SOLIMPEKS
Renewable Heating

INSTALLATION MANUAL

ACCESSORIES · MOUNTING KITS

Flat Roof Mounting Kit

Assembly instructions for installing Solimpeks solar thermal collectors and PVT panels on flat roofs.





OVERVIEW

About this kit

Solimpeks flat roof mounting kits hold solar thermal collectors and PVT panels at a fixed tilt on flat roofs. The frame is made of 40 × 40 mm steel profiles standing on mounting shoes. Two aluminium profiles carry the collector, which is fixed with clamps. Kits are available for 2510, 2108 and 1808 collectors and for PVT panels, in single- and double-collector versions.

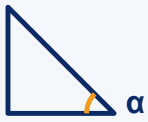
Available versions

Collector	Configuration
2510	Single · Double
2108	Single · Double
1808	Single · Double
PVT	Single · Double

Tools required

- Spanners, 17 mm and 15 mm
- Pliers
- Drill
- Tape measure
- Protective gloves

Tilt angle



The tilt angle α depends on the kit version (for example **45°** for one collector, **35°** for two collectors). It is marked on the drawing of your kit. Point the collector towards the equator (south in the northern hemisphere).

Safety

Only qualified installers should carry out the installation, in line with local building and safety regulations. Use fall protection when working on the roof.

Check that the roof can carry the system. Anchor the mounting shoes to the roof structure or ballast them to suit local wind and snow loads. Roof fixing material is not included in the kit.

Wear protective gloves. Profile edges can be sharp.

OVERVIEW

The mounting frame

The frame is supplied in two versions: a collector frame, and a solar water heater frame with tank holders. Both stand on mounting shoes. The tilt angle depends on the kit version.



Flat roof mounting kit with collector



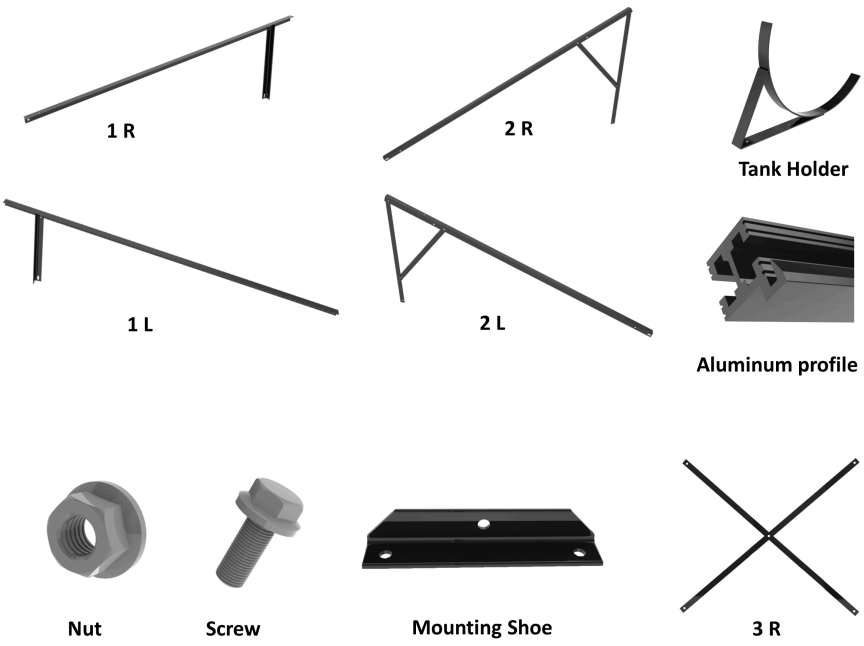
Flat roof mounting frame for collectors, with top and bottom aluminium profiles



Mounting frame for solar water heater, with tank holders

CONTENTS

Kit components



Parts list: solar water heater frame (one 2.6 m² collector)

No	Qty	Description / dimensions
1L	1 + 1 + 1	Front frame, left: 2415 × 40 × 40 mm, 1200 × 40 × 40 mm, 750 × 40 × 40 mm
1R	1 + 1 + 1	Front frame, right: 2415 × 40 × 40 mm, 1200 × 40 × 40 mm, 750 × 40 × 40 mm
2L	1 + 1	Side frame, left: 2060 × 40 × 40 mm, 500 × 40 × 40 mm
2R	1 + 1	Side frame, right: 2060 × 40 × 40 mm, 500 × 40 × 40 mm
3R	1	Cross brace: 2 pieces of 30 × 5 mm, screwed together at the centre
4	1	Aluminium profile, bottom: 2800 × 40 × 40 mm
5	1	Aluminium profile, top: 2800 × 40 × 40 mm
6	2	Tank holder (solar water heater frames only)
7	4	Clamp, 90 mm (top profile, Detail A)
8	4	Clamp, 22 mm (bottom profile, Detail B)
9	33	Screw M10 × 25
10	33	Nut M10 (shown as 10 in Detail A and 11 in Detail B)
M. Shoe	4	Mounting shoe: 230 × 40 × 40 mm

For collector-only kits, see the parts list by collector model on the next page. Always check the contents against the packing list supplied with your kit.

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Parts list by collector model

Collector-only flat roof kits. The parts are the same for every collector model except the length of the top and bottom profiles (5U, 5D).

Single collector kit

Part	Qty	Description / dimensions
1L	1	Frame: 3 screwed pieces of 1490 / 1190 / 980 × 30 × 30 mm
2L	1	Frame: 3 screwed pieces of 1490 / 1190 / 980 × 30 × 30 mm
3R	1	Cross brace: 2 screwed pieces of 980 × 30 × 5 mm
5U	1	Top profile, 30 × 30 mm: **1808** 1050 mm · **2108** 1150 mm · **2510 / 2512** 1335 mm
5D	1	Bottom profile, 30 × 30 mm: **1808** 1050 mm · **2108** 1150 mm · **2510 / 2512** 1335 mm
Screw	17	M10 × 20
Nut	17	M10
Clips	2	90 × 30 mm

Double collector kit

Part	Qty	Description / dimensions
1L	1	Frame: 3 screwed pieces of 1490 / 1190 / 980 × 40 × 40 mm
2L	1	Frame: 3 screwed pieces of 1490 / 1190 / 980 × 40 × 40 mm
3R	1	Cross brace: 2 screwed pieces of 1670 × 30 × 5 mm
5U	1	Top profile, 30 × 30 mm: **1808** 2100 mm · **2108** 2300 mm · **2510 / 2512** 2670 mm
5D	1	Bottom profile, 30 × 30 mm: **1808** 2100 mm · **2108** 2300 mm · **2510 / 2512** 2670 mm
Screw	19	M10 × 20
Nut	19	M10
Clips	4	90 × 30 mm

5U is the top profile (5 in the drawings); 5D is the bottom profile (4 in the drawings). Clips fix the collector to the profiles (Details A and B). The kit size follows the collector width: see "Compatible collectors" on the next page.

CONTENTS

Compatible collectors

Choose the kit size by the width of your Solimpeks collector. Collectors with the same dimensions use the same kit.

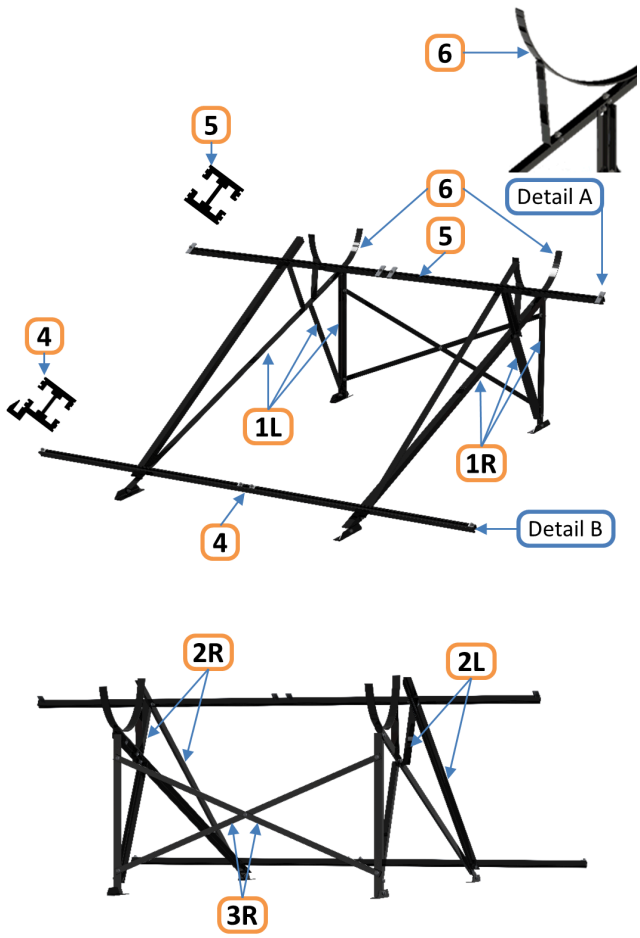
Collector	Product code	Dimensions (mm)	Kit size
WUNDER ANP 1808	ANP-1808	1927 × 927 × 90	1808
WUNDER ANSG 1808	ANSG-1808	1927 × 927 × 90	1808
WUNDER ALS 1809	ALS-1809	1927 × 927 × 90	1808
WUNDER ANP 2108	ANP-2108	1988 × 1041 × 90	2108
WUNDER ANSG 2108	ANSG-2108	1988 × 1041 × 90	2108
WUNDER ALS DRAIN 2108	ALS-DRAIN-2108	1988 × 1041 × 90	2108
WUNDER ALS 2110	ALS-2110	1988 × 1041 × 90	2108
WUNDER ANP 2510	ANP-2510	1988 × 1218 × 90	2510 / 2512
WUNDER ANSG 2510	ANSG-2510	1988 × 1218 × 90	2510 / 2512
WUNDER ALS DRAIN 2510	ALS-DRAIN-2510	1988 × 1218 × 90	2510 / 2512
WUNDER ALS 2512	ALS-2512	1988 × 1218 × 90	2510 / 2512
WUNDER ALS 2710	ALS-2710	2220 × 1218 × 90	On request
WUNDER ALS 3010	ALS-3010	2431 × 1222 × 90	On request
WUNDER ALS HORIZONTAL 2117	ALS-HORIZONTAL-2117	1041 × 1988 × 90	On request
WUNDER ALS HORIZONTAL 2517	ALS-HORIZONTAL-2517	1218 × 1988 × 90	On request

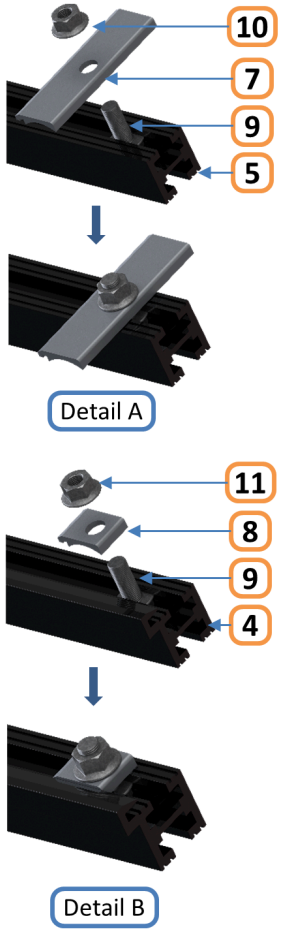
"On request": contact Solimpeks for the mounting kit of this collector. Dimensions: length × width × depth, as listed on solimpeks.com.

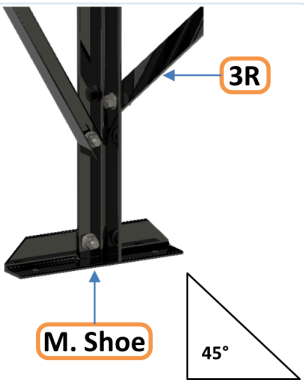
ASSEMBLY

Assembly overview: one collector, 45°

Solar water heater frame for one collector. The numbers match the parts list on page 4. **Detail A** shows how the collector is clamped on the top aluminium profile (5). **Detail B** shows the same on the bottom profile (4).







Detail A: top profile

Slide the head of screw **9** into the channel of aluminium profile **5**. Place the 90 mm clamp **7** over the collector frame and tighten with nut **10**.

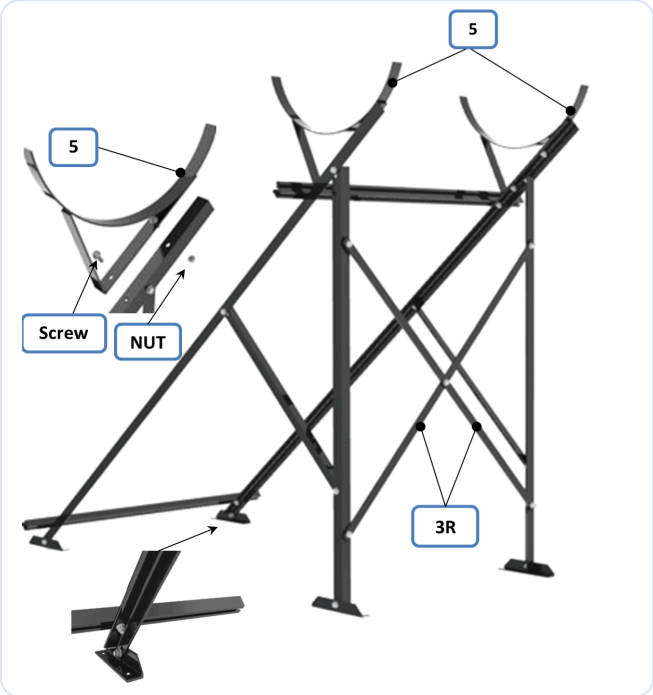
Detail B: bottom profile

Slide the head of screw **9** into the channel of aluminium profile **4**. Place the 22 mm clamp **8** and tighten with the nut (**11** in the drawing).

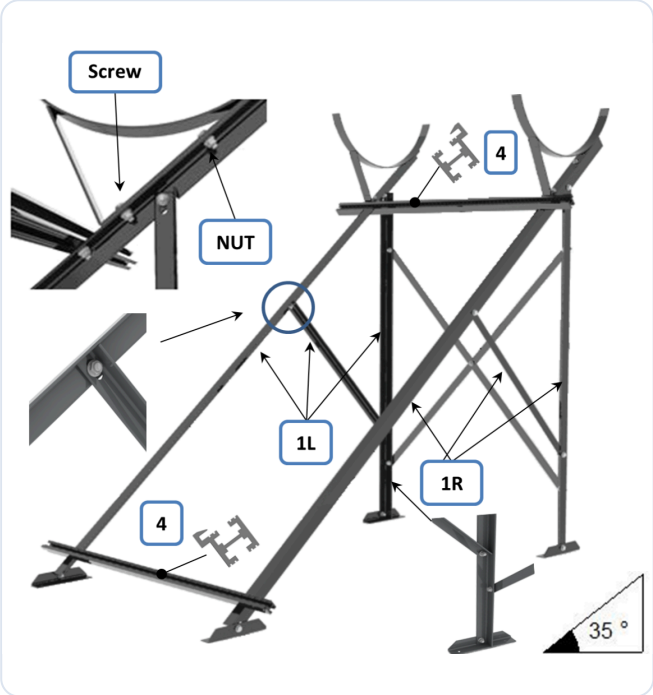
ASSEMBLY

Assembly overview: two collectors, 35°

Solar water heater frame for two 21XX collectors and a TSM 300 tank. Note the different tilt angle: this kit sets the collectors at **35°**.



Tank holders **5**, cross brace **3R** and the mounting shoe connection



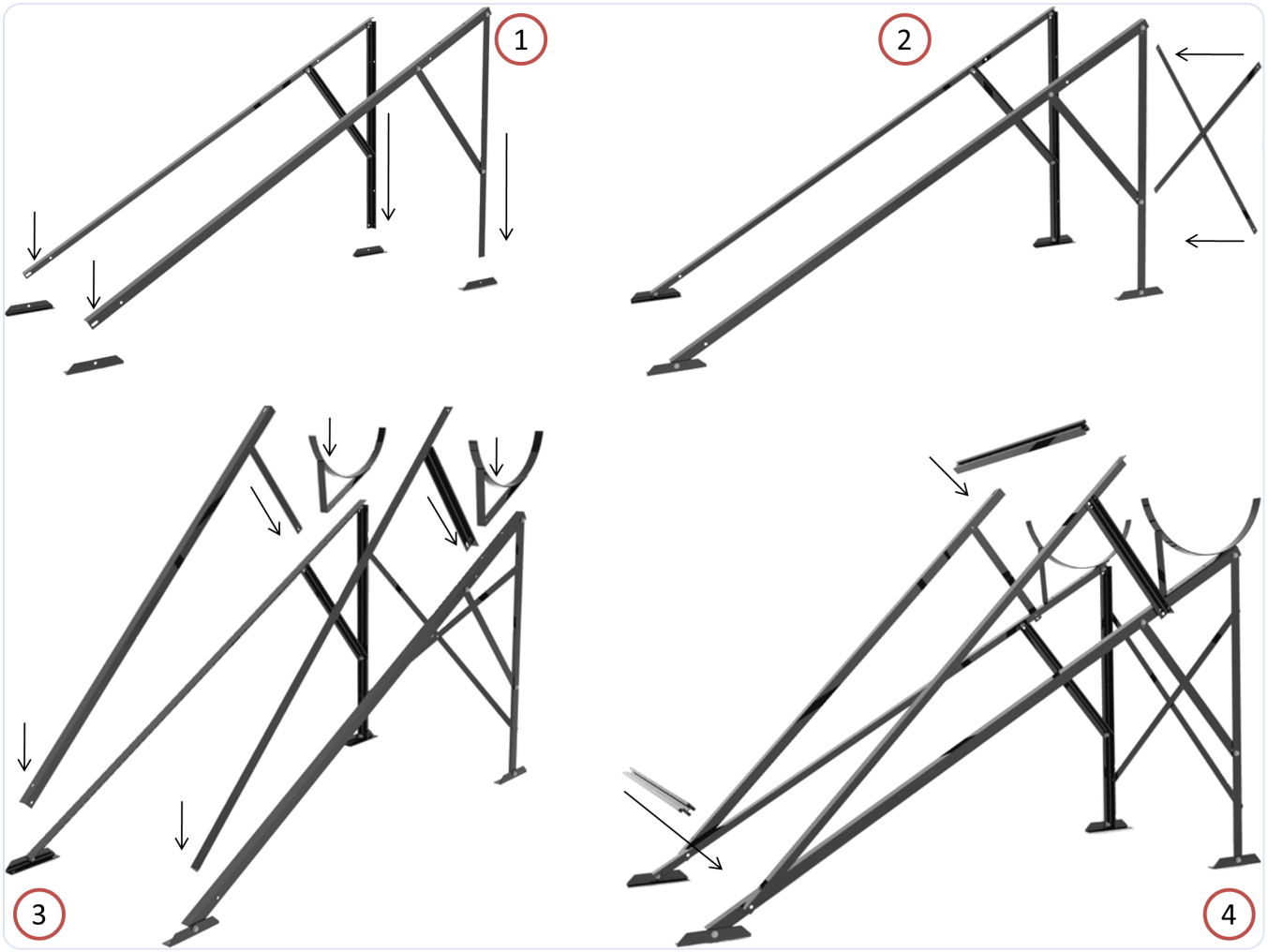
Frames **1L**, **1R** and aluminium profiles **4**; tilt 35°

Parts list: two collectors

No	Qty	Description / dimensions
1L	1 + 1 + 1	Frame, left: 2600 × 40 × 40 mm, 1390 × 40 × 40 mm, 870 × 30 × 30 mm
1R	1 + 1 + 1	Frame, right: 2600 × 40 × 40 mm, 1390 × 40 × 40 mm, 870 × 30 × 30 mm
3R	1	Cross brace: 2 pieces of 30 × 5 mm, screwed together
4	2	Aluminium profile: 1940 × 30 × 30 mm (21XX collectors)
5	2	Tank holder
Screw	23	M10 × 25
Nut	23	M10
M. Shoe	4	Mounting shoe: 230 × 40 × 40 mm

ASSEMBLY

Step by step



1 Side frames on the shoes

Place the four mounting shoes on the roof. Set side frames **2L** and **2R** on the shoes and fix them with M10 × 25 screws and M10 nuts.

2 Cross brace

Screw the two pieces of cross brace **3R** together at the centre. Fix the brace diagonally between the rear legs of 2L and 2R.

3 Front frames

Fit front frames **1L** and **1R** to the shoes and side frames. On solar water heater frames, mount tank holders **6** on top.

4 Aluminium profiles and collector

Bolt aluminium profiles **5** (top) and **4** (bottom) across the frames. Place the collector and fix it with clamps **7** and **8**, as shown in Details A and B.

Final checks

- Check that every screw and nut is tightened (17 mm and 15 mm spanners).
- Check that the frame is level, square and firmly anchored or ballasted on the roof.
- Check that every clamp holds the collector frame securely before you connect the hydraulic lines.