Sunbeam Luna

Installation manual

Tiled roof
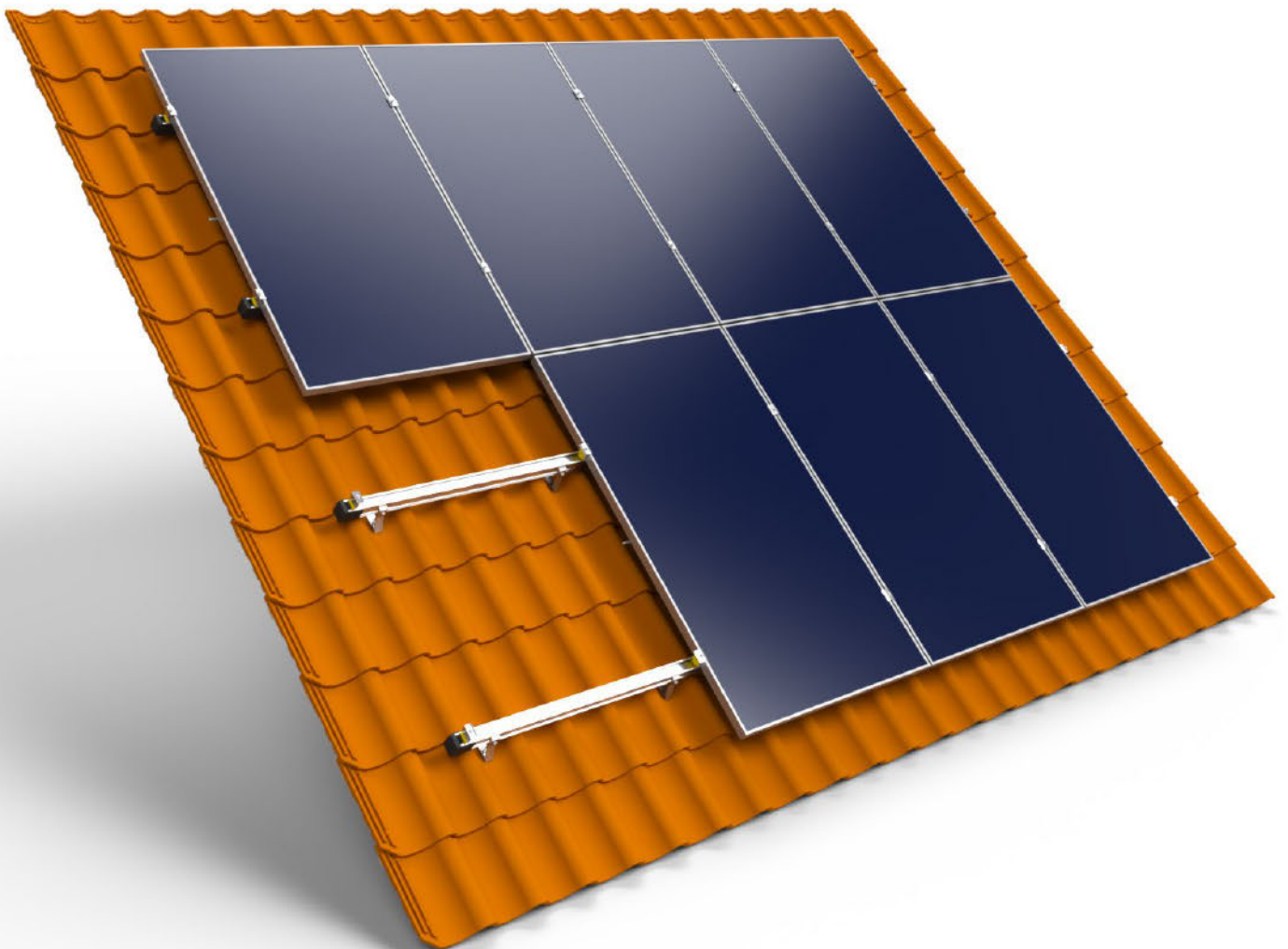
Sunbeam SOLAR MOUNTING

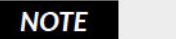supporting sustainability

General

Description of the user

This document is intended for the installer. Sunbeam Luna should only be installed by a trained installer who has fully read and understood the contents of this manual.

Intended use and reasonably foreseeable misuse

This type of Sunbeam Luna is suitable for the installation of solar panels on all tiled roofs. Sunbeam Luna must only be used according to the instructions in this document. Sunbeam Luna must only be used with the original accessories and components supplied by the supplier. Any other use is considered improper use and may lead to injury, damage to the system and void the warranty.

Symbols used

Symbol	Meaning
⚠ WARNING	This symbol indicates a hazardous situation which, if not avoided, could result in serious injury or death.
NOTICE	This symbol indicates situations not related to personal injury.
NOTE	This symbol indicates useful additional information.

Safety equipment

Always wear personal safety equipment and fall protection while installing Sunbeam Luna.

Safety instructions

⚠ WARNING

- Always follow the national safety regulations in the country of installation.
- Always use fall protection while installing the system.
- Preferably carry out system installation with at least two trained installers.
- Always ensure that the roof is clean and free of obstacles during installation of the system.
- Do not install the system in high winds or when the roof is wet.
- Always ensure that the AWP or scaffold is on a firm and stable surface.

- Always check:
  - the condition of the tiles;
  - the condition of the tile battens;
  - the fastening of the tile battens.
- Always wear personal protective equipment while installing the system.
- Always use the configuration plan derived from the Sunbeam Calculator software during installation.

NOTICE

- Use only original parts or fittings recommended and sold by Sunbeam.

Components
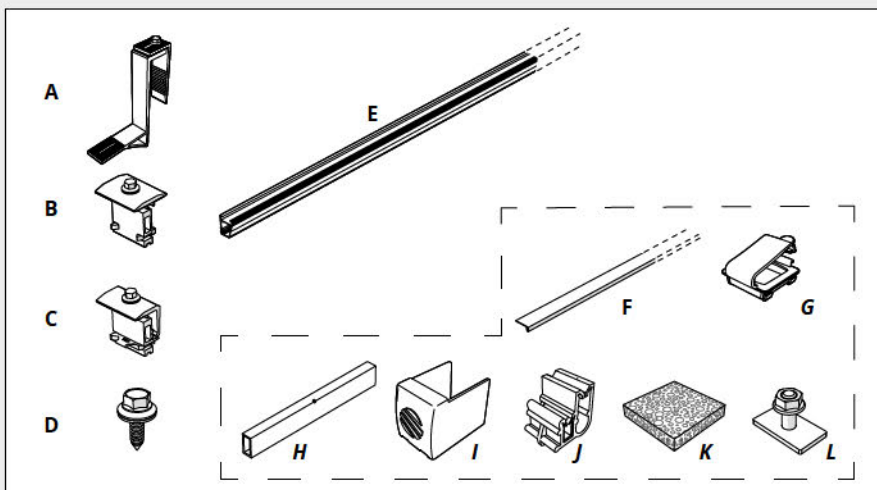
A   Roof hook
B   Mid clamp
C   End clamp
D   Mounting rail screw
E   Mounting Rail
F   LunaLiner
G   Cable clip
H   Coupler
I   End cap
J   Miniclip
K   Self-adhesive EPDM
L   Fastener set

Preparation

Recommended tools

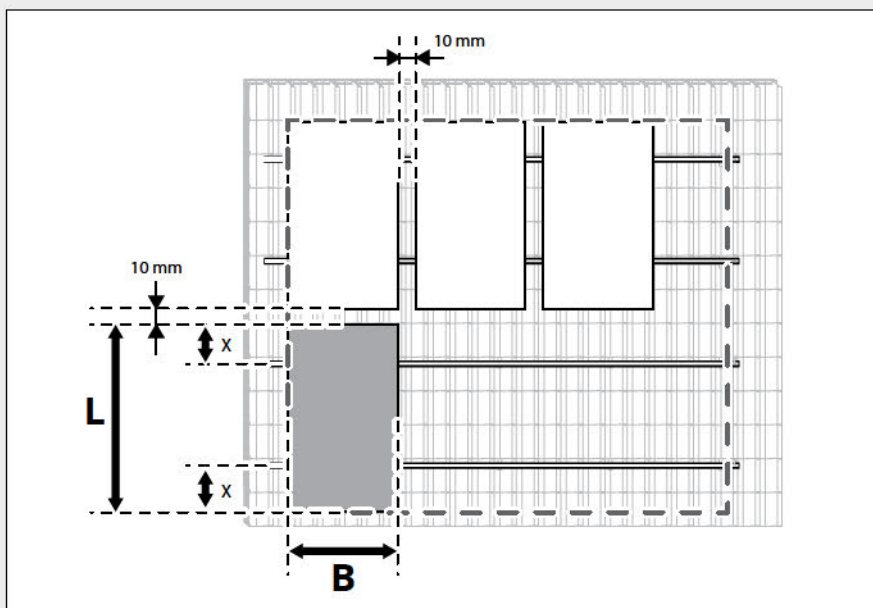| Electric screwdriver	Socket bit 3/8"	Chalk	Tape measure	13 mm open-ended spanner

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Marking the installation area

1. Mark the outer contours of the field.

2. Mark the positions of the roof hooks and Mounting Rail. Consult the panel installation manual for this. When using the LunaLiner, the spacing is 10 mm.

NOTE The mounting rails protrude from the panel field by 5 cm.

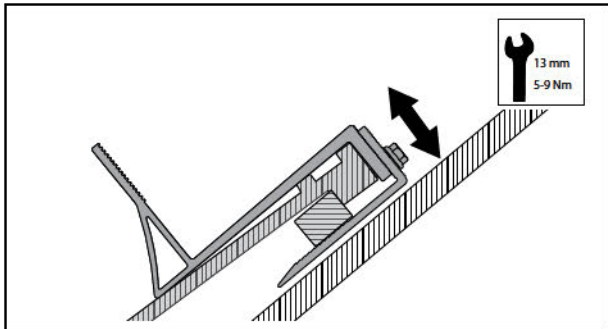**NOTE** Always stay 30 cm away from the edges of the roof.

Tiled roof
system installation

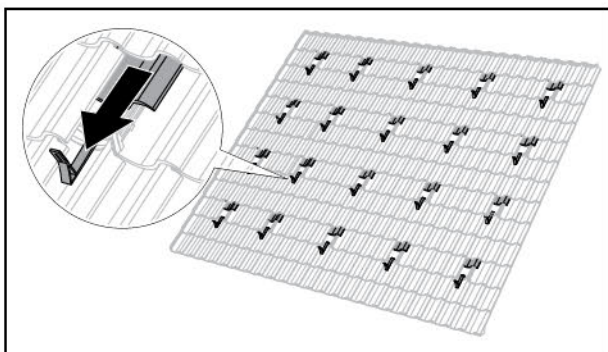### Mounting the roof hooks
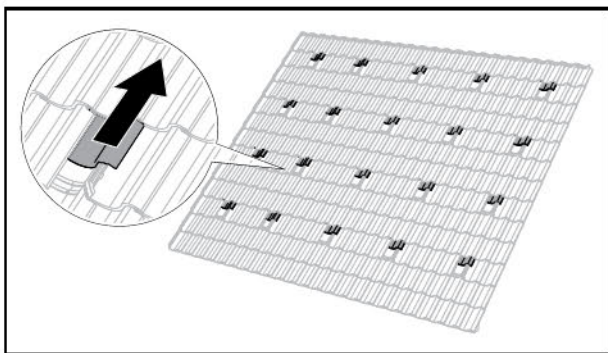
1. Slide up or remove the top tile, where the roof hook will be placed.

NOTE Sunbeam recommends cutting in the water barrier of the roof tiles for a better seal.
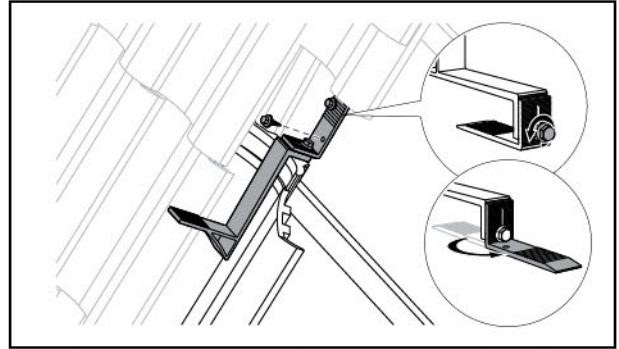

13 mm
5-9 Nm

2. Set the roof hook to the correct height.

NOTE You can optionally place the self-adhesive EPDM under the roof hook to achieve a tight connection to the roof tile.


3. Hook in the roof hooks at the positions where the roof tiles have been slid up.
4. Then slide the roof tile back down again.

If you choose to screw in the hook, the bottom piece should be flipped around. Use stainless steel screws with a thickness of at least 5.5 cm that are screwed into sufficiently strong wood.

NOTICE Never stand on a single roof hook!

Placing the mounting rails

3/8"
5-9 Nm

7 – 25 cm
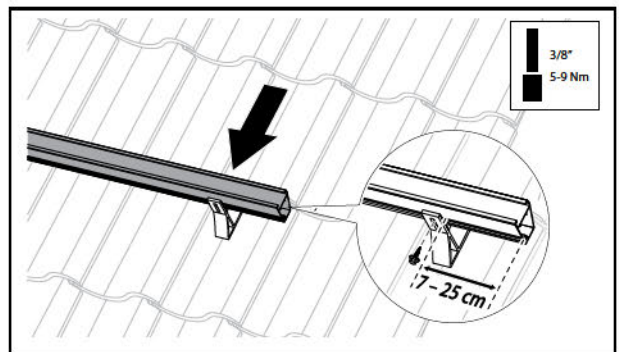
5. Place the mounting rail against the roof hook and set the roof hook to the correct height.
6. Secure the mounting rail with a mounting screw.
7. Repeat steps 5 and 6 to install the remaining mounting rails.
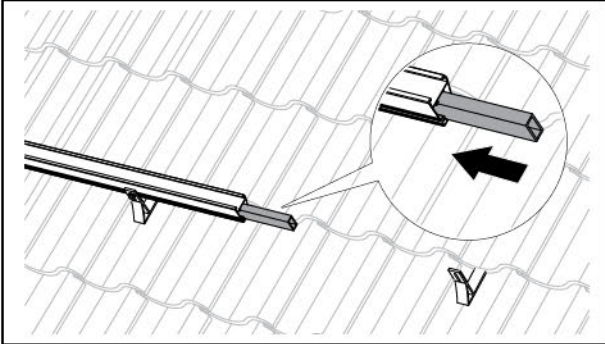
NOTE Allow the mounting rail to extend a minimum of 7 cm and a maximum of 25 cm beyond the roof hook.
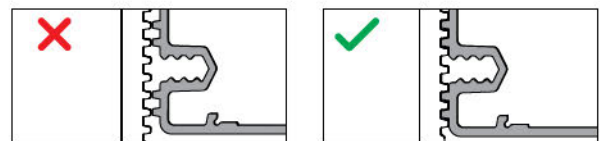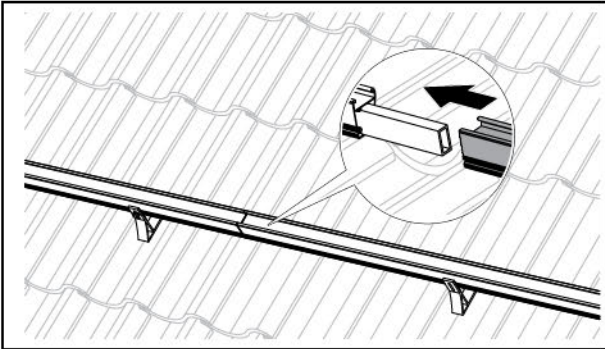

NOTICE Press the mounting rail firmly into the toothing of the mounting rail before you fasten it with the screw.

Extending the mounting rails (optional)

NOTE In some cases, the field may be larger than the mounting rails. This means the mounting rail must be extended.
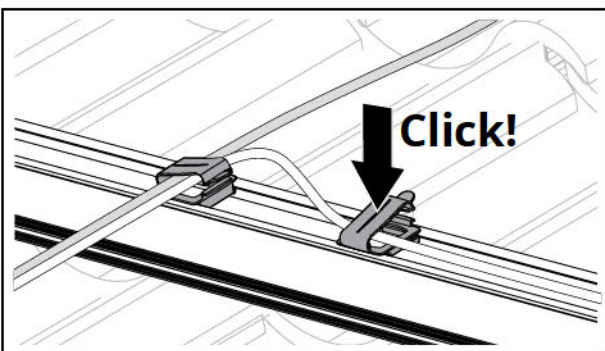

1. Slide the coupler into the mounting rails.

2. Slide the other mounting rail over the coupler. Slide the mounting rails fully against each other.
3. Use a mounting screw in both mounting rails to tighten the coupler in place.

Preparing to place the panels

1. Place a cable clip at the desired positions.
2. Place the return cable of the solar power system into the cable clips.
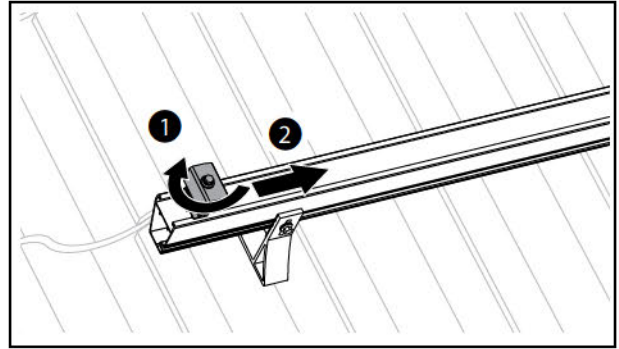
3. Place an end clamp into the end of each mounting rail, near the marked outer contours of the field.

NOTE All the clamps in the Luna system are inserted clockwise into the mounting rail and removed counter-clockwise.

NOTE Optional: install optimizers or micro-inverters with the fastener set.
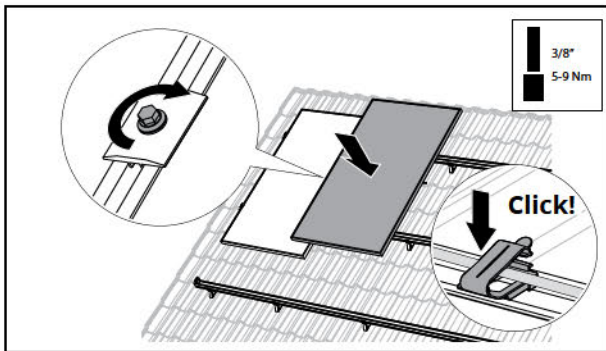
Placing the panels
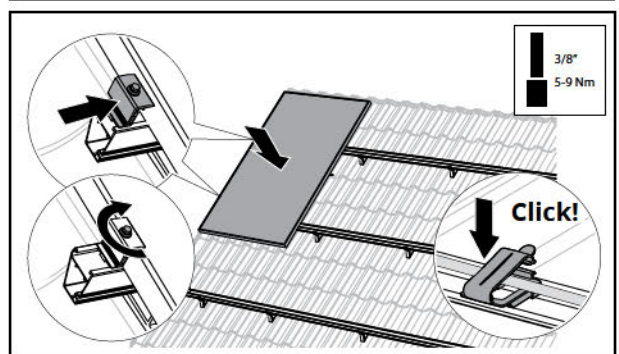
1. Position the panel against the two end clamps at the corner of the field.
2. Place the panel cable in the cable clip and push the cable clip to close it.
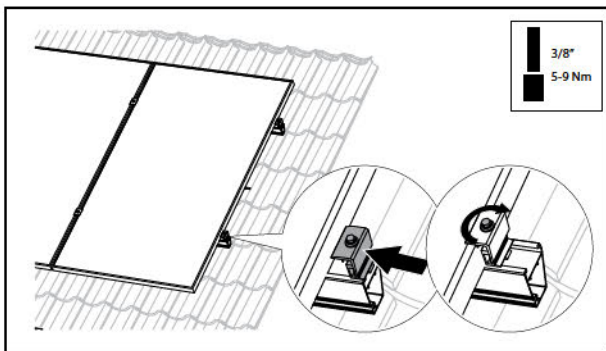3. Tighten the screws of the two end clamps.
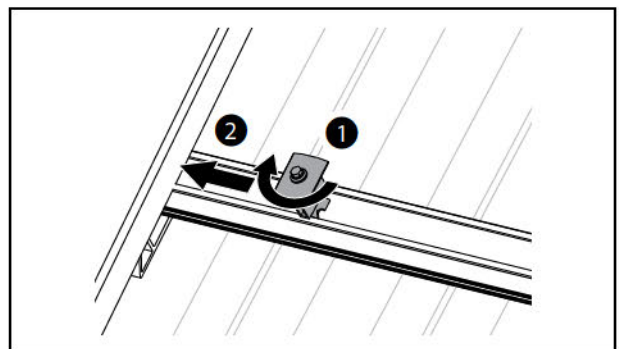
4. Insert a mid clamp into the mounting rail and slide it against the first panel.

Tiled roof
system installation

3/8"
5-9 Nm

Click!

5. Position the next panel against the two mid clamps.
6. Connect the panel cable to the panel cable of the previous row.
7. Place the panel cable into the cable clip and push it closed or use a miniclip.
8. Align the height of the panel with the first panel.
9. Tighten the two screws of the mid clamps.
10. Repeat steps 4 to 9 until the first row is finished.


3/8"
5-9 Nm

11. Finally, attach the two end clamps and slide them against the panel. Tighten the screws.
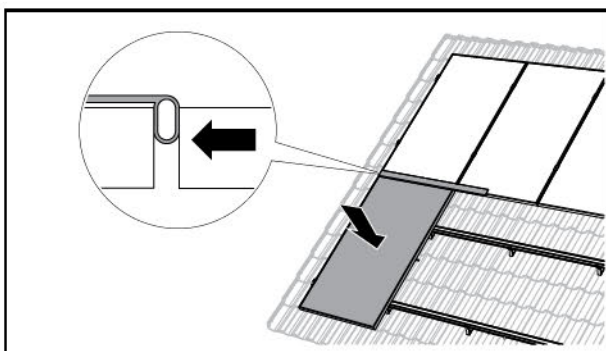
12. Place the LunaLiner on the lower edge of the first panel.

13. Place the next panel against the LunaLiner to determine the distance.
14. Connect the panel cables and attach them in a cable clip or miniclip.
15. Align the panel with the top panel and mount the end caps.
16. Place the rest of the panels in the row like steps 4 to 11.
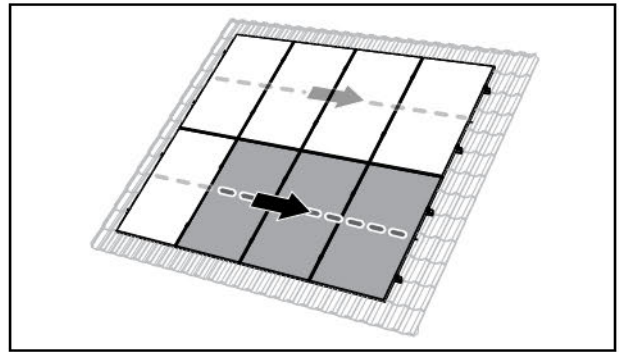
17. Repeat steps 12 to 16 to place the rest of the panels.
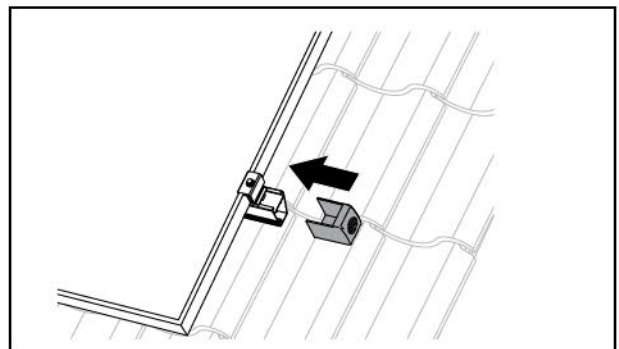
18. Slide the end caps over the mounting rails.

Safety standards

The national regulations in the country of installation must be observed at all times. Make sure you are aware of the safety measures prescribed by Sunbeam or the country of installation. If in doubt, consult your safety officer. Ensure safety or health hazards are shared with the employer, supervisor and employee carrying out the work for their information.

General safety

- For the Netherlands: Working Conditions Decree Articles 3.16, 7.23 and 8.1 to 8.3.
- For Belgium: General Regulations for Occupational Health and Safety (ARAB).

Electrical installation

- For the Netherlands:
  - NEN1010 - Chapter 7.12
  - NPR 5310 - Chapter 7.12
  - NEN 3140
- For Belgium: General Regulations on Electrical Installations (AREI).

Roof construction and various loads

- General:
  - EN 1990
  - EN 1991-1-3
  - EN 1991-1-4
- For the Netherlands: NEN 7250

Sustainability

As a manufacturer and supplier of panel mounting systems, we are committed to protecting the environment. In the event of a faulty system, please contact Sunbeam first. It may still be possible to repair the system.

Should you need to dispose the system, please dispose of the system according to the local applicable regulations. By properly disposing of the various materials, you will help prevent potential hazards to the environment and human health. The recycling of materials also contributes to the conservation of natural resources.

Warranty

Please refer to **www.sunbeam.solar/en** for warranty conditions.