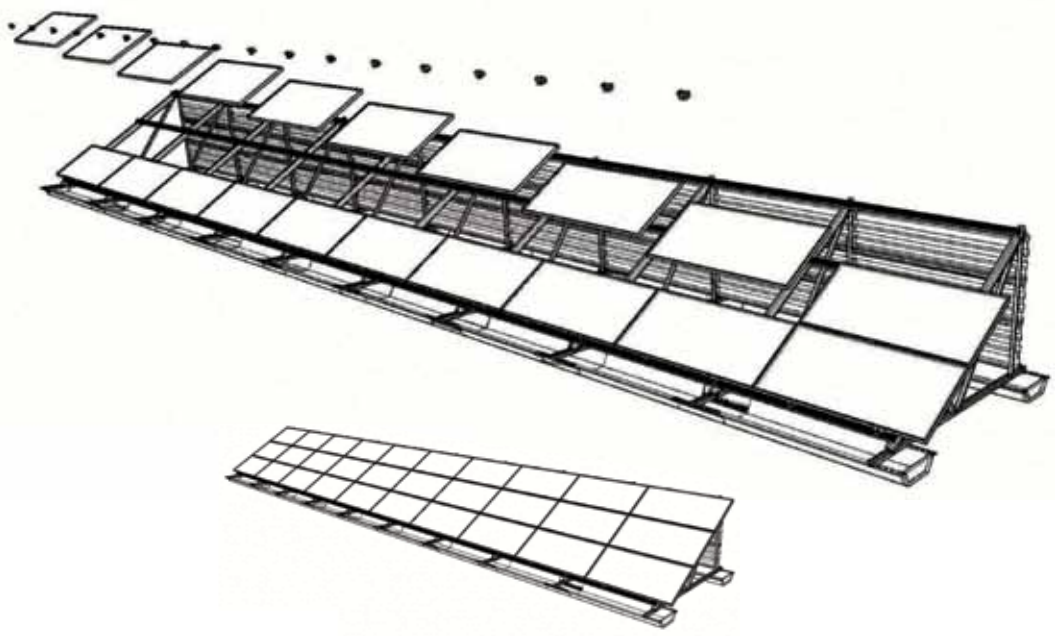


❿ **Module mounting from bottom to top**

- Lay the first (lowest) module.
- Put 2 end clamps on the fastening points on the lower long side of the module and fasten them with M8 bolts (wrench size 6).
- Connect the module cables as required.
- Lay the next module above the lower module and fasten both modules with middle clamps and M8 bolts (wrench size 6) that are put in between these two modules at the correct fastening points on the long sides of the modules.
- Again, fasten the last (top) module of a horizontal row with two end clamps.



⚠ Please find further information in the special information on module mounting.



For further information relating to our systems, please refer to our website: **www.schletter.eu** in the download area.