connect®

OW-Project
Assembly manual

blubase™
STRONG IN SOLAR SUPPORT

BEFORE YOU START

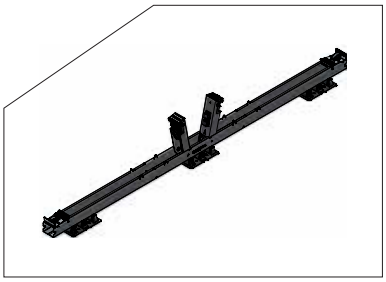
Installing a solar power system will change the building's structural load, which can influence the supporting structure. It is therefore important to have a qualified technician recalculate the load values. Ensure you take note of the prevailing legislation, particularly the NEN6702, NEN7250, NEN1991-1-1-4 A1+ C2/NB & NEN1991-1-1-3

Also ensure you obtain agreement from the insurer and the structural engineer for:

- the loads on the building due to the extra weight of the PV system.
- the loads on the building due to the changed geometry of the roof surface.
- the loads on the building due to dynamic wind pressure and precipitation.
- the loads during installation on the building, the roof covering and the insulation.
- the pressure of the contact points on the compatibility of the insulation and roofing.
- the compatibility of the roof covering with the supporting structure at the contact points.
- the consequences of the mutual thermal effects of the building and the PV system.
- the consequences of possible movement of the roof and the PV system.

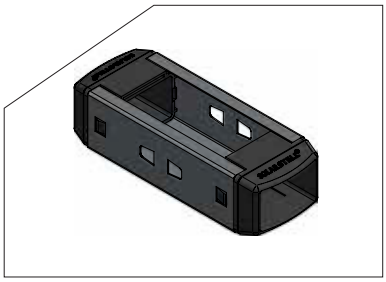
Although the calculations and dimensions in the calculator have been created with due care, no rights can be derived from these. The prices are intended to be indicative and may change, for example, if raw-material costs increase. You can find the general terms of supply at **blubase.com.**

THE COMPONENTS



Base element
Article no. Description

500150 Base element 1005
500155 Base element 1055

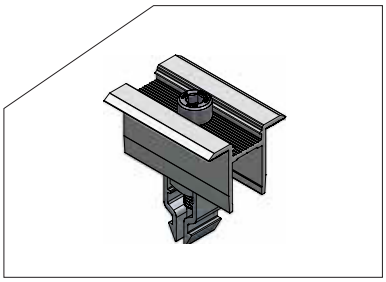


Coupler
Article no. Description

500050 Coupler east-west
500060 Coupler walkway 2300
500013 Coupler Connect 1320
500015 Coupler Connect 1500
500017 Coupler Connect 1700055

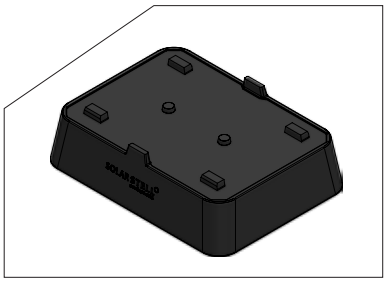
Ballast tray
Article no. Description

500430 Ballast tray
500440 Ballast tray 72 cells



Clamp
Article no. Description

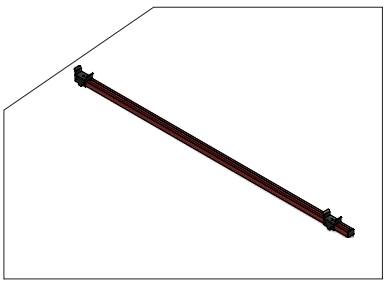
500221 Connect EasyClamp universal



Elevation block (optional)
Article no. Description

500810 Elevation block

YOUR EQUIPMENT

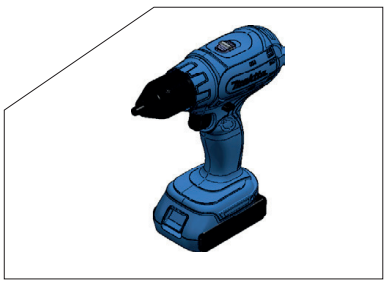


Solarsteller (landscape 60 cells or landscape 72 cells)

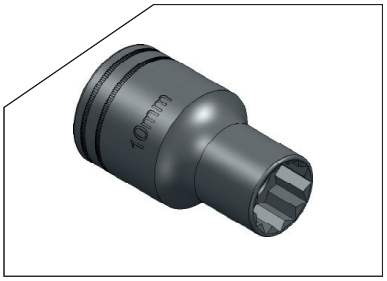
Article no. Description

500001 Landscape 60 cells
500011 Landscape 72 cells

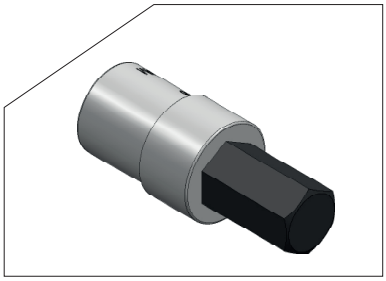
Measuring tool



Powered screwdriver



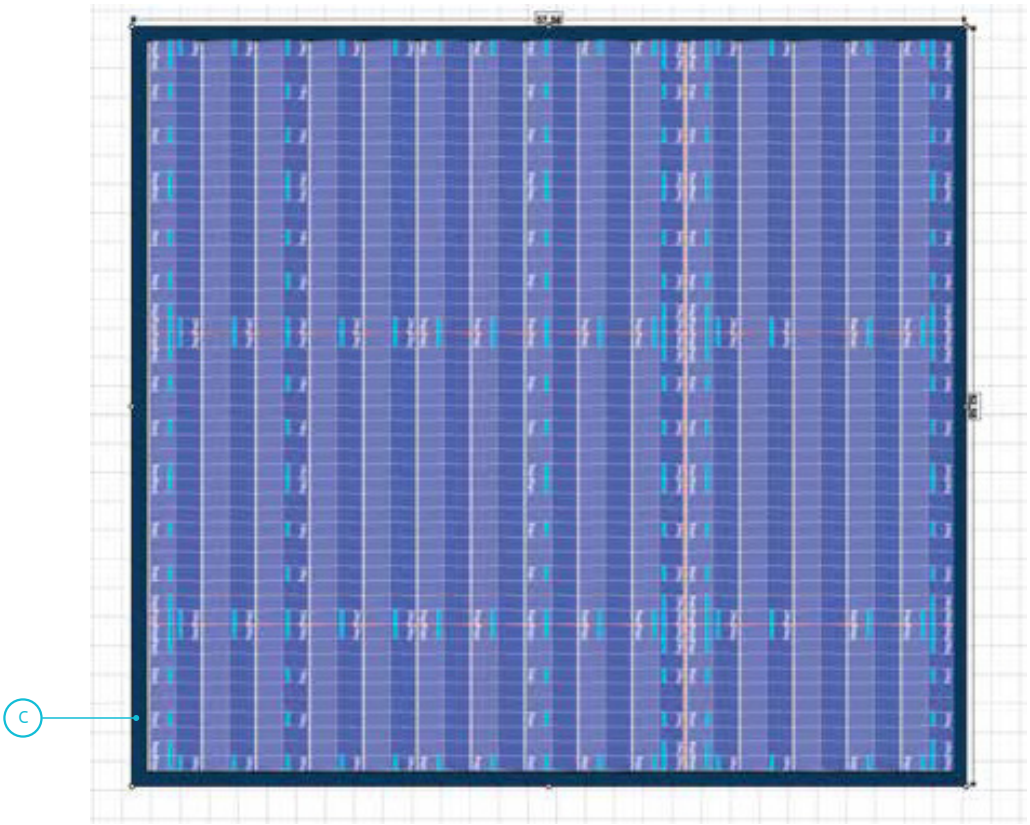
Hexagon profile socket 8 mm



Hexagon bit 8 mm

PREPARATION

Before you begin installation, clean the roof well and measure potential obstacles and interruptions.
Then, you can start. Always begin installation from north to south.



NO-GO ZONES

NEN 7250 stipulates that solar panels may not be placed right up to the edge of the roof, as this can cause turbulent wind flows. You must therefore leave a strip free – the 'no-go zone'.

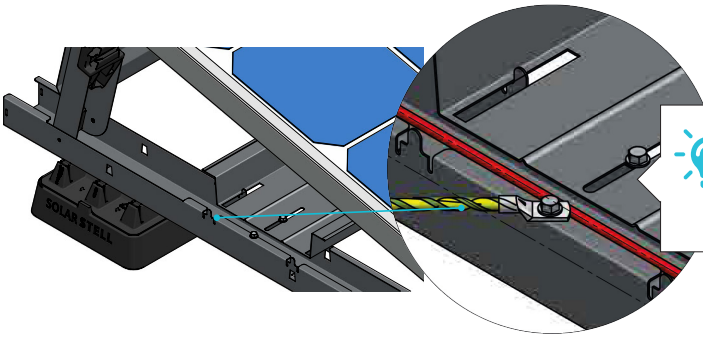
Are you installing solar panels on a roof higher than 12 metres? You may need to take extra measures.
Ask your contact person at SolarstellConnect for advice.

Measure the no-go zone from the outer edge (see blue outline in diagram C). How large should the no-go zone be? The correct figures are provided in the table. You can also find them in the ballast plan.

Roof height (metres)	No-go zone (metres)
1	0.75
2	0.75
3	0.75
4	0.75
5	0.84
6	1
7	1.18
8	1.33
9	1.5
10	1.67
11	1.83
12	2
Higher than 12	Ask for advice

EQUIPOTENTIAL BONDING

Equipotential bonding occurs automatically between the Magnelis steel and the aluminium.
This prevents the build-up of voltage in the material and ensures that the inverters and micro-inverters are not damaged. (NEN 1010:2015)

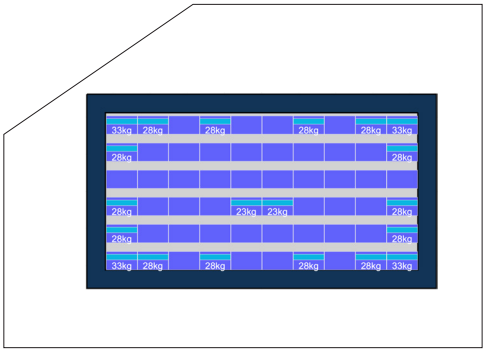


TIP:
Use one of these points for earthing.

GETTING STARTED – LAYING THE PANELS

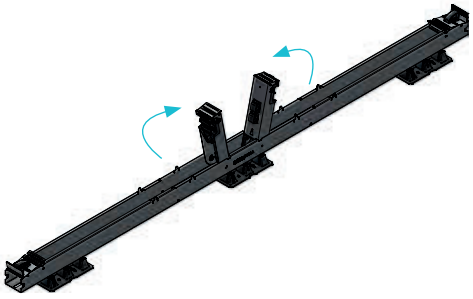
STEP 1: LAYOUT

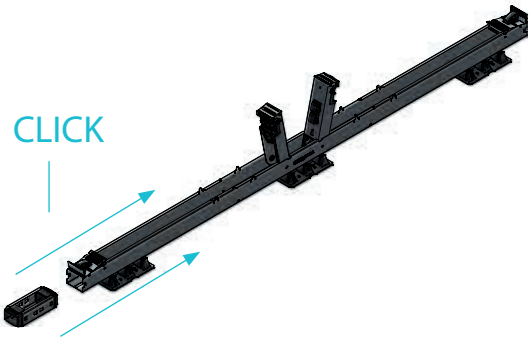
You'll use a layout plan from the calculator. Determine the first point of placement within the no-go zone (see page 4) and work from there.



STEP 2: FIRST POINT OF PLACEMENT

Take the base element and click the uprights upwards. Place the base elements on the first point of placement. Then, take the coupler and click it in place. Note: The click must be clearly audible. This means the hook has engaged properly in the slot.



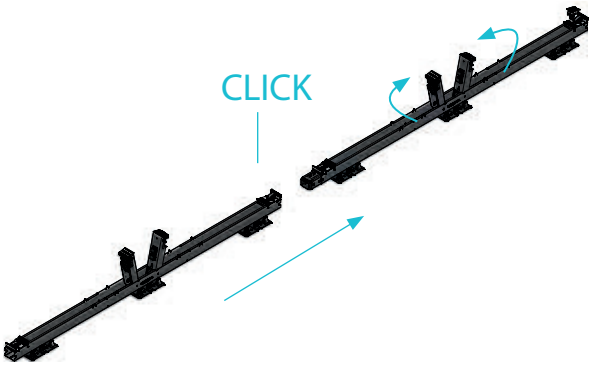


TIP:
Are you working on a roof with gravel? Use our elevation blocks. They fit precisely under the feet of a base element. The mounting system is then higher and will not move around.

TIP:
It is essential to place your rows in straight lines with angles of 90 degrees. Otherwise, the solar panels will not sit properly in the uprights. You can use a mason's line to help with this, for example.

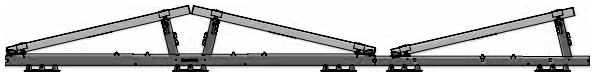
STEP 3: FIRST ROW

Now, couple the second base element to the first and click another coupler in place. Note: Ensure the uprights are clicked upwards first! Then, connect the next base elements and couplers using the same technique until the first row is complete according to the layout plan.



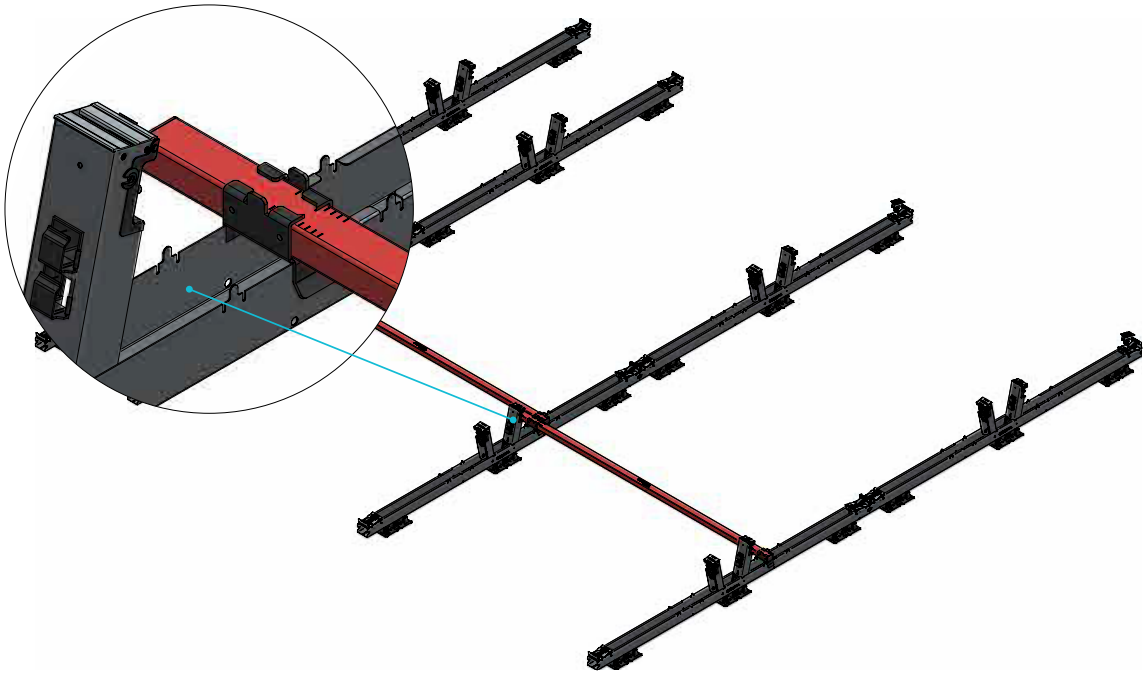
END OF ROW SETUP

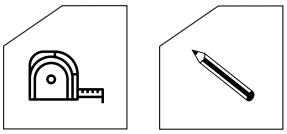
Ending a row on a single panel?
Use a standard Connect base element (article number 500110).

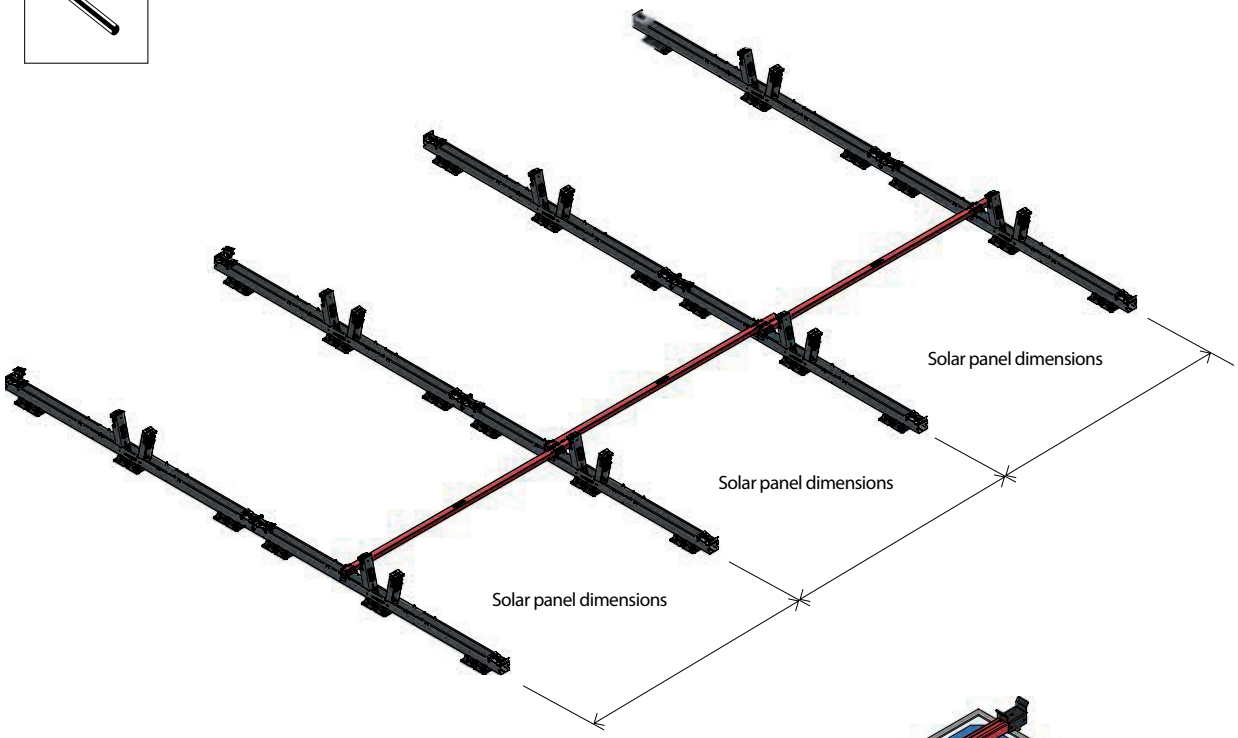


STEP 4: THE SUBSEQUENT ROWS

Lay the second row in exactly the same way as the first row. The length of the panels determines the distance between the rows. Use the Solarsteller to precisely measure the spacing distance. Repeat these steps for all the rows, following the layout plan. You can find instructions on how to use the Solarsteller on the following page.

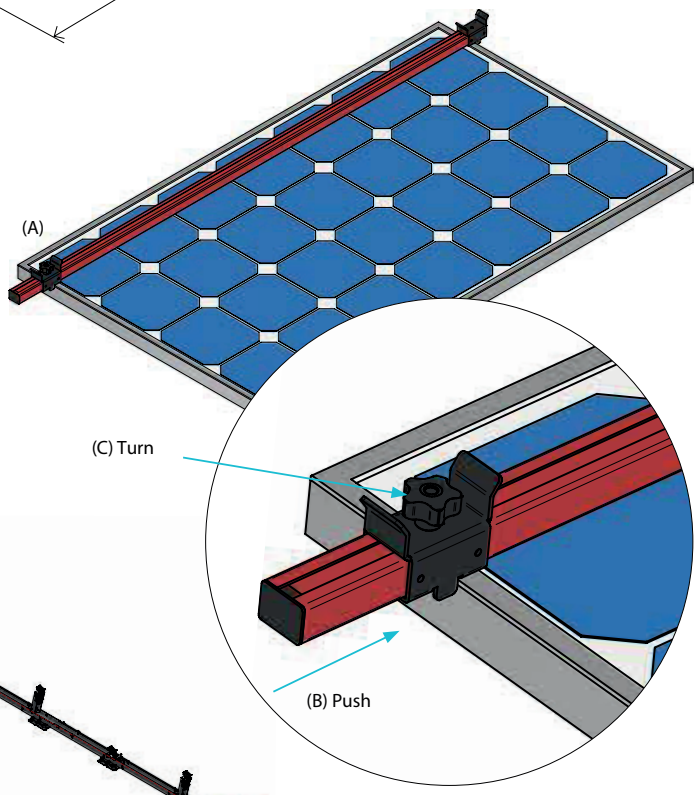


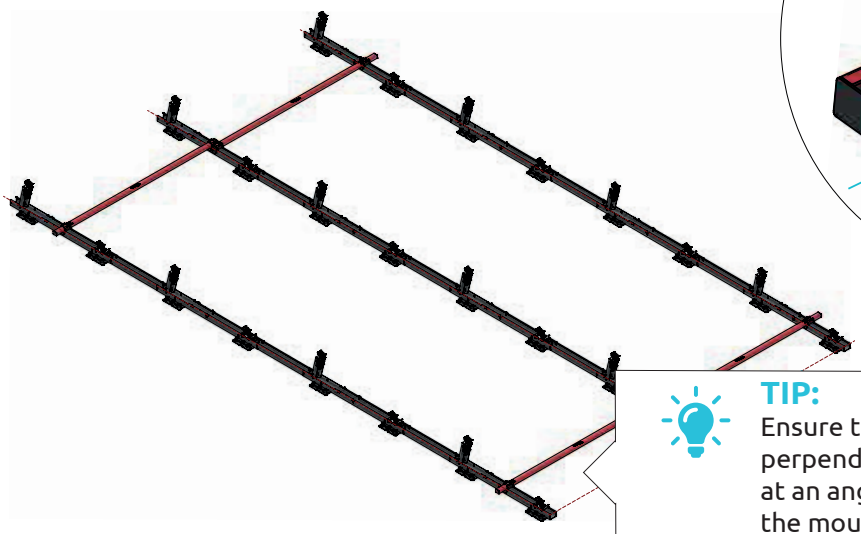




HOW TO USE THE SOLARSTELLER

Lay the Solarsteller (A) over the width of the panel, push in the slide (B) until it touches the edge and then turn the rotary button (C) until it is fixed in place.

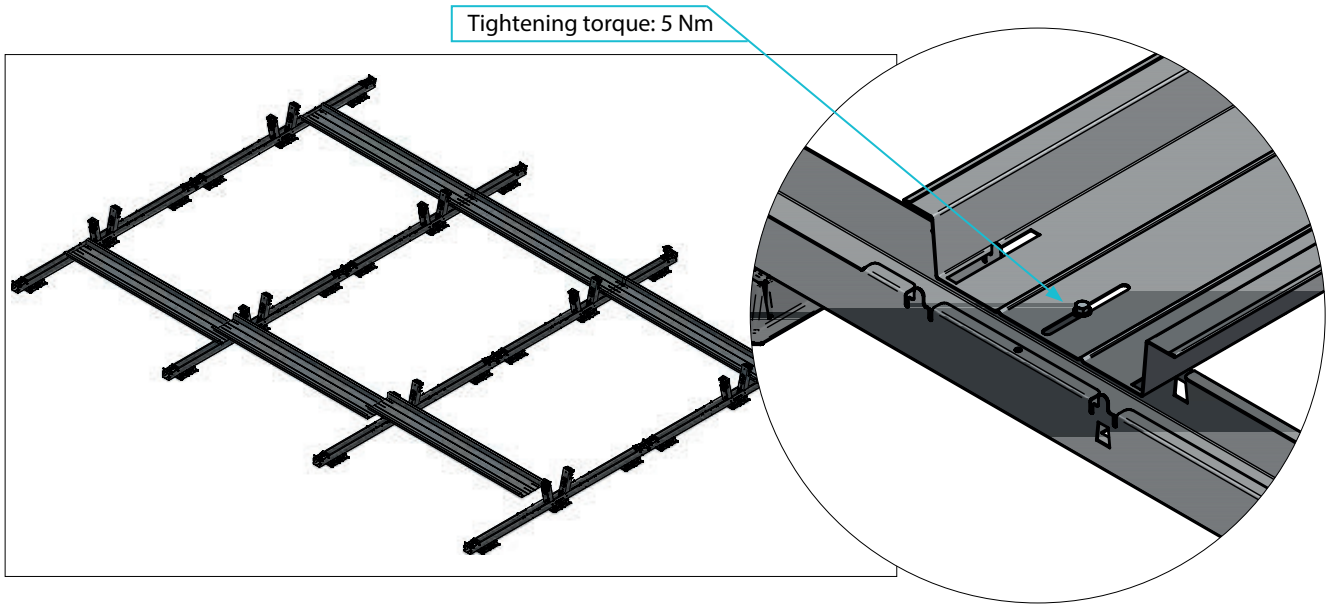




TIP:
Ensure that you mount the Solarsteller perpendicular from the start. That is, at an angle of 90°. This ensures that the mounting system is always straight and the solar panels always fit.

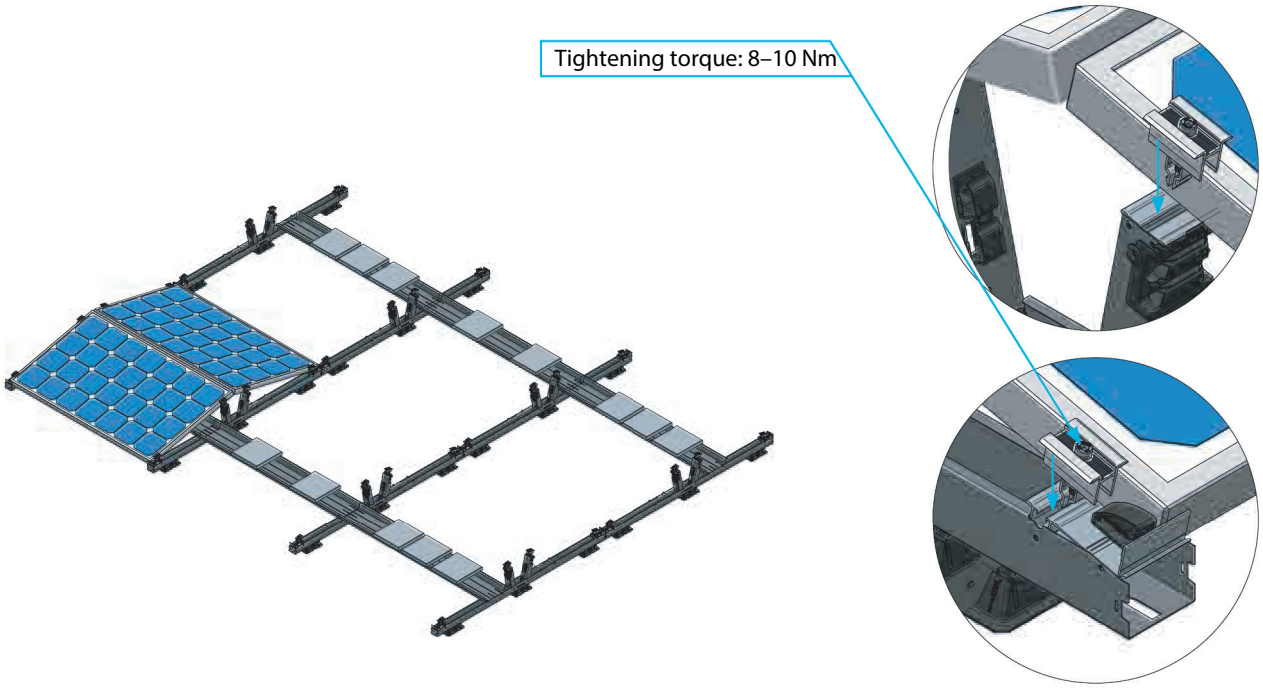
STEP 5: BALLAST TRAYS

Place the ballast trays with the ballast inside as per the layout. The trays do not have to be screwed in place, although this may be advisable for large projects as it prevents the system from slipping. Holes have been pre-drilled in the base elements for this purpose.



STEP 6: SOLAR PANELS

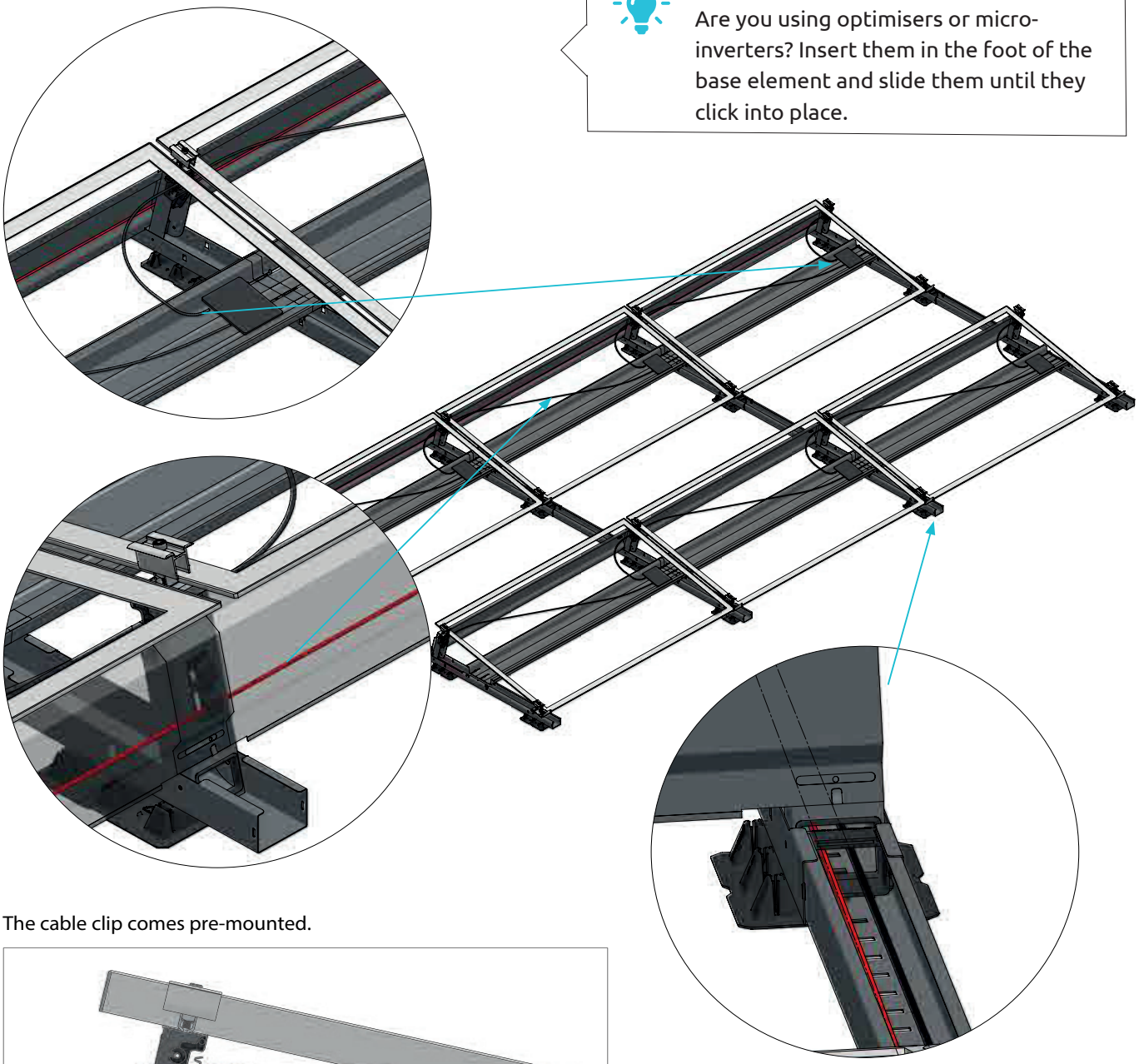
Place the solar panels on the placement points. Then feed the cables into the cable management system. Click the clamps into the base elements and turn until they are fixed in place (tightening torque 8–10 Nm).



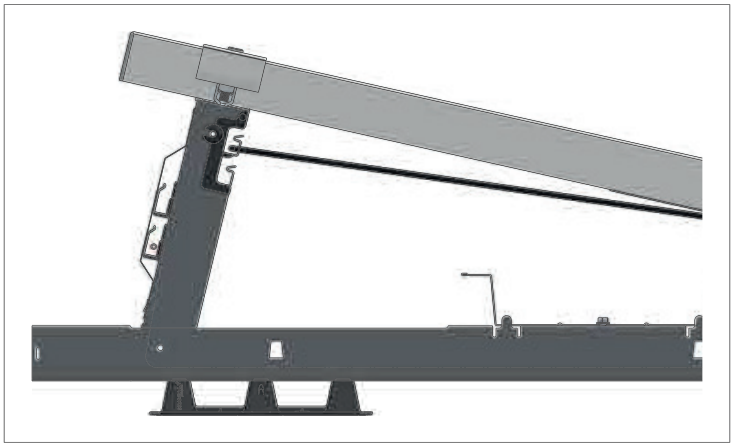
STEP 7: CABLE MANAGEMENT

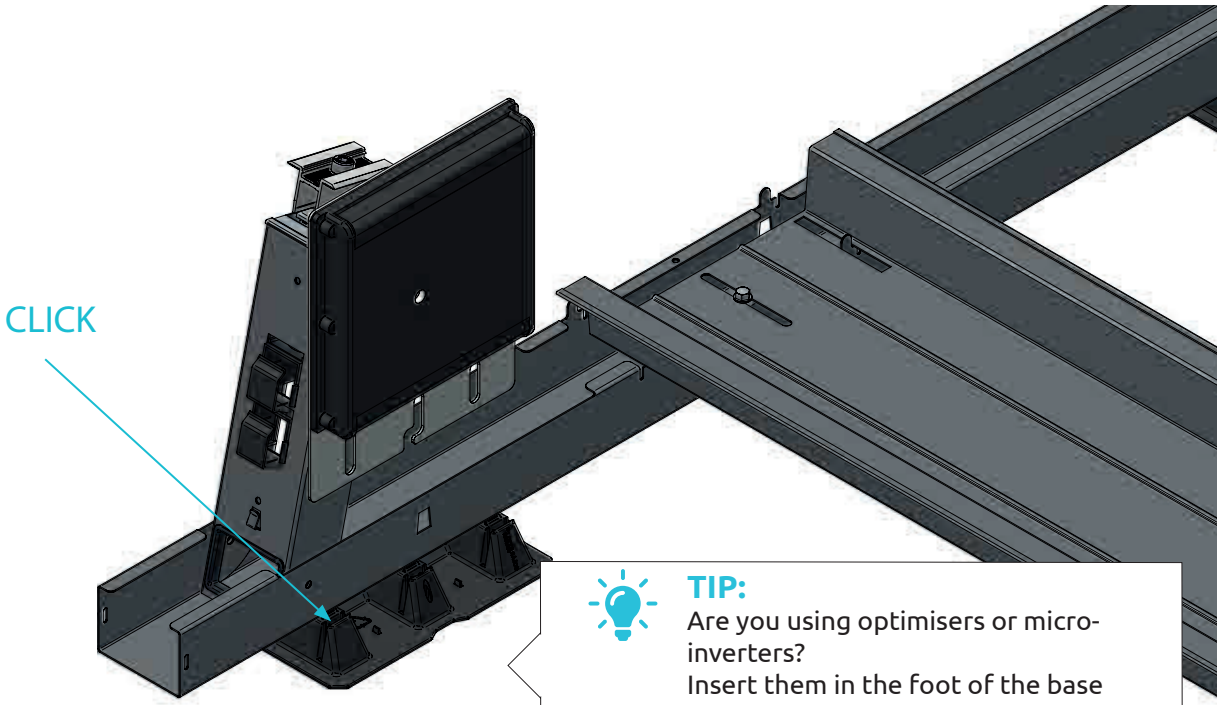
Feed the string cable through the uppermost lug of the cable guide on the interior of the upright. The return cable can then easily be routed outside via the cable guide on the front. The cable gutter provides insulated space for the rest of the cables.

TIP:
Are you using optimisers or micro-inverters? Insert them in the foot of the base element and slide them until they click into place.



The cable clip comes pre-mounted.





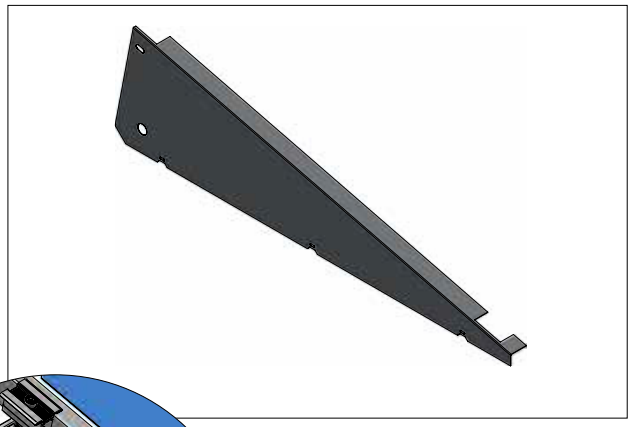
TIP:
Are you using optimisers or micro-inverters?
Insert them in the foot of the base element and slide them until they click into place.

OPTIONS

SIDE PANELS

Side panels are optional. If you are using them, click them in place at the bottom of the base element and use one screw to fix them into the mounting point in the upright.

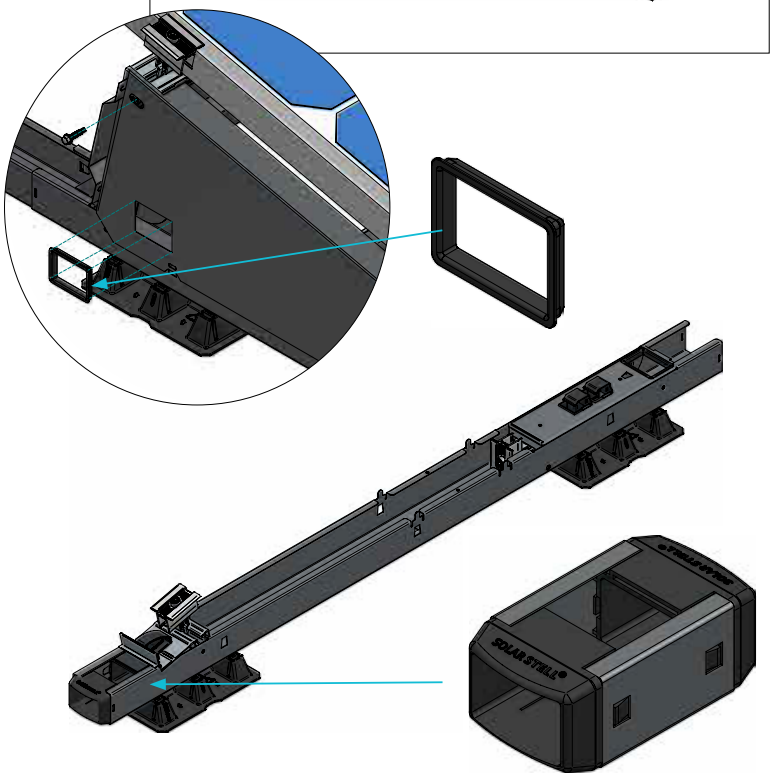
Article no. Description
500130 Side panel left
500131 Side panel right
500140 Side panel portrait left
500141 Side panel portrait right



GROMMET

Grommets are available for side panels and base elements. They are used to guide the cables while preventing damage or breaks.

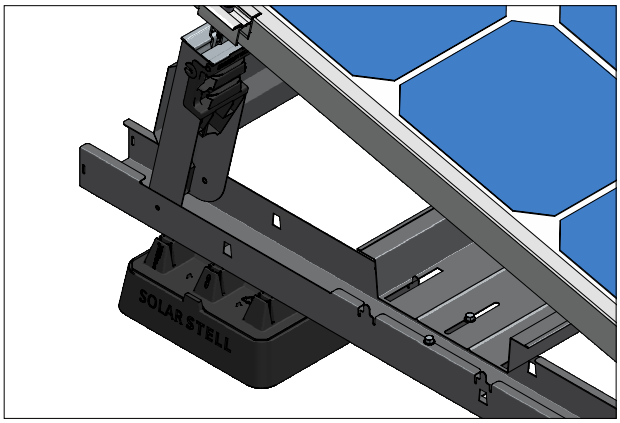
Article no. Description
500820 Grommet side panel
500830 Grommet base elements

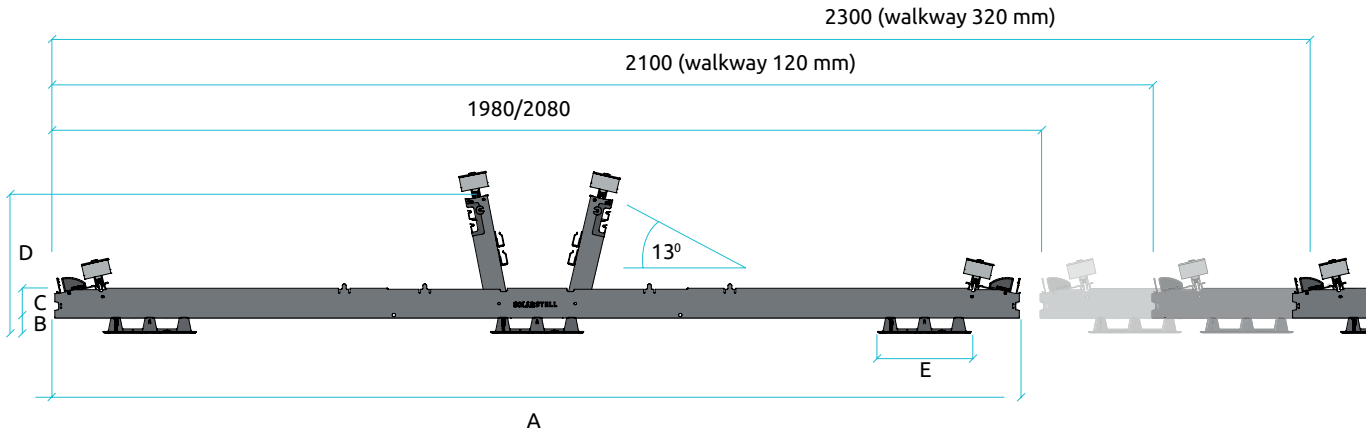


ELEVATION BLOCK

Are you working on a gravel roof or is there another reason you want your mounting system higher? If so, use our elevation blocks. They fit precisely under the feet of the base element.

Article no. Description
500810 Elevation block





Panel size min–max				
Cells	**Length**	**Width**		**Thickness**
		(art. 500150)	(art. 500155)	
60 landscape	1580–179	Up to 1055	Up to 1055	32-45
72 landscape	1987–2080	Up to 1055	Up to 1055	32-45

Dimensions of base elements			
A	1960 or 2060 m	D	305 mm
B	32 mm	E	140 mm
C	68 mm		

	Base element 1980 for panels up to 1005 mm (art. 500150)		**Base element 2080** for panels up to 1055 mm (art. 500155)	
Coupler	**Centre to centre**	**Spacing**	**Centre to centre**	**Spacing**
East-west (art. 500050	1980	20	2080	20
1320 (art. 500013)	2100	120	2200	120
2300 (art. 500060)	2300	320	2400	320

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