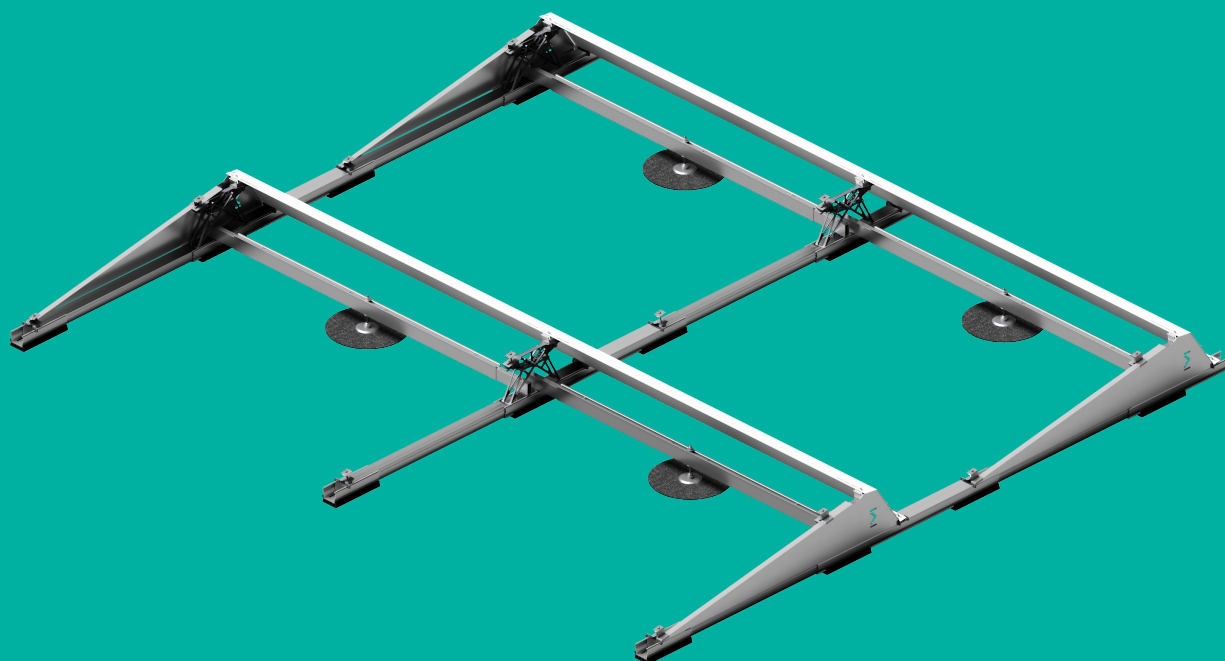


# SolarFix Installation Manual



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# 1. Introduction

## 1.1. Short Description

The Solarfix Low support is designed for the secure attachment of solar panels to different types of floors. This manual will guide you through the entire installation process, from preparation to final installation. The use of special screws ensures a secure fixation and protects the solar panels from wind and weather conditions.

## 1.2. On this instructions

This manual is intended for installers and professionals who will be mounting the Solarfix Low support on different floors. It contains detailed instructions for every step of the installation process.

## 1.3. Warning notices

The warning notices used in this Installation Manual indicate safety-relevant information. They include:

- warning symbol (pictogram)
- signal word indicating the hazard level
- information on the type and source of hazard
- information on possible consequences if hazards are disregarded
- measures to be taken in order to prevent
- hazards and avoid injuries or damage

Always wear appropriate protective equipment, including gloves and safety glasses.

The signal words of the warning notices indicate the following hazard levels:



### **DANGER!**

Only use the recommended screws and tools to ensure the structural integrity of the installation.



### **CAUTION!**

Improper installation may result in damage to the solar panels or the building.

## 1.4. Safety

The safety notices used in this Installation Manual indicate safety-relevant information.

- Always wear protective gloves and safety glasses during installation.
- Ensure that the work area is free of obstacles and that all electrical connections are properly insulated..
- Handle heavy parts properly to avoid injury.

# 2. Important assembly notes

## 2.1 Preparation

Proper preparation is key to a successful installation. Follow these steps to ensure everything is ready for the assembly process:

- Inspect each part for any visible damage or defects. If any parts are damaged, contact the supplier for replacements before proceeding.
- Organize all components in the order of their use. This will streamline the installation process and prevent confusion during assembly.
- Ensure the work area is clear of any debris, obstacles, or unnecessary materials. This reduces the risk of accidents and allows for a smoother workflow.

## 2.2 Assembly Aid and Required Tools

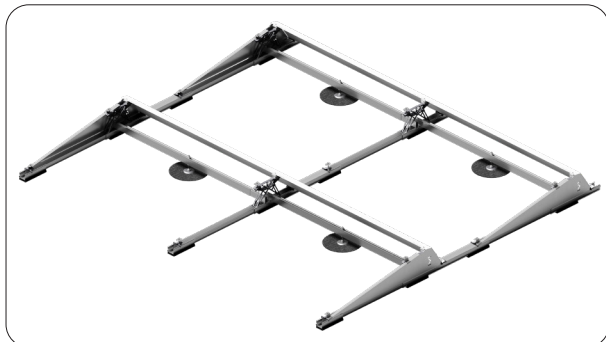
To ensure a smooth and efficient assembly process, the following tools and aids are required:

- Wrench SW15
- Wrench SW17
- Cordless screwdriver
- Attachment for cordless screwdriver SW8
- Heating torch
- PVC welding gun (welding machine)
- Torque spanner
- Socket spanner SW 17
- Press-on roller

### 3. Technical description

The Solarfix Low system is a comprehensive solution that includes all necessary components for the secure mounting of solar subconstructions on different roofs.

#### 3.1 System configurations



Solarfix configuration



Solarfix hybrid configuration

#### 3.2 System overview

##### Base Unit

The primary support structure that anchors the solar panels to different floors. This base is designed to be both lightweight and strong, allowing for easy handling during installation while providing a stable platform for the panels.

##### Special Screws

The system includes specially designed screws that penetrate the wooden floor to the precise depth required for maximum holding power. These screws are made from stainless steel to prevent rust and corrosion.

##### SolarFix Anchoring Set

The SolarFix anchoring set will be used on concrete roofs.

##### SolarFix M10 Bolt Set

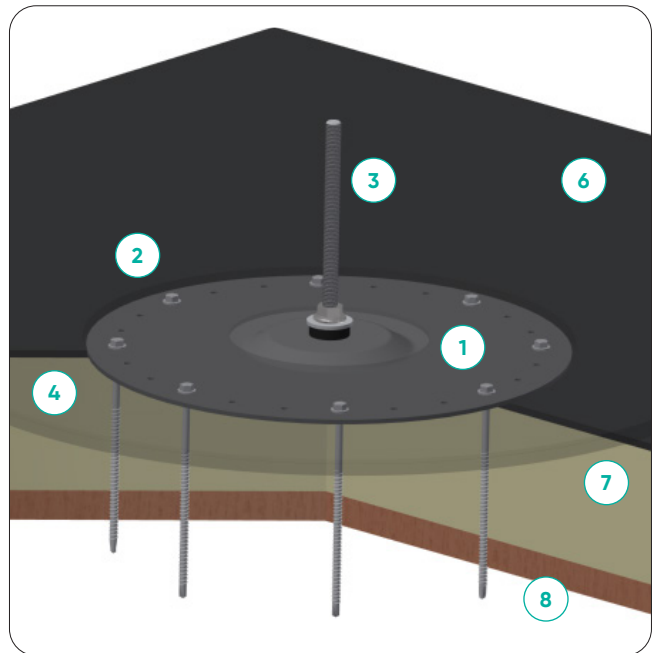
High-strength M10 nuts and washers are used to secure the solar panels to the base unit. The washers help distribute the load and prevent the nuts from loosening over time.

##### Rosettes

Large rosettes with specified outer and inner dimensions are included to ensure that the solar panels are mounted securely and uniformly across the wooden surface.

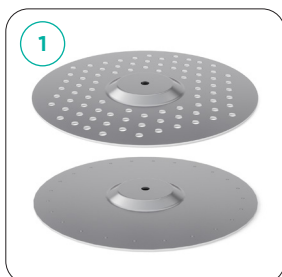
### 3.3 Basic information about the system

- 1 SolarFix 12mm
- 2 SolarFix screws
- 3 M10 Bolt/ Anchoring Set
- 4 Bitume/ PVC rosette
- 5 Bitume cover
- 6 Bitume/EPDM membranes
- 7 Insulation
- 8 Roof base



### 3.4 Components

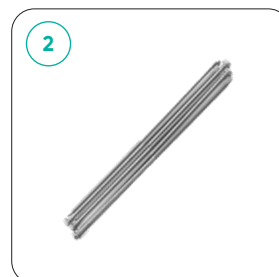
All mechanical fastening parts of the SolarFix that may be included in the scope of delivery are listed below. The exact scope of delivery and the number of individual frame parts depend on your order.



Solarfix Low Base Unit



Solarfix pvc coated



Special Screws



M10 Bolt/ Anchoring Set



Rosettes, bitume



Rosettes, pvc



Cover, bitume

## 4. Installation

### 4.1 Pre-assembling SolarFix low base unit

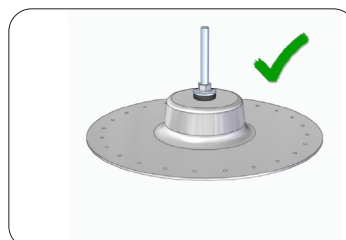
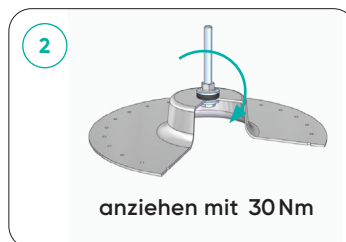
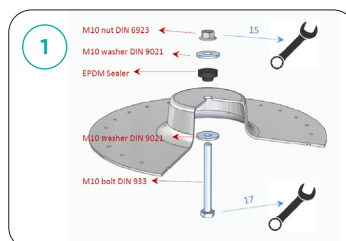
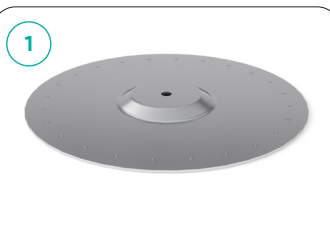
Assembly steps:

- 1 Preassemble the SolarFix low base unit with the SolarFix M10 bolt set according to the illustration.
- 2 The nut has to be tightened with a force of 30Nm.



#### ATTENTION!

Any loose dirt must be removed from the area where Solarfix is to be applied.

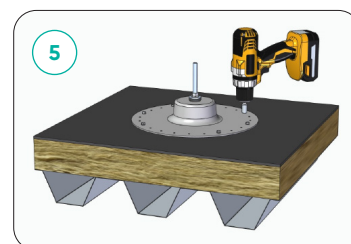
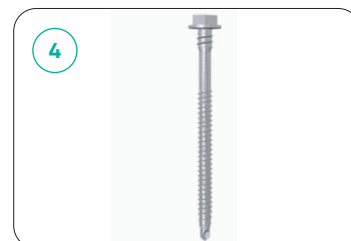
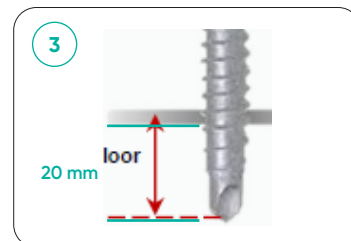
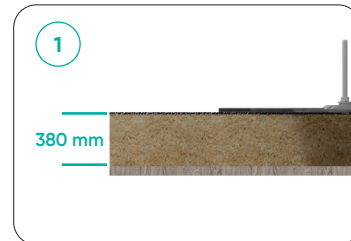


## 4.2 SolarFix on wooden roofs

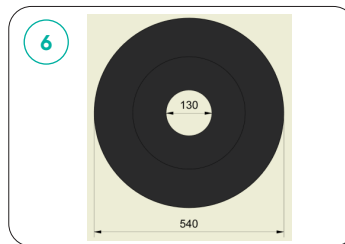
Solarfix fixation on wooden roofs with 8 special screws.

### Assembly steps:

- 1 Ensure insulation height (X) does not exceed 380 mm
- 2 Ensure the wooden floor, including underlayment or OSB, is at least 18 mm thick for secure fastening and to avoid damage.
- 3 Recommended excess length through the floor 20mm
- 4 Select the length according to these specifications.  
4.8 mm screws for sizes from 18-300 mm  
6.8 mm screws for sizes from 300-400 mm
- 5 Use 8 screws to fasten the Solarfix to the base plate/OSB, taking care not to overtighten the screws when tightening.

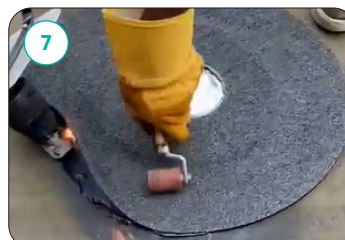
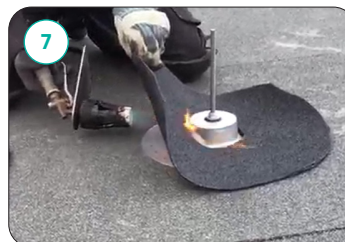
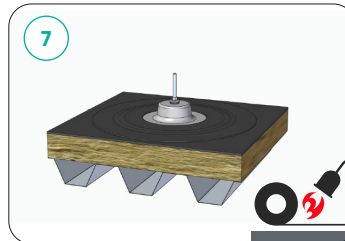


- 6 Recommended rosette dimensions:  
540 mm outer circle  
130 mm inner circle



- 7 The rosette is heated from the centre to the outer edge. The molten bitumen mass should be pressed outwards using a pressure roller.

Ensure that the bitumen compound also emerges from the inner ring of the rosette, filling any gaps.



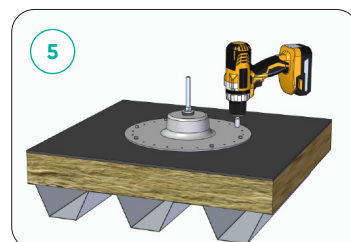
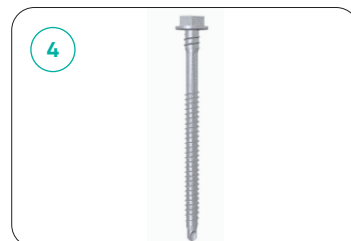
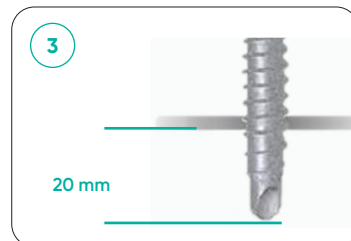
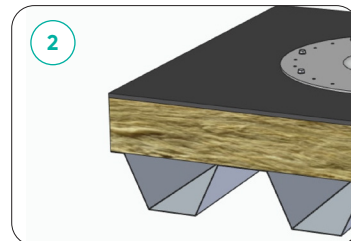
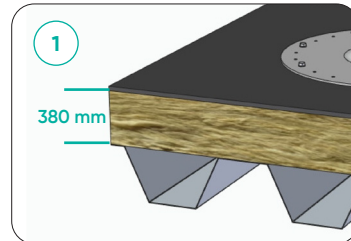


### 4.3 SolarFix on metal roofs

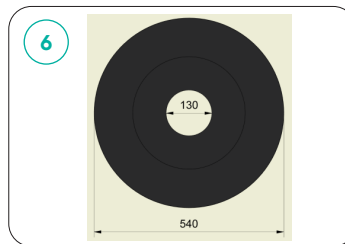
Solarfix fixation on metal roofs with 6 special screws.

#### Assembly steps:

- 1 Ensure insulation height does not exceed 380 mm
- 2 Sheet steel requirements:  
0.75 mm – 2.5 mm thickness  
max. 2.5 mm for double sheets
- 3 Recommended excess length through the floor 20mm
- 4 Select the length according to these specifications.  
4.8 mm screws for sizes from 18–300 mm  
6.8 mm screws for sizes from 300–400 mm
- 5 Use 6 screws to fasten the Solarfix to the trapezoidal sheet. When tightening, ensure that the screws are not overtightened. The appropriate tightening torque depends on the thickness and material of the trapezoidal sheet.

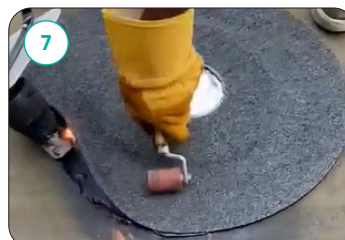
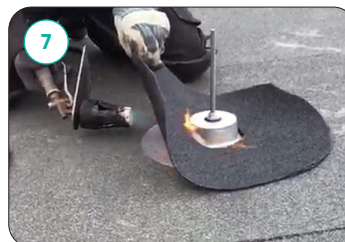
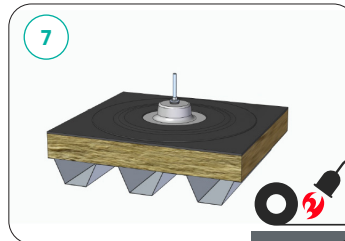


- 6 Recommended rosette dimensions:  
540 mm outer circle  
130 mm inner circle



- 7 The rosette is heated from the centre to the outer edge. The molten bitumen mass should be pressed outwards using a pressure roller.

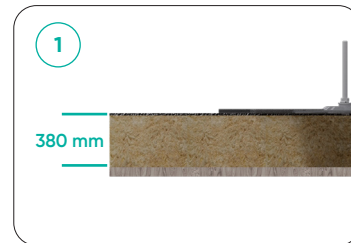
Ensure that the bitumen compound also emerges from the inner ring of the rosette, filling any gaps.



#### 4.4 SolarFix PVC fixation on roofs with EPDM roofing membranes

##### Assembly steps:

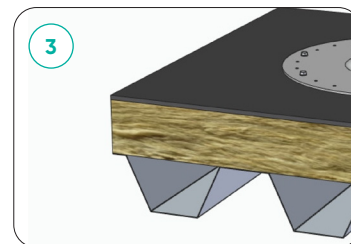
- 1 Ensure insulation height does not exceed 380 mm, for both, wood and sheet steel roofs



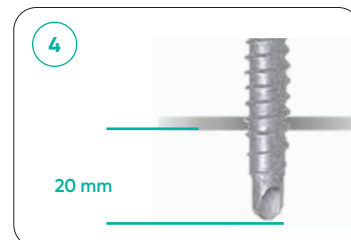
- 2 Ensure the wooden floor, including underlayment or OSB, is at least 18 mm thick for secure fastening and to avoid damage.



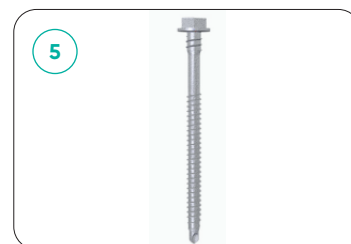
- 3 Sheet steel requirements:  
0.75 mm - 2.5 mm thickness  
max. 2.5 mm for double sheets



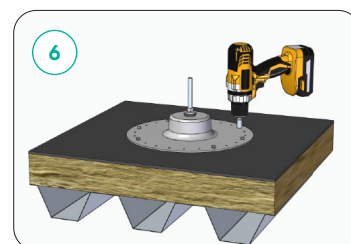
- 4 Recommended excess length through the floor 20mm



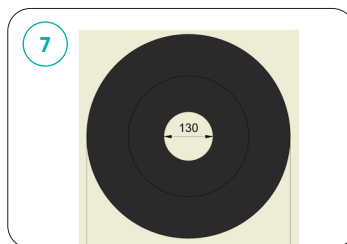
- 5 Select the length according to these specifications.  
4.8 mm screws for sizes from 18-300 mm  
6.8 mm screws for sizes from 300-400 mm



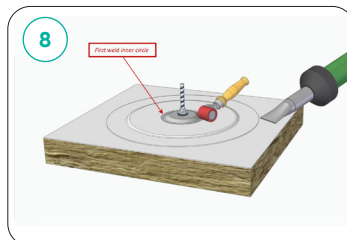
- 6 Use 8 (wood)/6(steel) screws to fasten the Solarfix, taking care not to overtighten the screws when tightening.



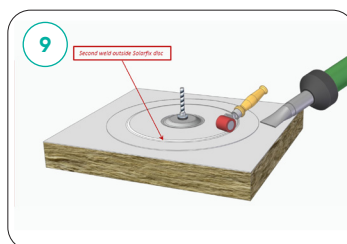
- 7 Recommended rosette dimensions:  
510 mm outer circle  
130 mm inner circle



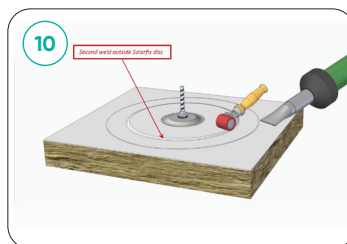
- 8 First weld seam on the inner circle  
Sealing by a competent person who is able to install the PVC rosette in accordance with the PVC manufacturer's instructions



- 9 Second weld seam on the outer circle of the Solarfix disc



- 10 Third weld seam on the outer circle of the rosette



#### 4.5 SolarFix nonfix

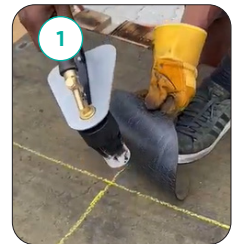
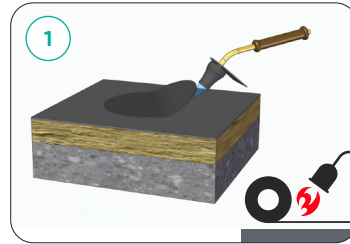
##### Assembly steps:

- 1 Eyecatcher Solarfix bitumen lower layer must be fully welded to the bitumen cover. The molten bitumen mass should be pressed outwards using a pressure roller.

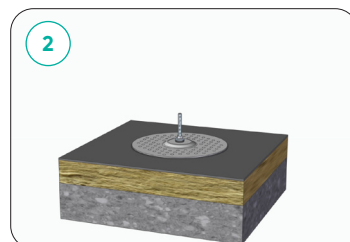
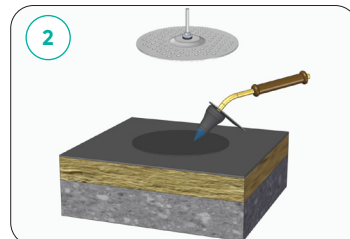


##### ATTENTION!

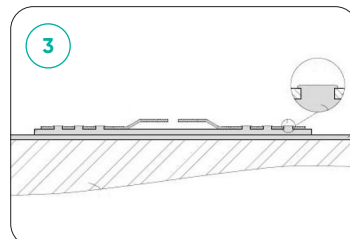
Processing conditions:  
Temperature above -5°C and dry,  
clean surfaces, i.e. no precipitation  
permitted.



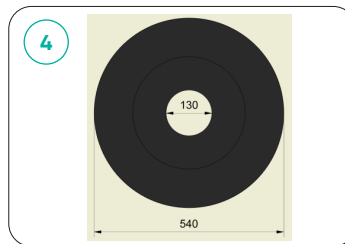
- 2 After heating and melting the bitume, press the SolarFix low base unit down



- 3 Melted bitumen fills the holes.

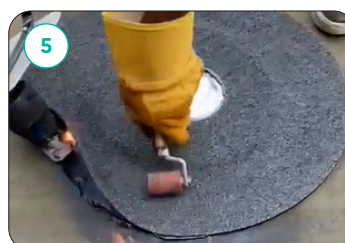
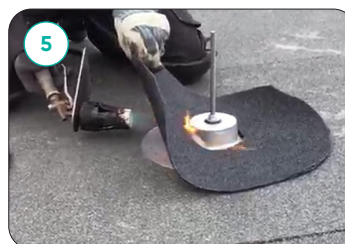
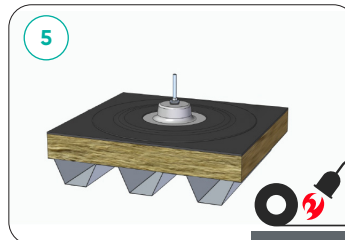


- 4 Recommended rosette dimensions:  
540 mm outer circle  
130 mm inner circle



- 5 The rosette is heated from the centre to the outer edge. The molten bitumen mass should be pressed outwards using a pressure roller.

Ensure that the bitumen compound also emerges from the inner ring of the rosette, filling any gaps.







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