Installation manual

Fibre cement



 $February\ 2023\ |\ Version\ 1.0\ |\ This\ is\ the\ English\ translation\ of\ the\ original\ Dutch\ installation\ manual$



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 installation on all pitched roofs featuring fibre cement and bitumen corrugated sheets. 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.
COMMENT	This symbol indicates useful additional information.

Safety equipment

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

Safety instructions

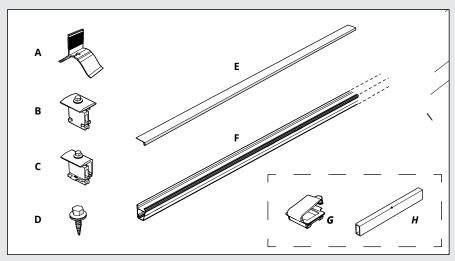
AWARNING

- 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 free of obstacles and clean 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 ladder is on a firm and stable surface.
- Some roofs are not strong enough to support the system. Always check the condition and strength of the roof before installing the system.
- 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.
- Never walk over the system or solar panels.

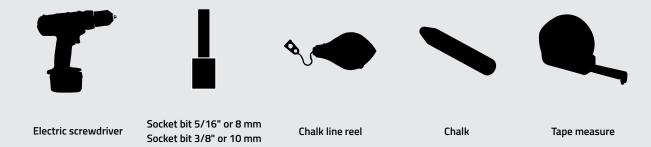
Components



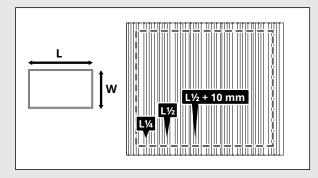
- A Corrugated sheet adapter
- B Mid clamp
- C End clamp
- D Self-drilling screw
- E LunaLiner
- F Mounting profile
- G Cable clip
- H Coupling

Preparation

Recommended tools



Marking the installation area



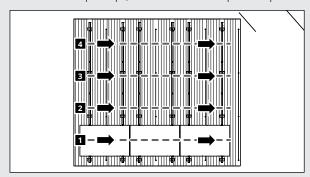
- 1. Using a tension line or chalk line, mark the outer contours of the field.
- 2. Mark the positions of the panel clamps. Consult the panel installation manual for this. When using the LunaLiner, the spacing is 10 mm.



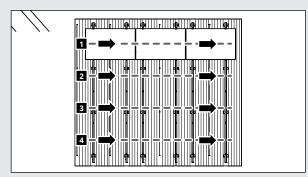
The mounting profiles protrude by 5 cm.

Laying method

This user manual shows the panels being placed using the bottom-to-top method. If roofs have a steeper slope, it is recommended to place the panels using the top-to-bottom method.



Bottom-to-top method

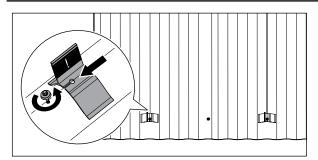


Top-to-bottom method

Fibre Cement

system installation

Installing the mounting profiles

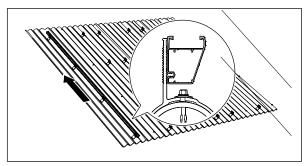


- Slightly loosen the screw that is being used to assemble the roof sheet.
- 2. Slide the indentation in the sheet adapter under the screw.
- 3. Tighten the screw.
- 4. Repeat steps 1 to 3 to install the other sheet adapters.

COMMENT

Make sure that the profile is supported

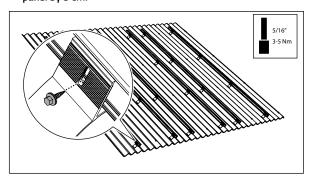
by an adapter on each purlin. The maximum distance between two adapters is 150 cm. $\,$



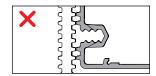
5. Position the profile against the adapters. Make sure that the profile does not protrude from the adapter by more than 30 cm.

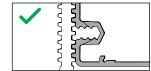
COMMENT

- Ensure that the top side of the profiles is in the same section. Do this using the configuration possibilities of the sheet adapter.
- Make sure that the profile always protrudes from under the panel by 5 cm.



- 6. Use the self-drilling screw to tighten the mounting profile in place.
- 7. Repeat steps 5 and 6 to install the other mounting profiles.







Make sure that the teeth of the profile

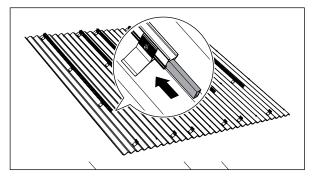
engage with the adapter.

Extending mounting profiles (optional)

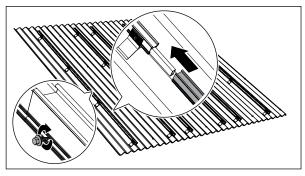
COMMENT

In some cases, the field may be larger

than the mounting profile. This means the mounting profile must be extended.



1. Slide the coupling into the mounting profile.



- 2. Slide the other mounting profile over the coupling. Slide the mounting profiles completely against each other.
- Use a self-drilling screw in both mounting profiles to tighten the coupling in place.

If the field is higher than 11 metres, a dilatation (partition) must be implemented.

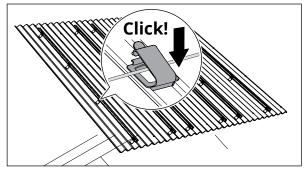
- 1. Place the coupling in the mounting profile.
- Use a self-drilling screw to tighten one side of the coupling in place.
- 3. Slide the other mounting profile over the coupling. Maintain a distance of 2 cm.
- Place the panels at a distance of minimum 10 cm from each other. Fasten both ends in place using an end clamp. Make sure that each end clamp is fastened to its own profile.

COMMENT

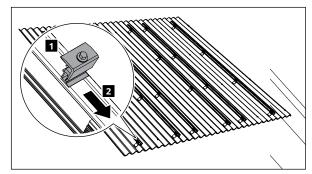
Do not place any panels over the

dilatation.

Preparing to place the panels



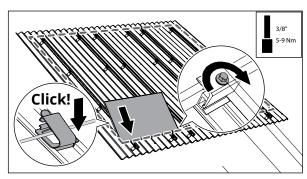
- 1. Place a cable clip at each desired position.
- 2. Place the return cable of the solar power system into in the cable clips.



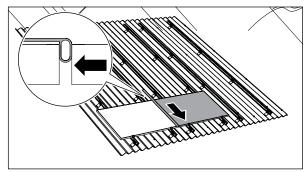
Place an end clamp into the end of each mounting profile, near the marked outer contours of the field.

COMMENTAll clamps in the Luna system are inserted clockwise into the mounting profile and removed counterclockwise.

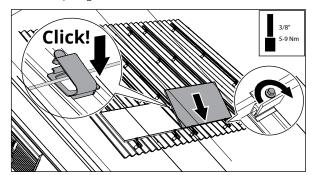
Placing the panels



- 1. Position the panel against the two end clamps at the corner of
- 2. Place the panel cable in the cable clip and push the cable clip to close it.
- 3. Lower the panel. Align the panel with the field contour.
- 4. Tighten the screws of the two end clamps.
- 5. Place the LunaLiner on the first panel.

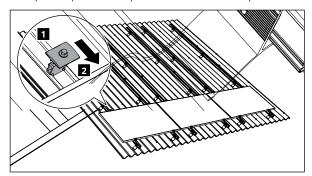


6. Lower the next panel and slide the panel against the LunaLiner to set the spacing.

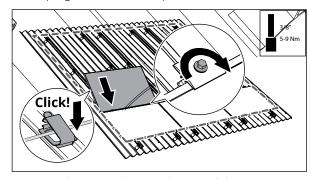


- Position the panel against the next two end clamps.
- 8. Connect the panel cables to the previous panel. Place the panel cable in the cable clip and push the cable clip to close it.

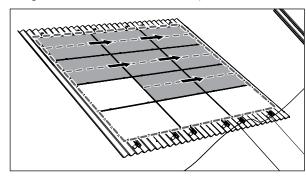
- 9. Tighten the screws of the two end clamps.
- 10. Place the LunaLiner on the recently placed panel.
- 11. Repeat steps 6 to 10 to place the first row of solar panels.



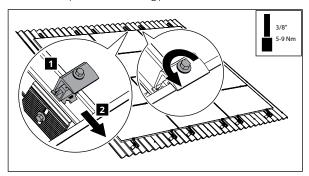
12. Place a mid clamp in the mounting profiles, and slide the mid clamps against the first row of panels.



- 13. Position the next panel against the two mid clamps.
- 14. Connect the panel cable to the panel cable of the previous row. Place the panel cable in the cable clip and push the cable clip to close it.
- 15. Lower the panel. Align the panel with the field contour.
- 16. Tighten the screws of the two mid clamps.



17. Align the next panel with the LunaLiner and repeat steps 12 to 17 in order to place the remaining panels.



18. Place an end clamp into the end of each mounting profile, and slide the end clamps against the last row of installed panels. Tighten the screws of the end clamps.

Sunbeam Luna

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Installation manual

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 executive worker 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.

The Sunbeam designs are protected by several international patents.

^{&#}x27;Sunbeam' is a registered trademark.