

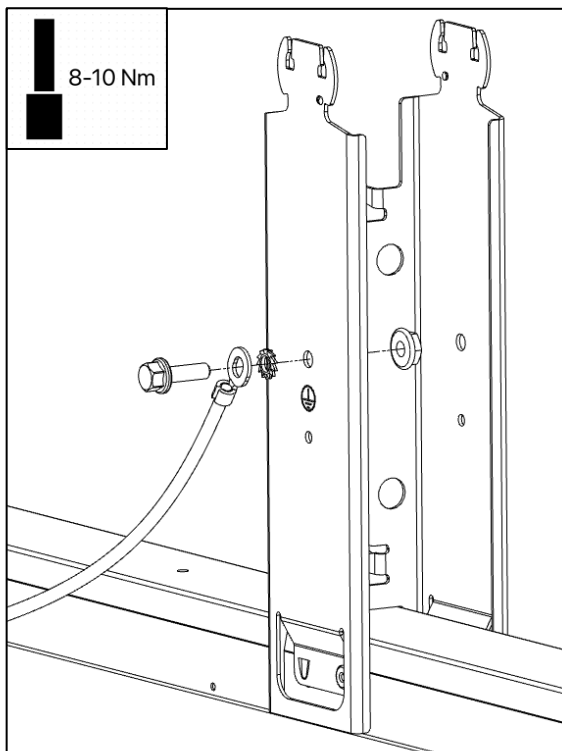
Sunbeam **Supra**

Equipotential bonding and lightning protection

Equipotential bonding

Sunbeam Supra is electrically connected in contiguous fields. A field must be connected to the functional bonding conductor (grounding). For a redundant connection, we recommend connecting the field at two diagonally opposite points. The connections within the contiguous field have been extensively tested to ensure long-term equipotential bonding of the metal parts of the system and the (aluminum) module frames. Connections can be made in two ways:

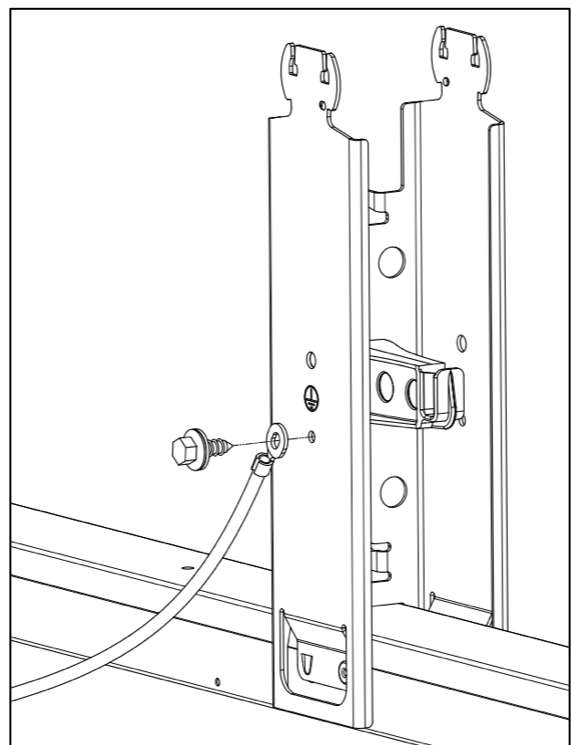
1. With M6 fasteners (preferred method)



Place a cable lug on the functional bonding conductor.

Secure the cable lug in the hole above the grounding symbol with an M6x20 mm bolt and (self-locking) nut (8-10 Nm). Optionally, place a serrated washer between the bolt and cable lug.

2. With the short screw



Place a cable lug on the functional bonding conductor.

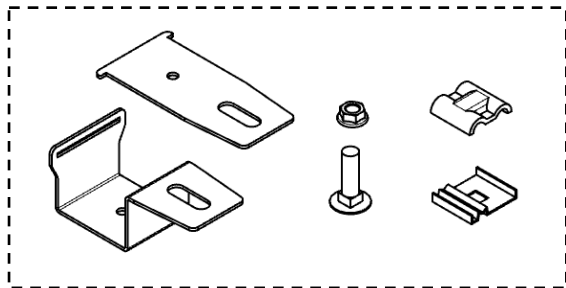
Screw the short screw into the hole below the grounding symbol (3-5 Nm). Optionally, place a serrated washer between the bolt and cable lug.

Connection to the Lightning Protection System

The Sunbeam Supra mounting system has been tested and approved according to the EN-IEC 62305 standard. The lightning current load capacity has been tested according to EN 62561-1 and meets test class N (50kA). Both connection (A) and integration into the capture network (A, B, and C) are possible. Clamped cable cross-section: 4-50mm².

NOTE! Consult a lightning protection expert for the design and integration of the solar energy system into the lightning protection installation.

A. Connection to the Lightning Protection System



For each connection:

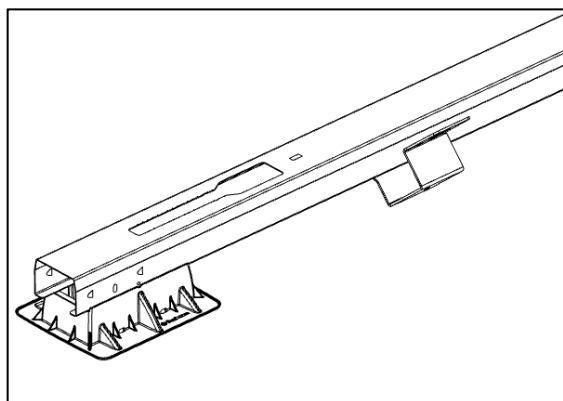
1x Lightning protection clamp bracket and clamp plate

1x M10x30 carriage bolt

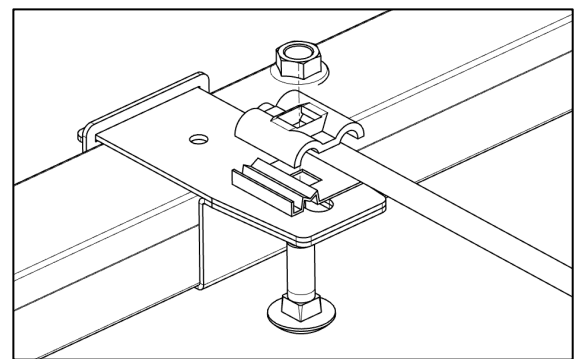
1x M10 flange nut

1x UNI ground clamp

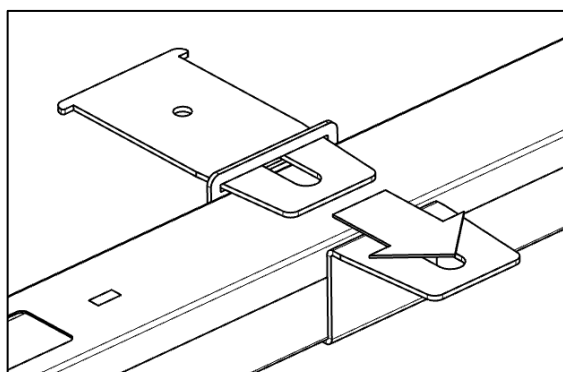
This set is available as 'Lightning Protection Clamp Supra' under number I01499.



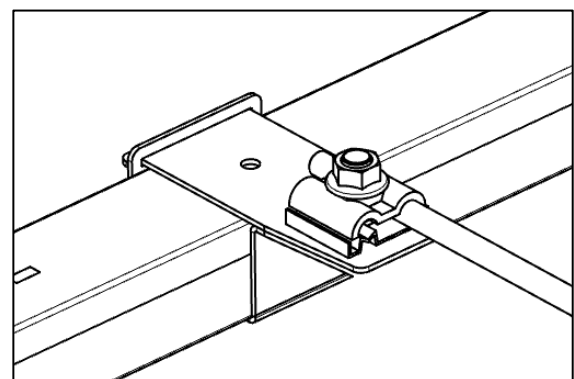
1. Place the clamp bracket with the lip upwards at the point where the lightning conductor will be connected.



3. Insert the M10x25 carriage bolt from below into the slot hole. Assemble the ground clamp together with the lightning conductor.



2. Slide the clamp plate into the clamp bracket.



4. Tighten the nut to clamp the assembly onto the base unit (20 Nm).

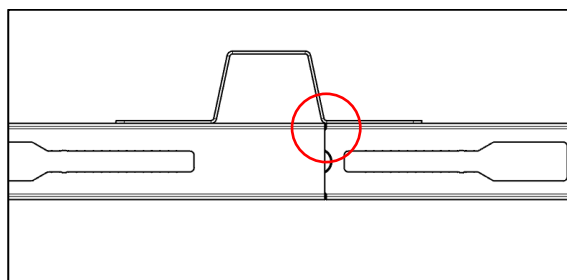
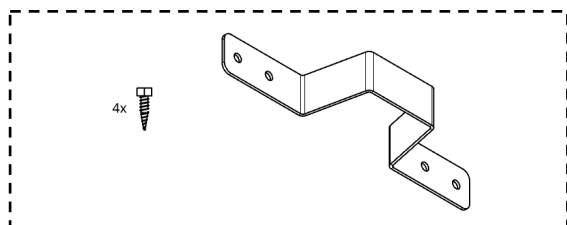
Integration into the Capture Network of the Lightning Protection System

The methods below are independently tested connections to allow coupling or integration of the Sunbeam Supra mounting system to the lightning protection on the roof. Connect the beams according to step A on the previous page and then follow the steps below.

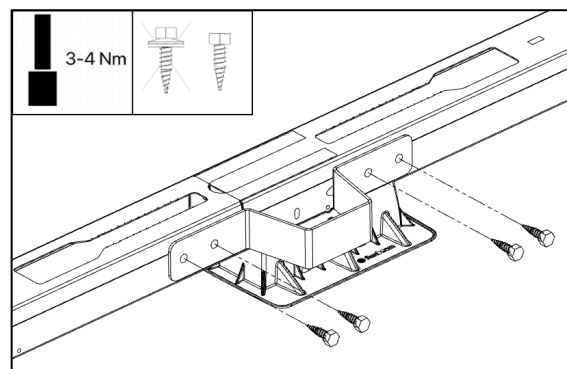
NOTE! Consult a lightning protection expert for the design and integration of the solar energy system.

B. Integration in the direction of the Supra base unit

To integrate a series of beams into the capture network of the lightning protection system, all connections must be bridged with a Lightning Protection Bridging Bracket (I01500) secured with 4 mounting screws (60x25) without a washer (I01046).



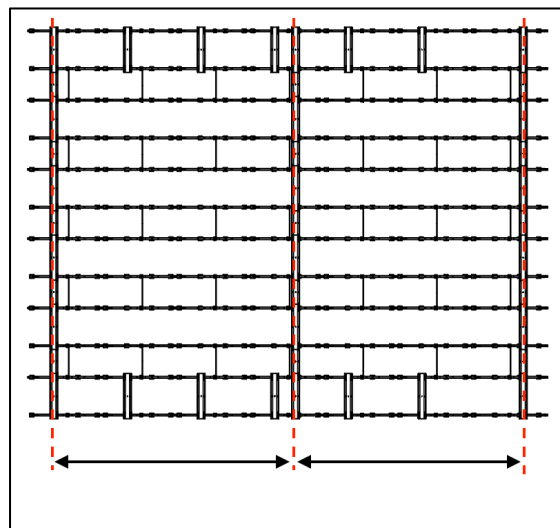
1. Place the bridging bracket over the connection. Ensure that the setting aligns with the transition between both beams. The screws will then leave the connection between both beams clear.



2. Screw the bridging bracket with the mounting screws.

C. Integration in the direction of the ballast plates

The ballast plates and ballast connector plates placed according to the manual are suitable for integration into the capture network. Check the layout plan to see where they are located.



NOTE! Install additional rows of ballast plates and ballast connector plates for large fields to comply with the maximum separation distance.