

Conergy SolarSimplex

Professional
installation
instructions



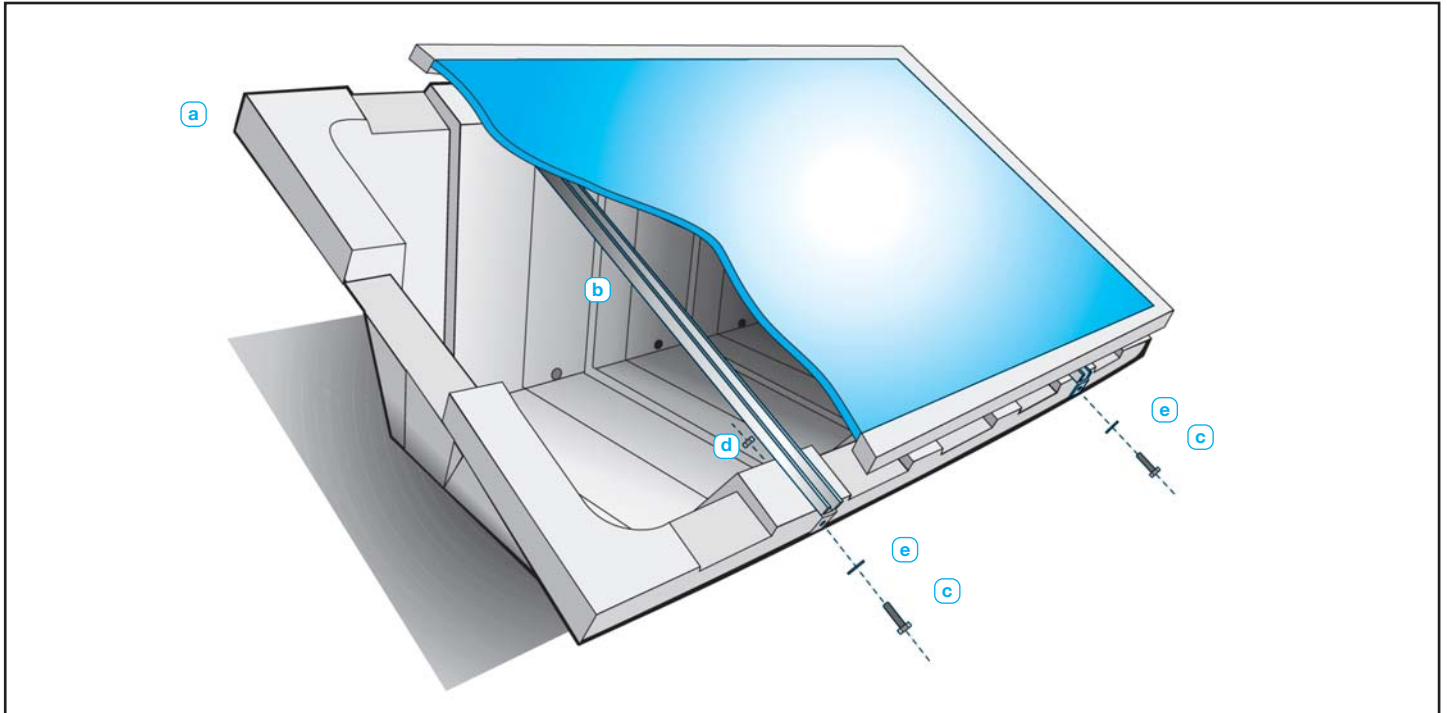
1. PREPARATION FOR FITTING

Thank you

for choosing Conergy SolarSimplex, the universal system for installing PV modules on flat roofs. Before you begin installation, please carefully read through these installation instructions. Please be sure to read the "Important Information" on page 5. Then familiarise yourself with the system components. During installation, especially when working on the roof, please observe the applicable safety at work regulations.

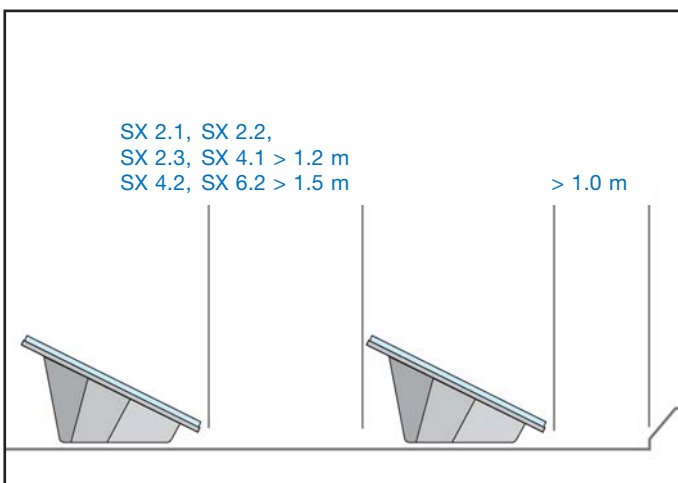
Overview of system components

- (a) Plastic trough
- (b) Conergy aluminium mounting rails with channel section
- (c) Stainless steel hexagonal bolts M6 x 20 mm
- (d) Self-locking stainless steel nuts M6
- (e) Stainless steel washers 18 mm



Overview of required tools

- | Cordless drill
- | 7 mm drill bit
- | 10 mm open-ended or ring spanner

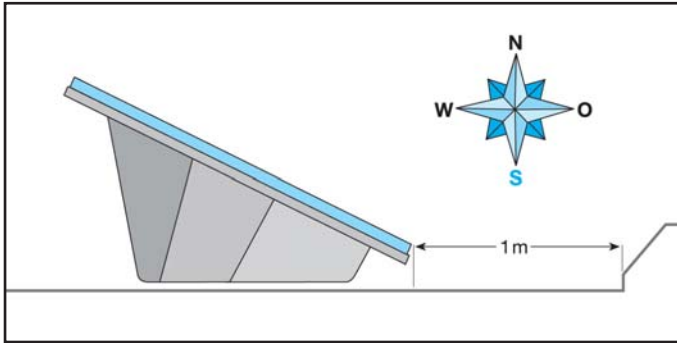


Planning the module area

The distance between the module rows must be greater than 1.2 m for versions SX 2.1, SX 2.2, SX 2.3 and SX 4.1, and greater than 1.5 m for version SX 4.2 and SX 6.2 (for Conergy SolarSimplex versions, see the table on p. 3). The distance from the p system to the roof edge must be more than 1 m.

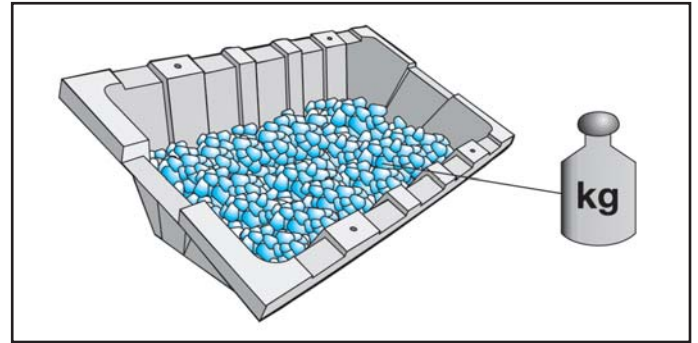
2. INSTALLING CONERGY SOLARSIMPLEX

1.



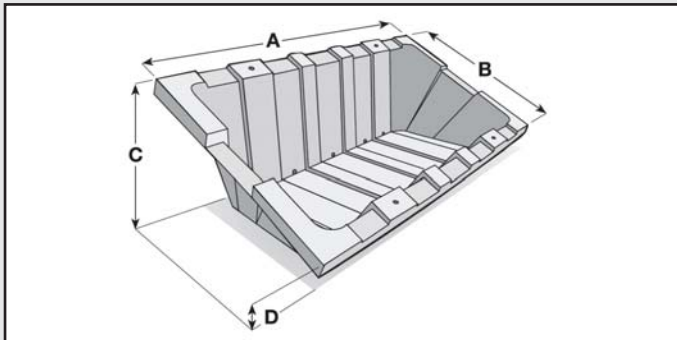
Position the Conergy SolarSimplex with the flat side facing south. Make sure the unit is positioned at least 1 m from the edge of the roof.

2.



Add the required amount of ballast (for guide values, see table). The Conergy SolarSimplex is weighed down with ballast so that it can withstand wind loads. The required ballast weight is dependent on the height of the building, its location and the properties of the surface on which the unit stands. Gravel, stone, slabs or similar are suitable as ballast.

3. Conergy SolarSimplex technical data

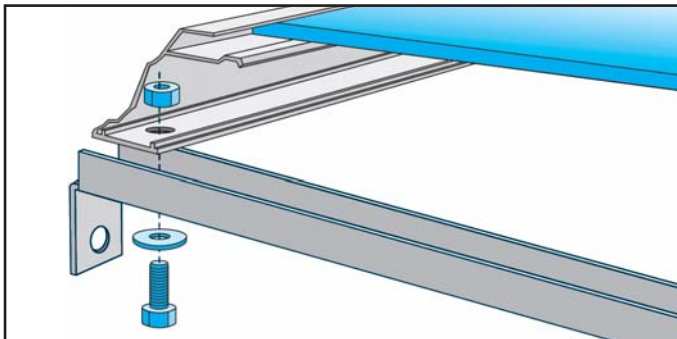


The correct weight will prevent the Conergy SolarSimplex from tipping over. Security against slipping is dependent on the friction coefficient between the roof skin and Conergy SolarSimplex. If you are uncertain about the conditions at the installation site, we recommend that a

Conergy Solar Simplex (SX)	Dimensions (in mm)				necessary ballast ¹	Hole intervals module frame		
	A	B	C	D		without extension set (in mm) min	max	with extension set (in mm) max
SX 2.1	1,350	730	440	100	59 kg	591	711	781
SX 2.2	1,440	670	390	100	55 kg	531	651	721
SX 2.3	1,250	860	480	90	60 kg	721	841	911
SX 4.1	1,600	800	450	85	73 kg	661	781	851
SX 4.2	1,200	1,050	550	80	68 kg	895	1,015	1,085
SX 6.2	1,680	1,570	550	80	98 kg	685	1,015	1,185

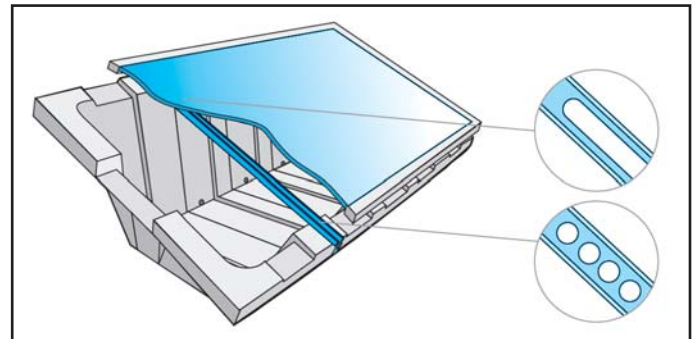
stress calculation be carried out with reference to the standards and regulations applicable at the installation site. **Caution: different values than those shown in the table may apply depending on the location and roof properties. If in doubt, contact a stress analyst.**

4.



Secure the channel sections to the module. Use the supplied fixing materials. Securely tighten the bolts. You can select any of the holes. We recommend mounting the modules symmetrically on the rails.

5.

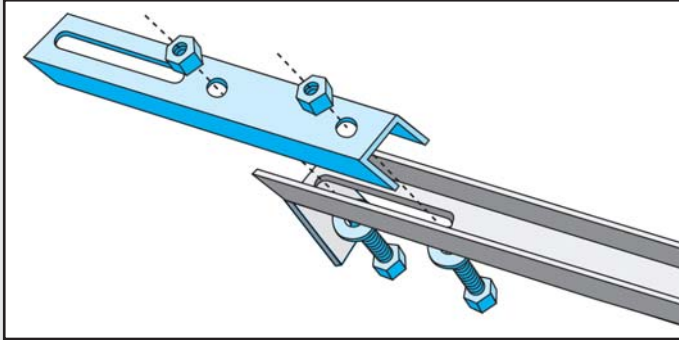


Connect up the cables. Place the PV module symmetrically on the Conergy SolarSimplex. The hooks prevent it slipping off. Make sure that the elongated hole is on the higher side of the Conergy SolarSimplex and that the small round holes are on the lower side.

¹ Attention: Other values may be required depending on the site and roof type. For further information, please contact a local structural engineer.

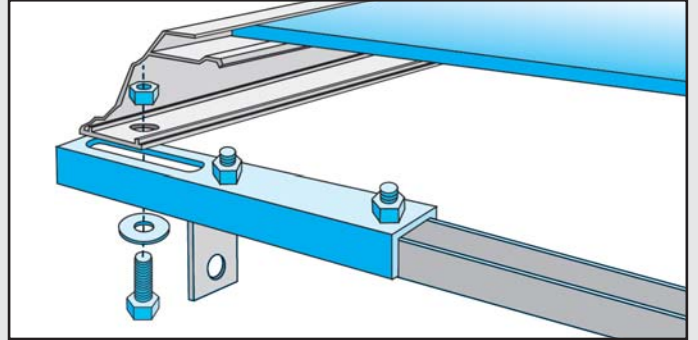
2. INSTALLING CONERGY SOLARSIMPLEX

6. Variation for larger modules



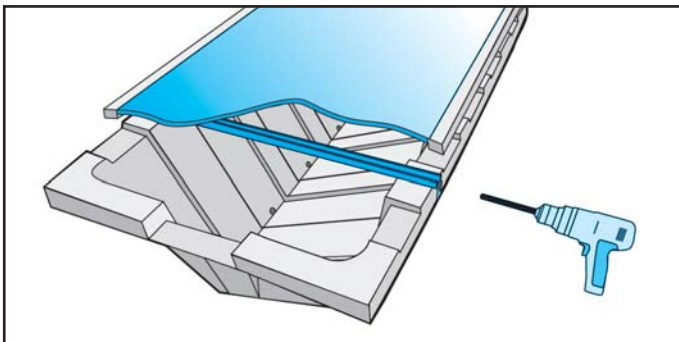
For larger modules, omit installation step no. 4. First secure the two extension rails (optionally available) in each case to the elongated hole side of the Conergy aluminium mounting rails.

7.



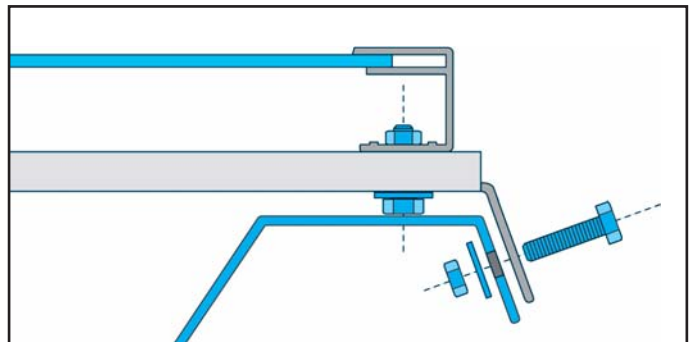
Then bolt the module onto the extension rails as shown. Now proceed with steps 5, 8 and 9.

8.



Through the holes in the mounting rails, drill 4 holes (7 mm diameter) in the vertical edges of the Conergy SolarSimplex.

9.



Secure the rails to the Conergy SolarSimplex using the supplied fixing materials. Ensure that the washer is positioned between the nut and the Conergy SolarSimplex.

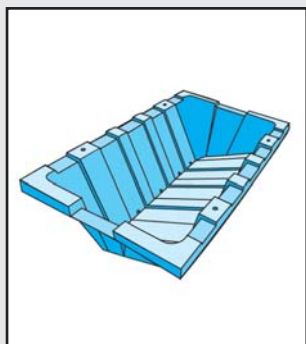
3. IMPORTANT INFORMATION

Please note the following:

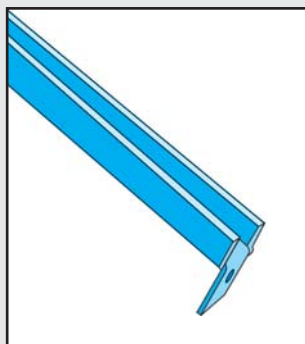
The surface must be level, clean and must not be too smooth or slippery. On slippery surfaces (e.g. PVC, EPDM) an anti-slip mat should be used. Check whether the installation surface (e.g. the roof) is designed to accommodate the additional roof load.

Note: long rows of Conergy SolarSimplex may impede the drainage of rain water from the roof. If you are in doubt, we recommend having this checked by a certified expert.

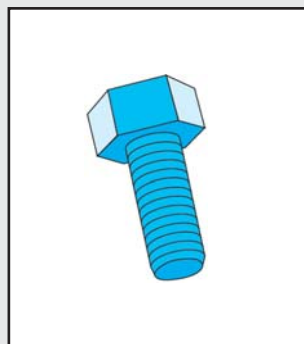
Overview of system components



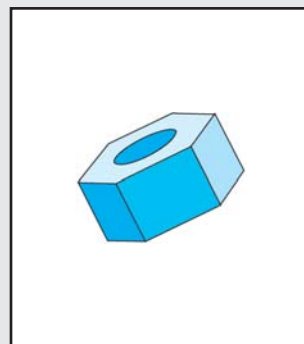
Conergy plastic trough



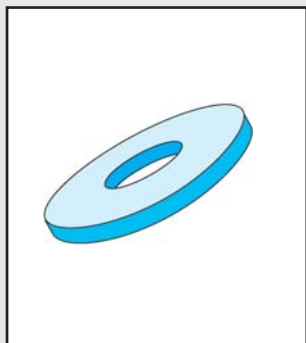
Conergy aluminium mounting rails with channel section



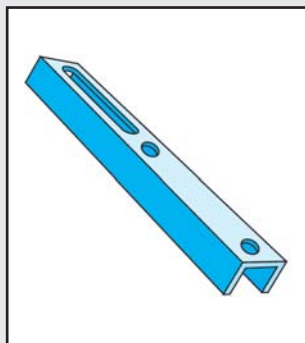
Stainless steel hexagonal bolts M6 x 20 mm



Self-locking stainless steel nuts M6



Stainless steel washers
18 mm



Extension rails

System components:

- 1 Conergy plastic trough
- 2 Conergy aluminium mounting rails with channel section
- 8 stainless steel hexagonal bolts M6 x 20 mm
- 8 self-locking stainless steel nuts M6
- 8 stainless steel washers 18 mm

Accessories for larger modules*:

- 2 Conergy extension rails
- 4 stainless steel hexagonal bolts M6 x 20 mm
- 4 self-locking stainless steel nuts M6
- 4 stainless steel washers 18 mm

* to be ordered additionally



For technical enquiries, please contact us

www.conergy.com

Subject to technical changes
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