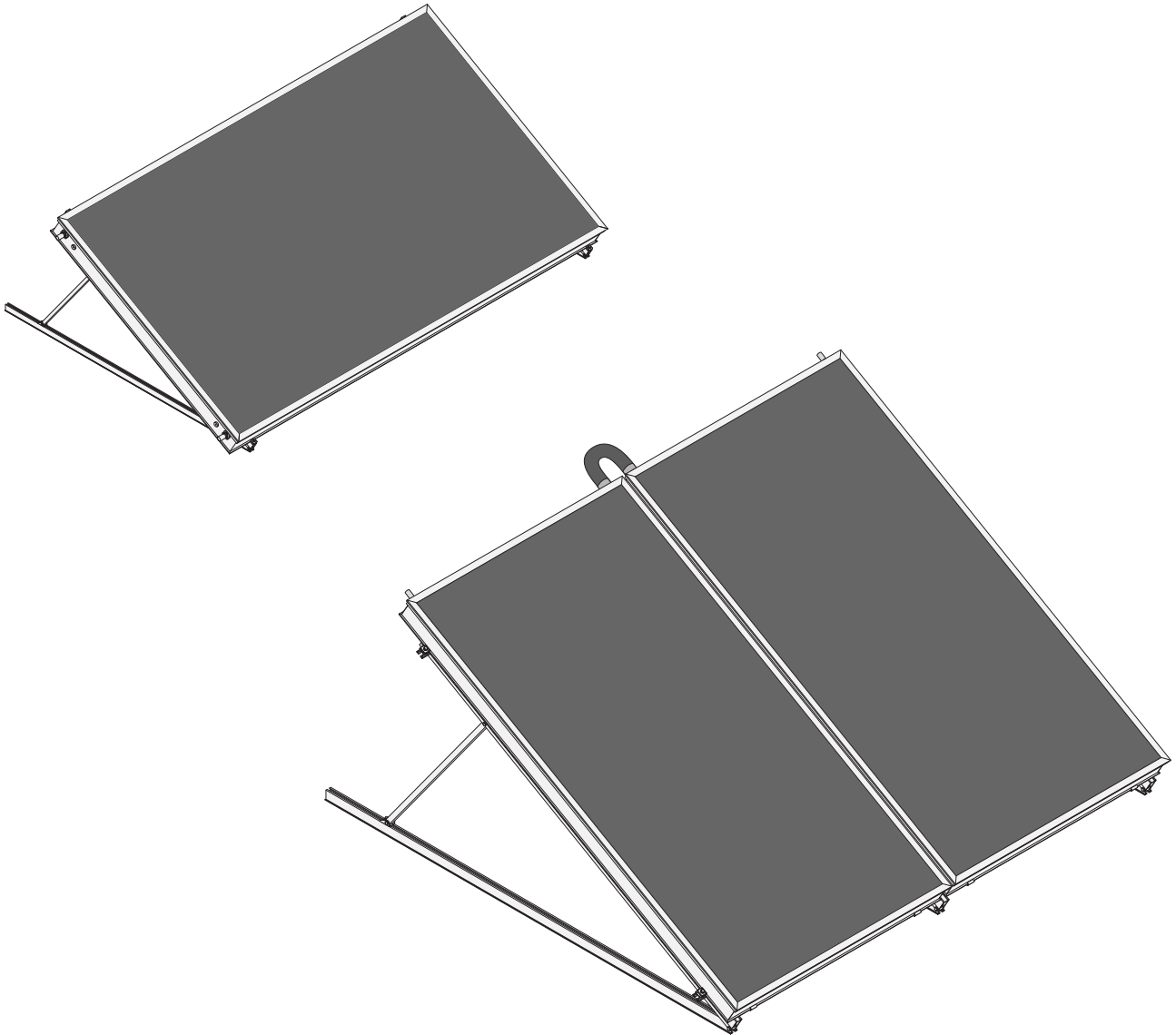


EURO TRIC F Free Standing for FOCUS AR/HTF collectors



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1 General Safety Notes

1.1 Symbol

The following symbols are used throughout these instructions and must be adhered to



DANGER of possibly serious personal injury



WARNING against material damage



NOTE as additional information

1.2 Norms and Regulations

The standards and regulations applicable at the installation location must be adhered to.

- Make sure to observe country and territory regulations related to roof works and roof sealing standards as well as professional codes for plumbing work. The installation process must reflect the on-site conditions as well as applicable rules, regulations and accident prevention procedures. Appropriate work safety measures must be observed (ropes, hooks, lines, scaffolding, protection nets).
- Safety barriers to protect pedestrians against falling parts must be set up.
- The dimensioning of the mounting system (number of roof brackets etc.) should be specifically carried out for each individual project, following the specified structural engineering standards and regulations.
- Prerequisite for the proper application always is a solid mounting base that can accommodate the occurring forces (weight, wind and snow loads).
- Especially the pipes in the lower parts of the building must be connected electrically conductive, conforming to standards. The collector installation must be professionally integrated with an existing or new lightning protection system.

1.3 Qualification of the Installer

Setup, installation and proper commissioning of the solar installation must be carried out by authorized professionals. Non-compliance renders the warranty void.

1.4 Intended Use and Application



Scope and Limitations of Application

The collector is intended for the application in solar thermal installations for hot water preparation and space heating support. As operating mediums water (attention - risk of freezing!) or an appropriate water-glycol mixture can be used in a closed circuit. Operational conditions underrunning the dew point within the collector for pro-

longed periods are not permitted! This can occur for example, when collectors are integrated in the brine circuit of a heat pump.

Maintenance

For maintenance notes and additional information about setup and operation of the collector field, please refer to the technical information "Solar Thermal Systems".

1.5 Notes on Proper Collector Storage

1.5.1 Proper Outdoor Storage of Collectors

- Remove protective film and lay down collectors with glass pane up. Avoid direct ground contact (e.g. underlay square timber). Avoid scratches on glass panes by using spacers between collectors (e.g. wooden battens).
- When leaning collectors against walls or similar, use a minimum inclination of 15° and apply spacers. Do not use cardboard as under liner. If incorrectly stored, humidity can enter the collectors through the air vents.
- Storing collectors in foil package may damage the glass surface (see figure 2).



1.6 Pre-Installation Notes

Ensure technically correct roof structure

For roof integrated installation the space behind the collector field has to be protected against uprising and accumulating humidity. Ensure that the roof is sufficiently ventilated in the area of the in-roof collector field (see "Installation Field" on page 6)

- Danger of open injuries when working with sharp edged metal sheets and components!
- Risk of burns at collector connections as soon as uncovered collector is exposed to the sun.
- Remove glass protection PE-LD film before commencing installation work!
- Do not subject the collector connections to mechanical loads or use as transportation handles. Specially designed collector handles are available for this purpose.
- Keep a minimum distance between collectors and roof structures such as chimneys, air vents, sky lights that may release moist air. Otherwise there is an increased risk of excess humidity entering through the air vents of the collector encasing.



Overheat Protection

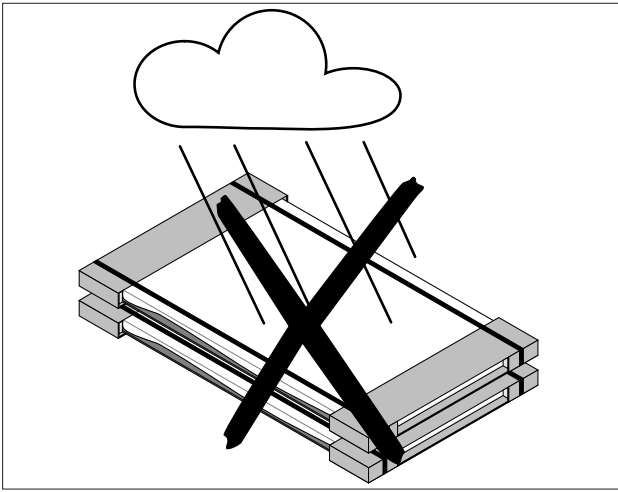
For roof heating centrals and when 4 or more EURO collectors with anti reflective glass are installed vertically, the "Technical Information Solar Thermal Systems - Setup, Commissioning and Maintenance" must be followed to avoid damage to the solar circuit.



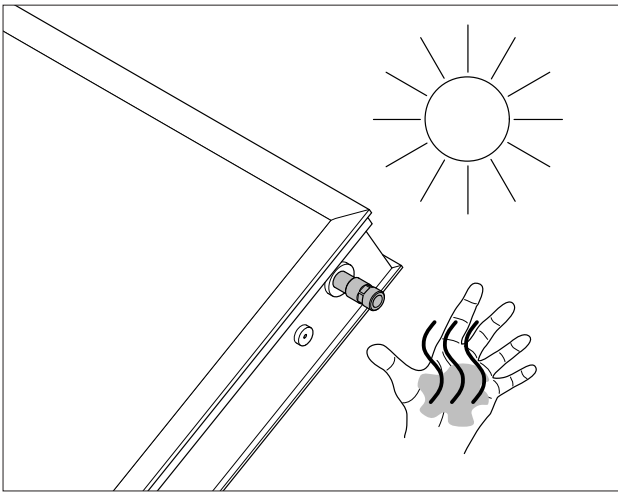
Preventing frost Damage

After pressure testing and flushing, collectors cannot be completely emptied. Make sure that no pure water remains in collector during risk of frost!

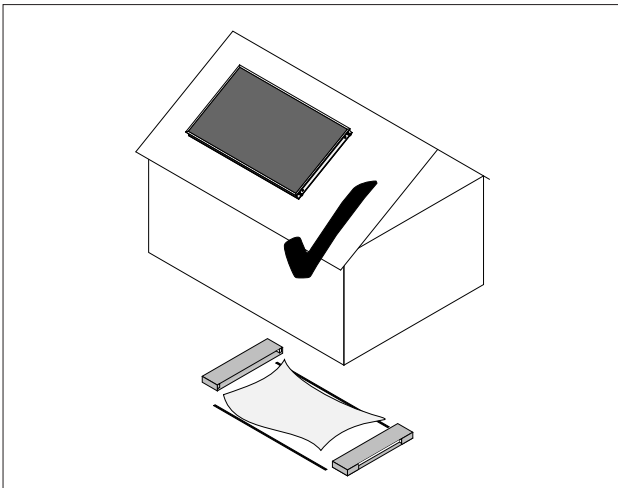




Do not expose film covered collector to rain!



WARNING! Collector connections heat up during solar irradiation.



Do not install collector covered with protection film on roof

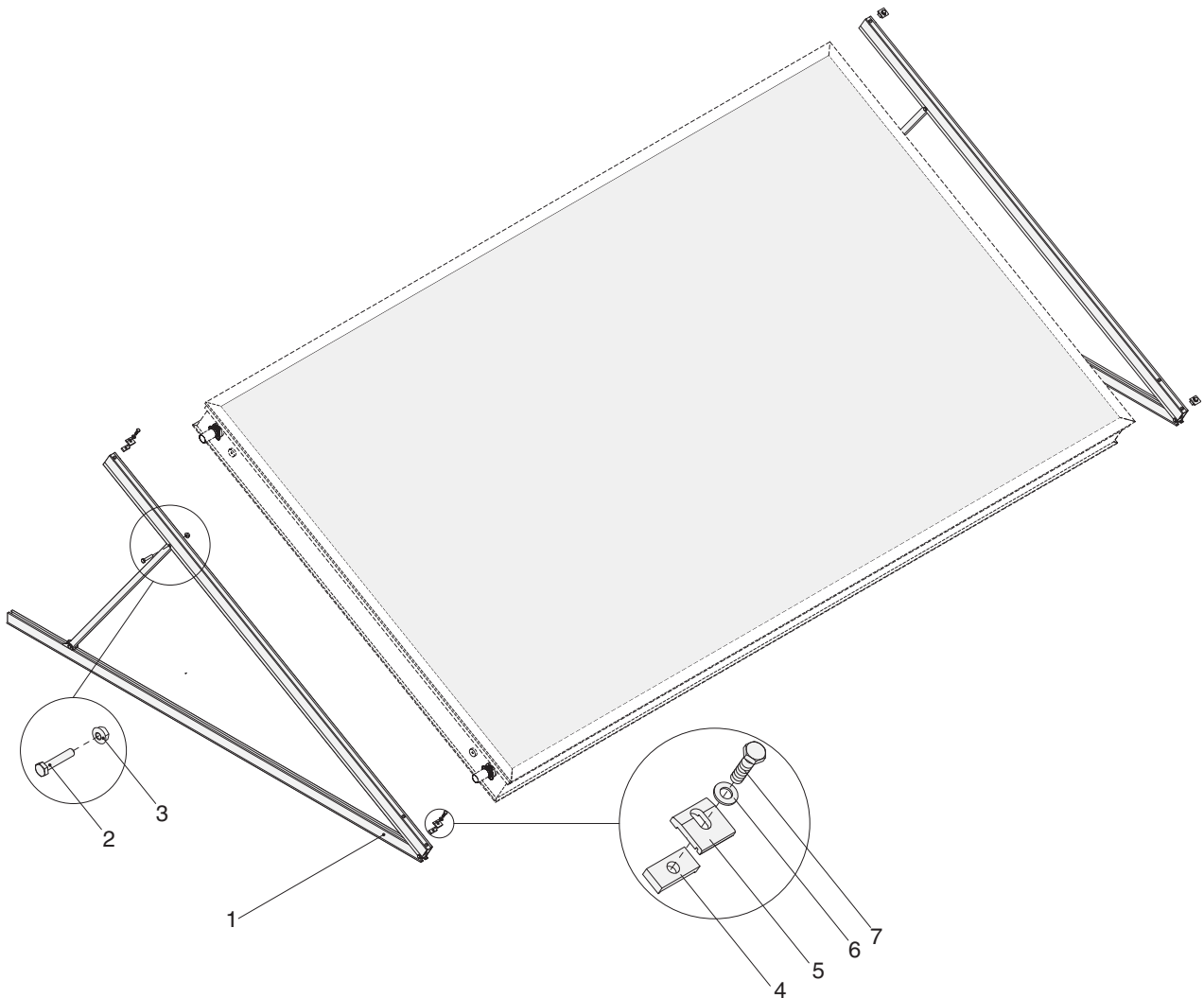
1.7 Recycling Note

At the end of the long operational lifetime, the valuable materials of the installation should be recycled in an environmentally sound manner.

2 Scope of Supply

2.1 Horizontal

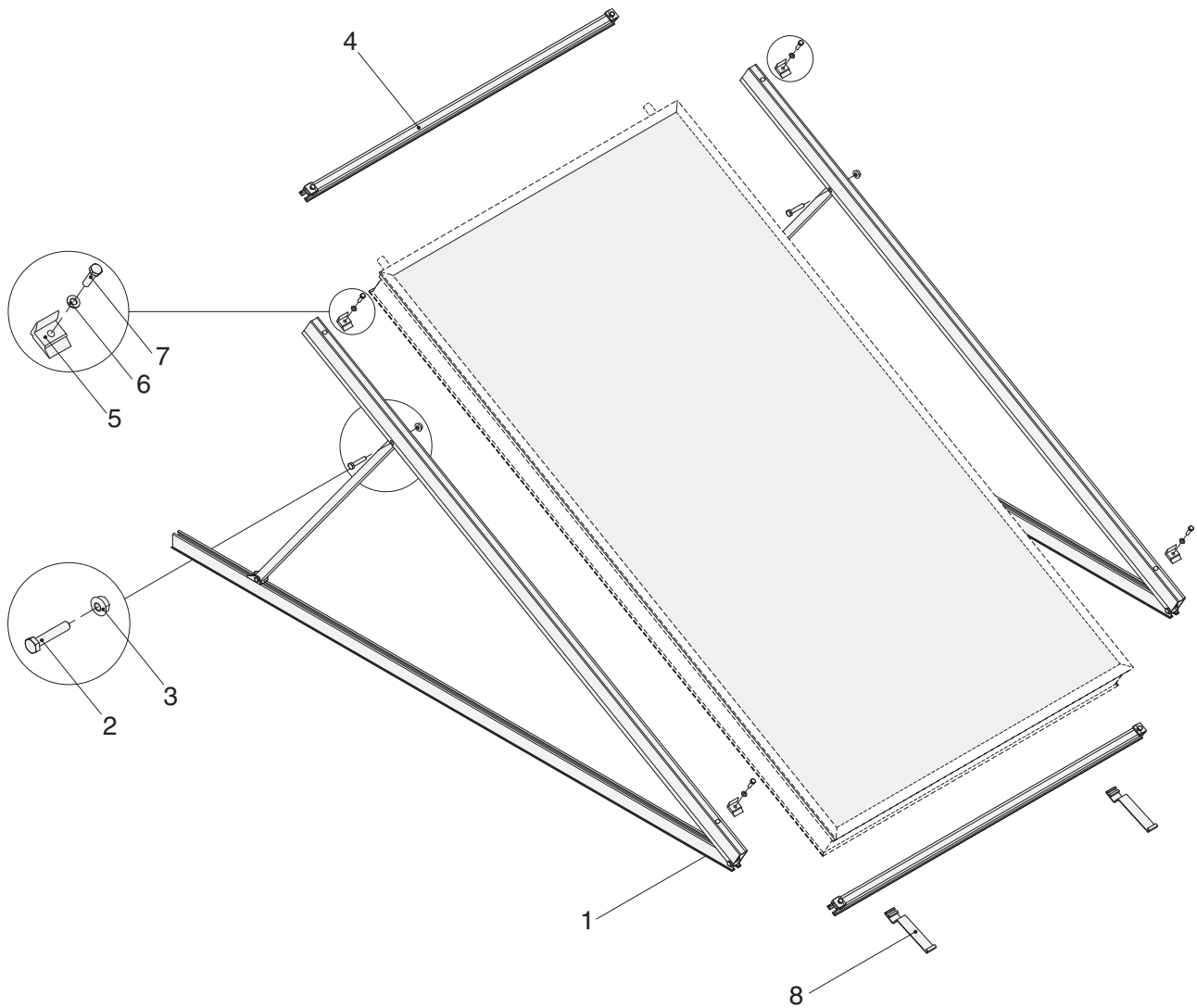
Basic set



Basic set, horizontal installation		
Position no.	Component	Qty
1	Pre-assembled racking triangle	2
2	Hexagonal screw M8 x 40	2
3	Nut M8 interlocked	2
4	Collector clamp - lower side	4
5	Collector clamp - top	4
6	Washer Ø 8.4	4
7	Hexagonal screw M8 x 30	4

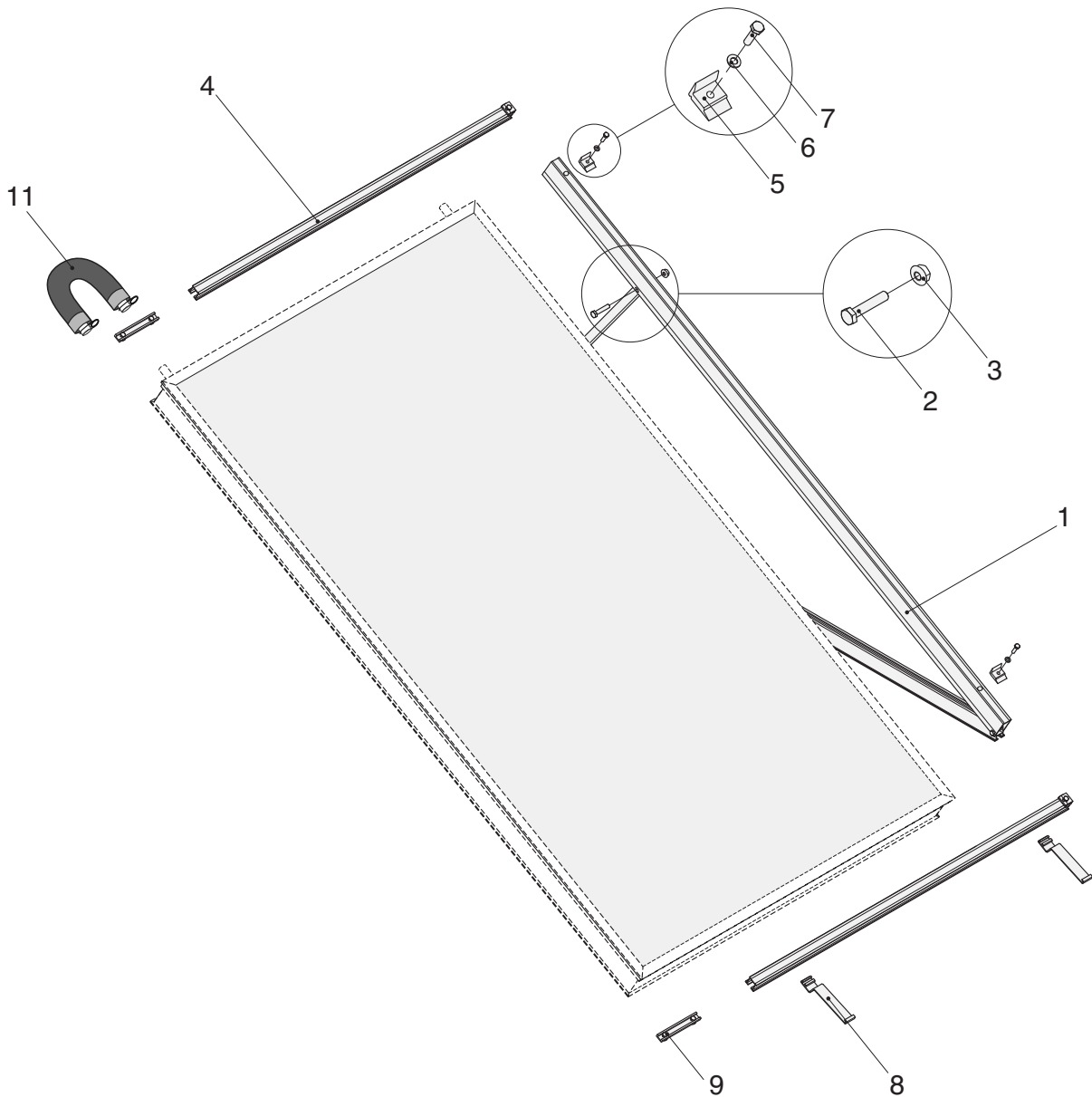
2.2 Vertical

Basic set



Basic set, vertical installation		
Position no.	Component	Qty
1	Pre-assembled racking triangle	2
2	Hexagonal screw M8 x 40	2
3	Nut M8 interlocked	2
4	Collector rail incl. 2 collector clamps, 1257	2
5	Clamping angle	4
6	Washer Ø 8.4	4
7	Hexagonal screw M8 x 30	4
8	Collector holder	2

Extension set



Extension set, vertical installation		
Position no..	Component	Qty
1	Pre-assembled racking triangle	1
2	Hexagonal screw M8 x 40	1
3	Nut M8 interlocked	1
4	Mounting rail with one collector clamp, 1223	2
5	Clamping angle	2
6	Washer Ø 8.4	2
7	Hexagonal screw M8 x 30	2
8	Collector holder	2
9	Rail connector	2
11	Collector connection hose 320 mm with snap connection, comprised of corrugated stainless steel hose and soft foam insulation	1

3 Installation of the Racking Triangles

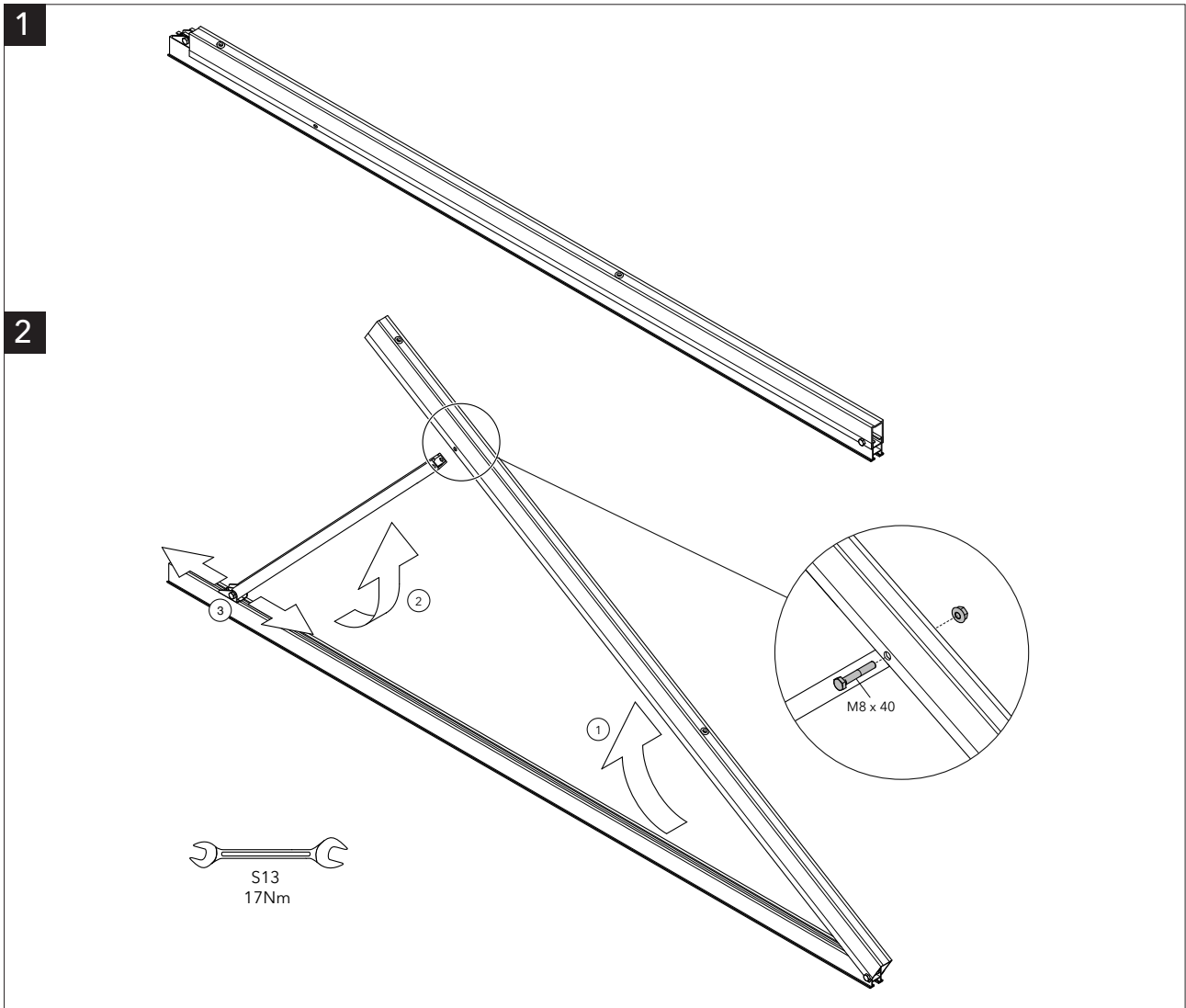
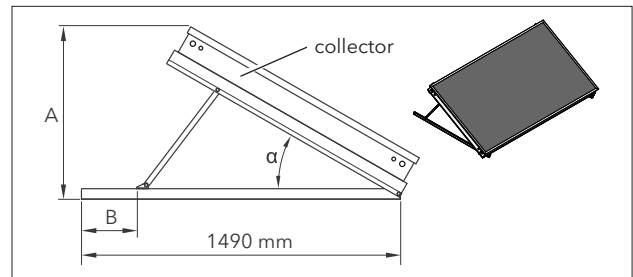
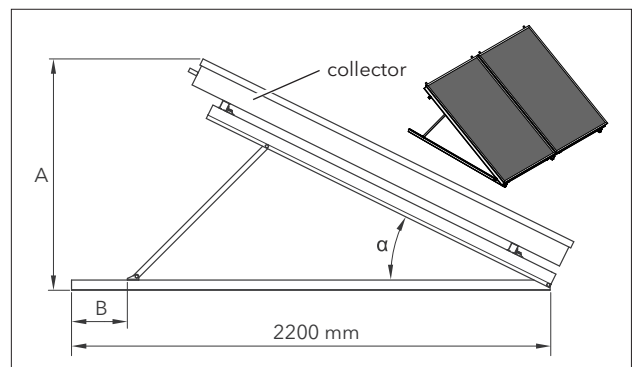


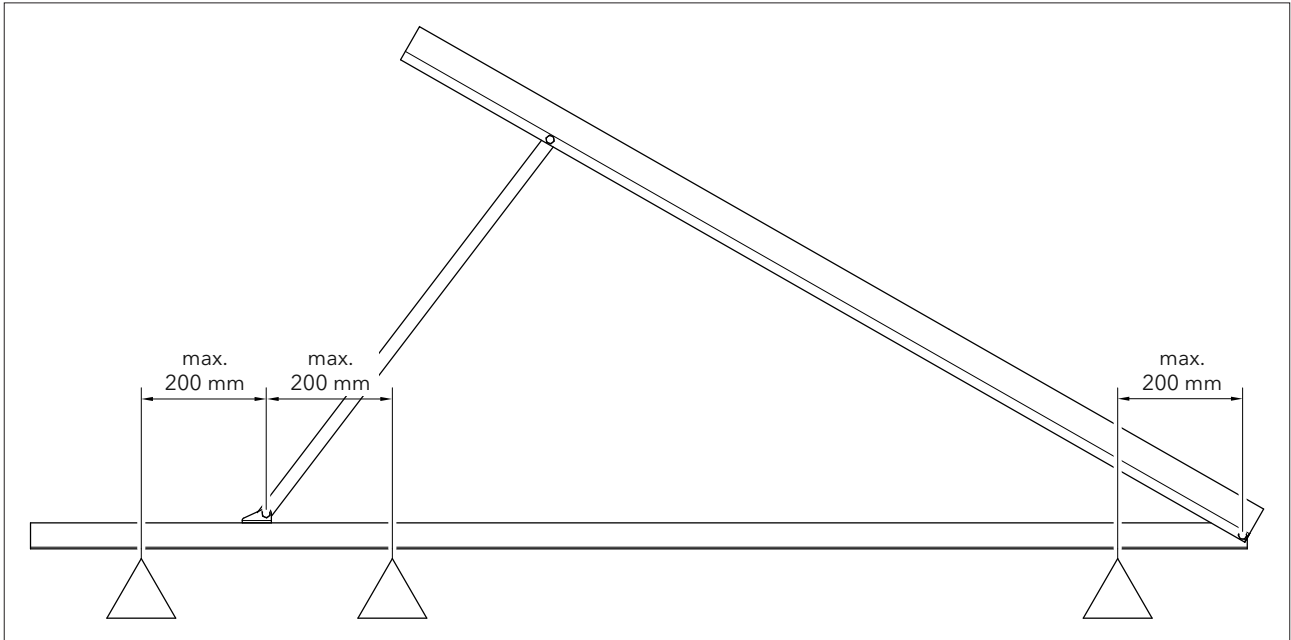
Table 4	Collector type	α [°]	A [mm]	B [mm]
EURO TRIC F horizontal 35° - 50°	All EURO- collectors	35°	863	10
		40°	940	147
		45°	1009	311
		50°	1070	521
EURO TRIC F vertical 37° - 50°	EURO L20, L40,	37°	1471	0
		40°	1553	153
		45°	1679	458
		50°	1782	920
	EURO L22, L42	37°	1338	0
		40°	1410	153
		45°	1522	458
		50°	1619	920



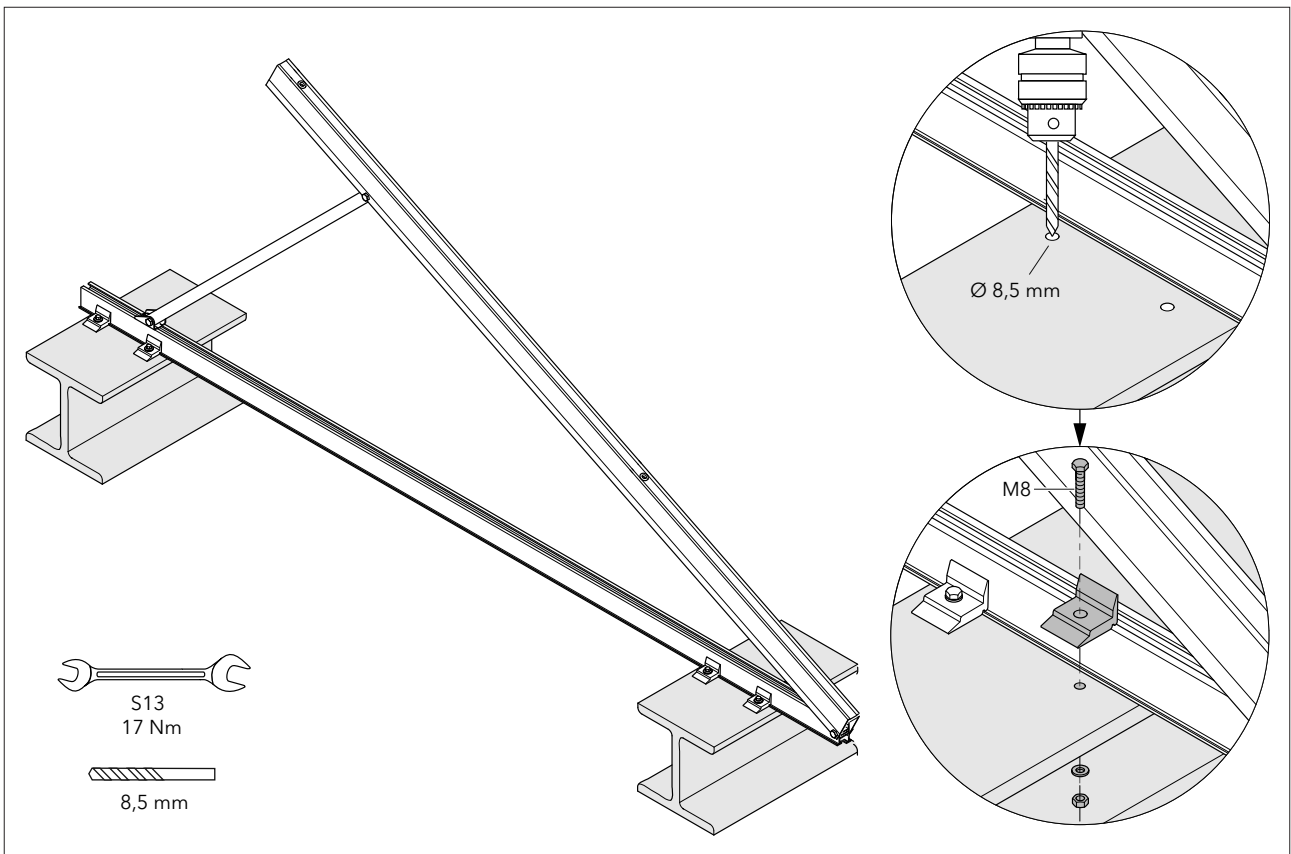
Horizontal installation



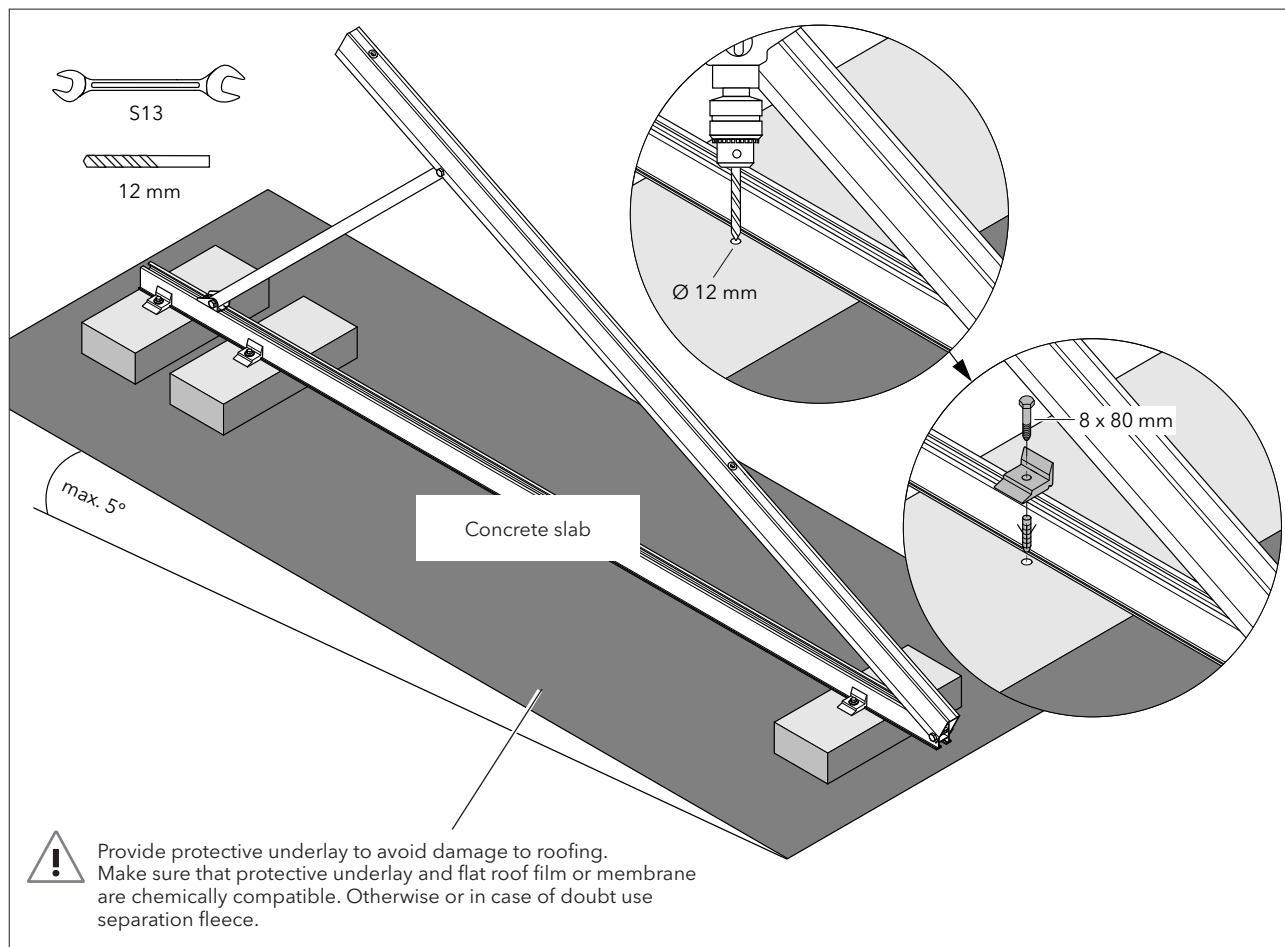
Vertical installation



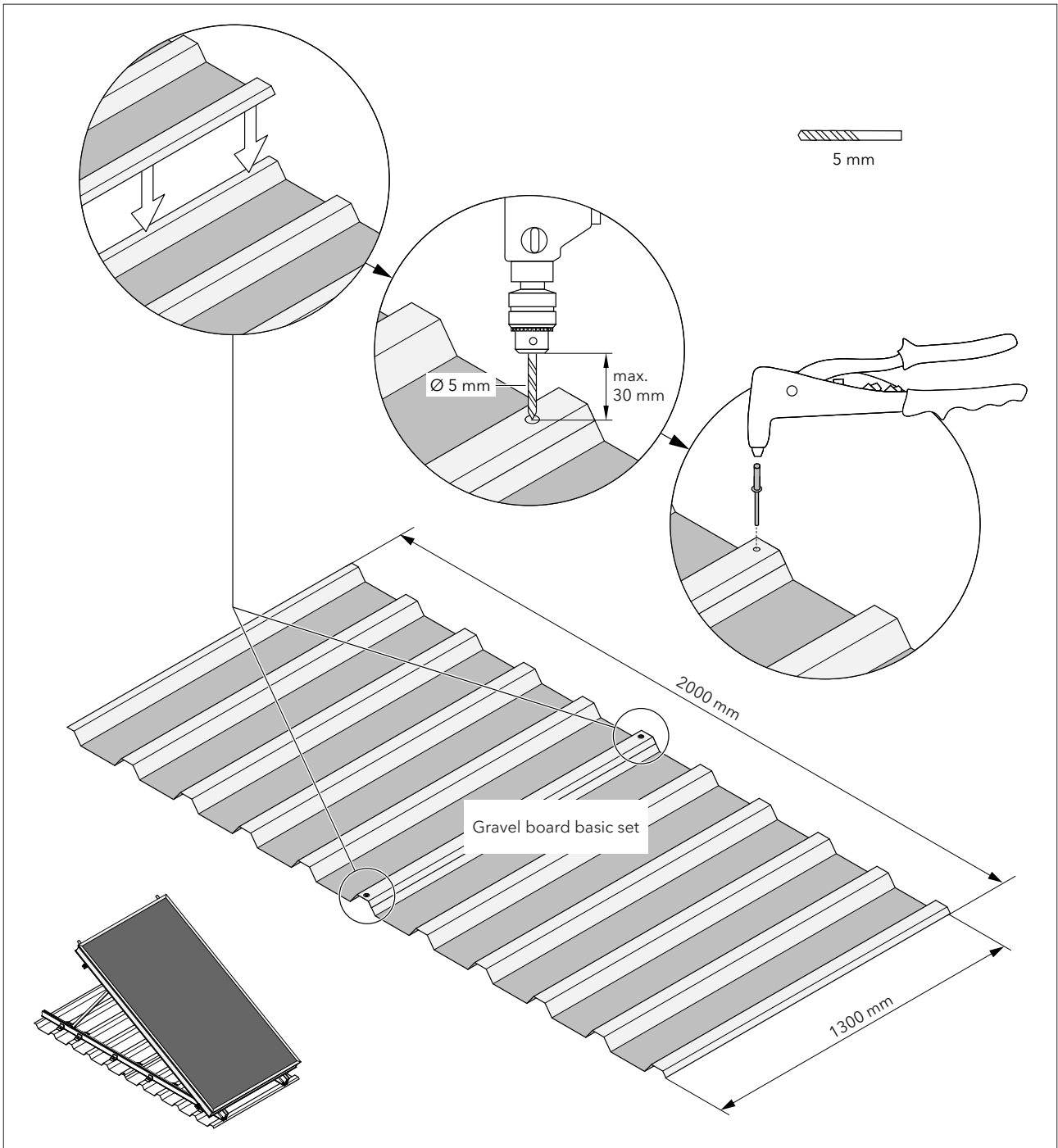
3.1 Installation on Steel Beams

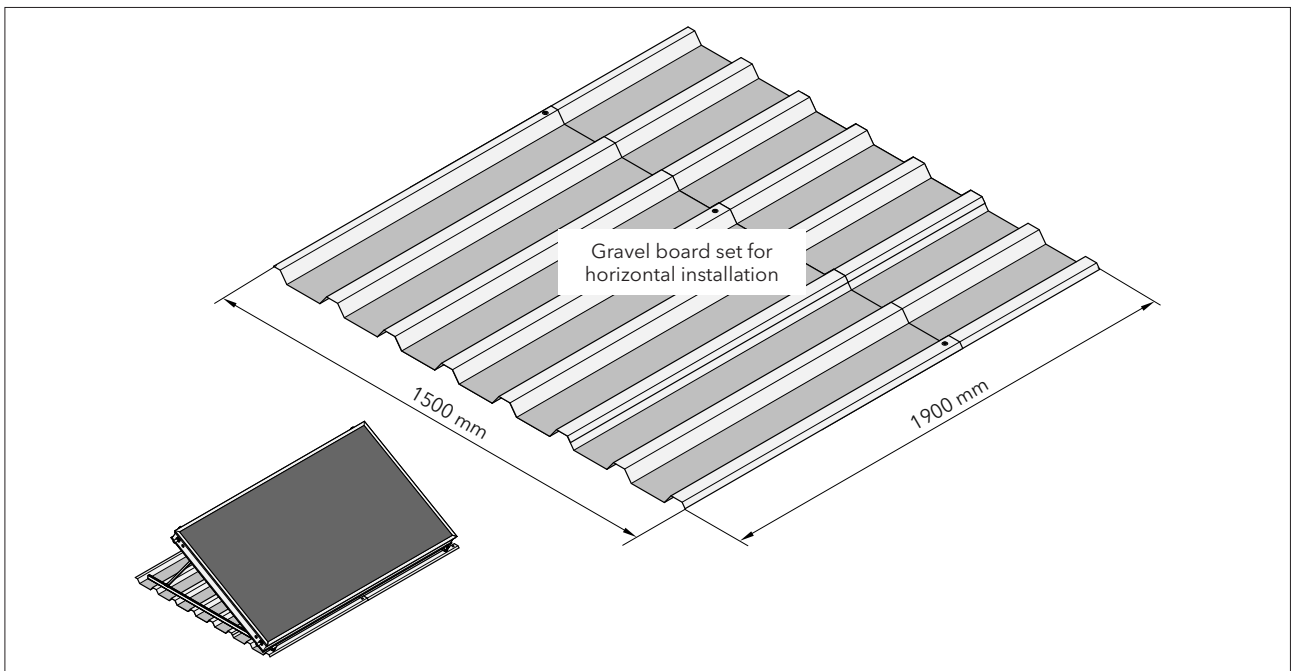
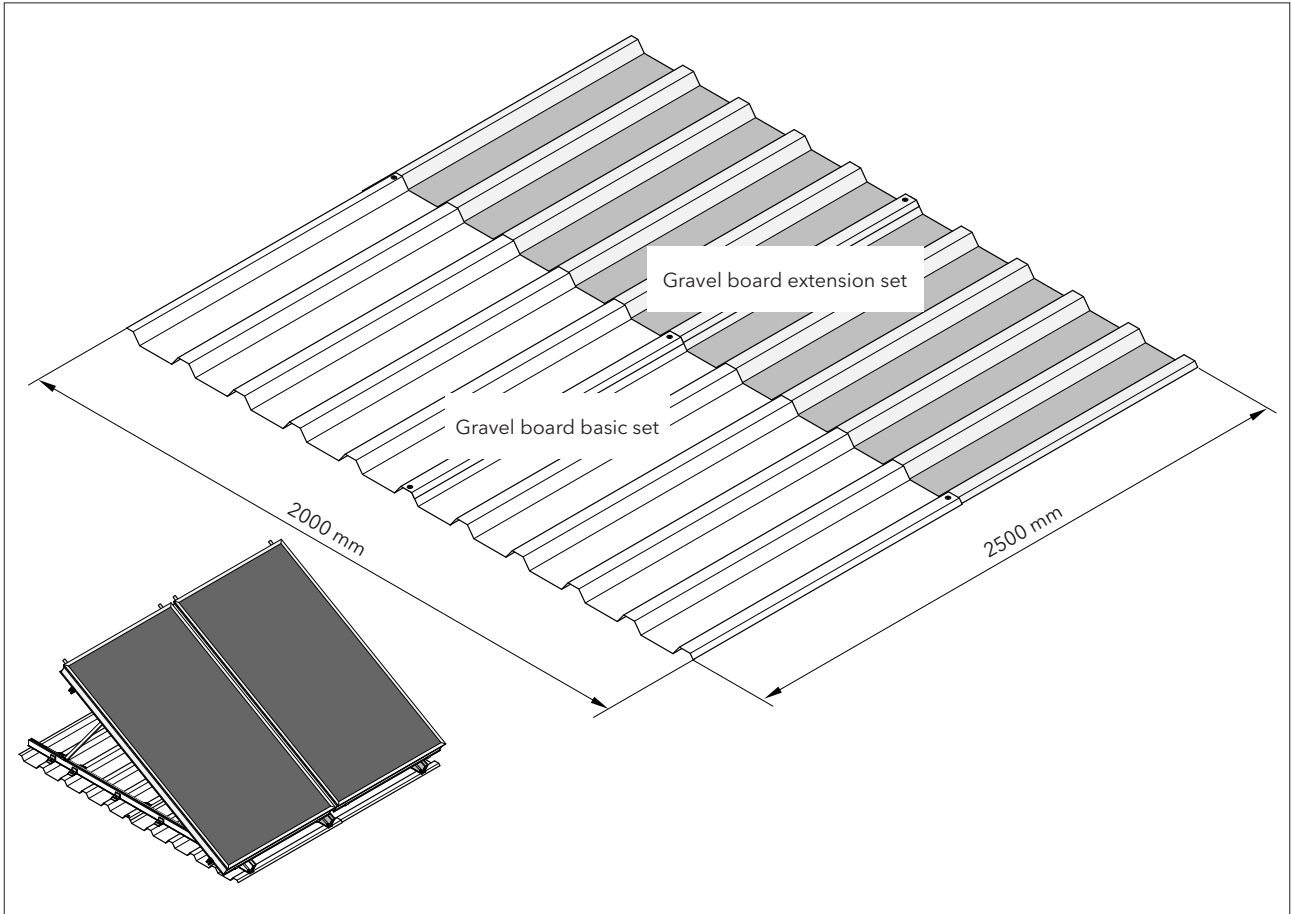


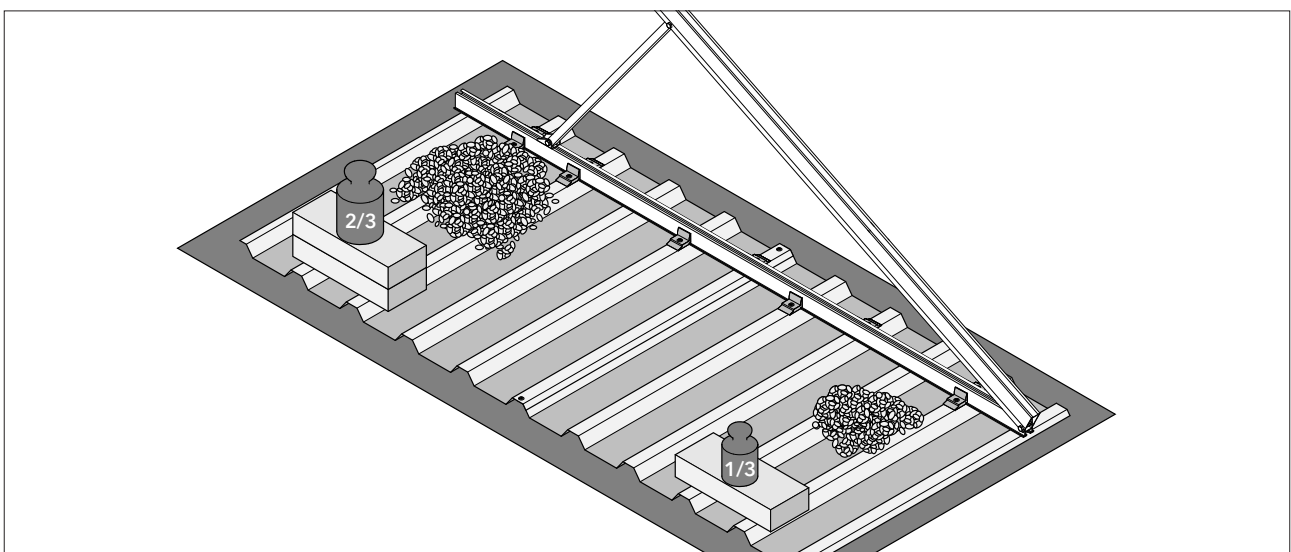
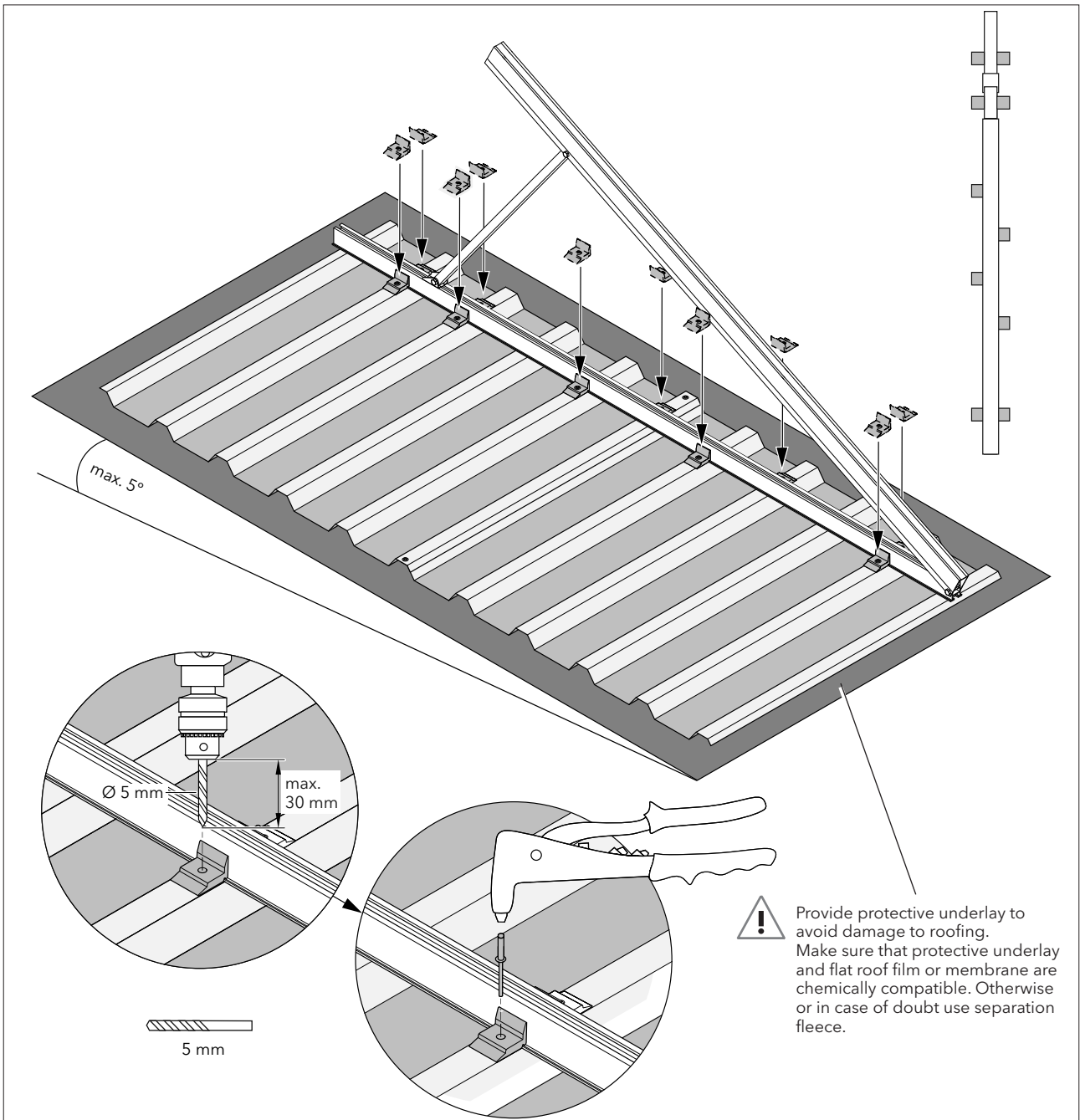
3.2 Installation on Concrete Slabs



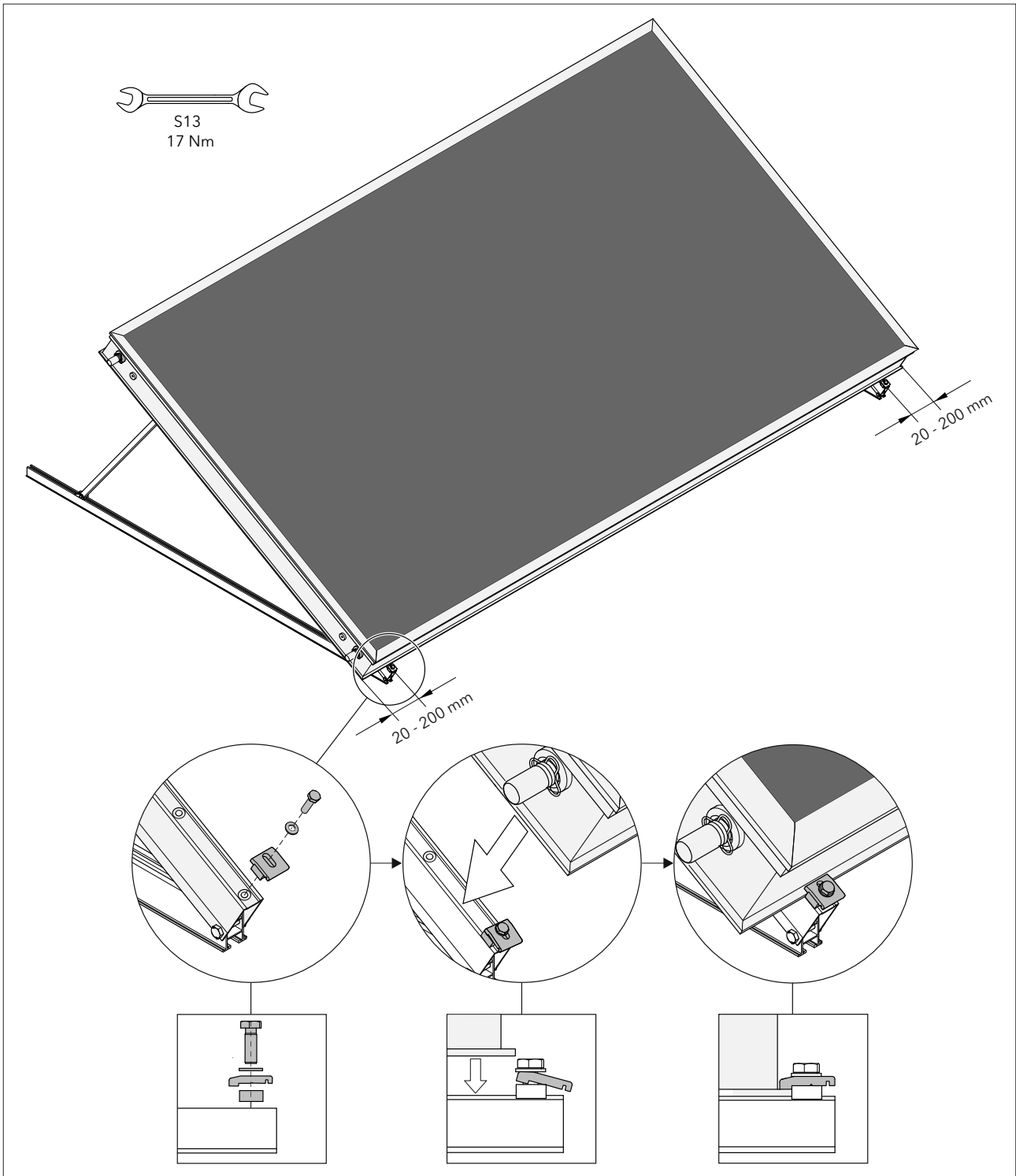
3.3 Installation on Gravel Board Set



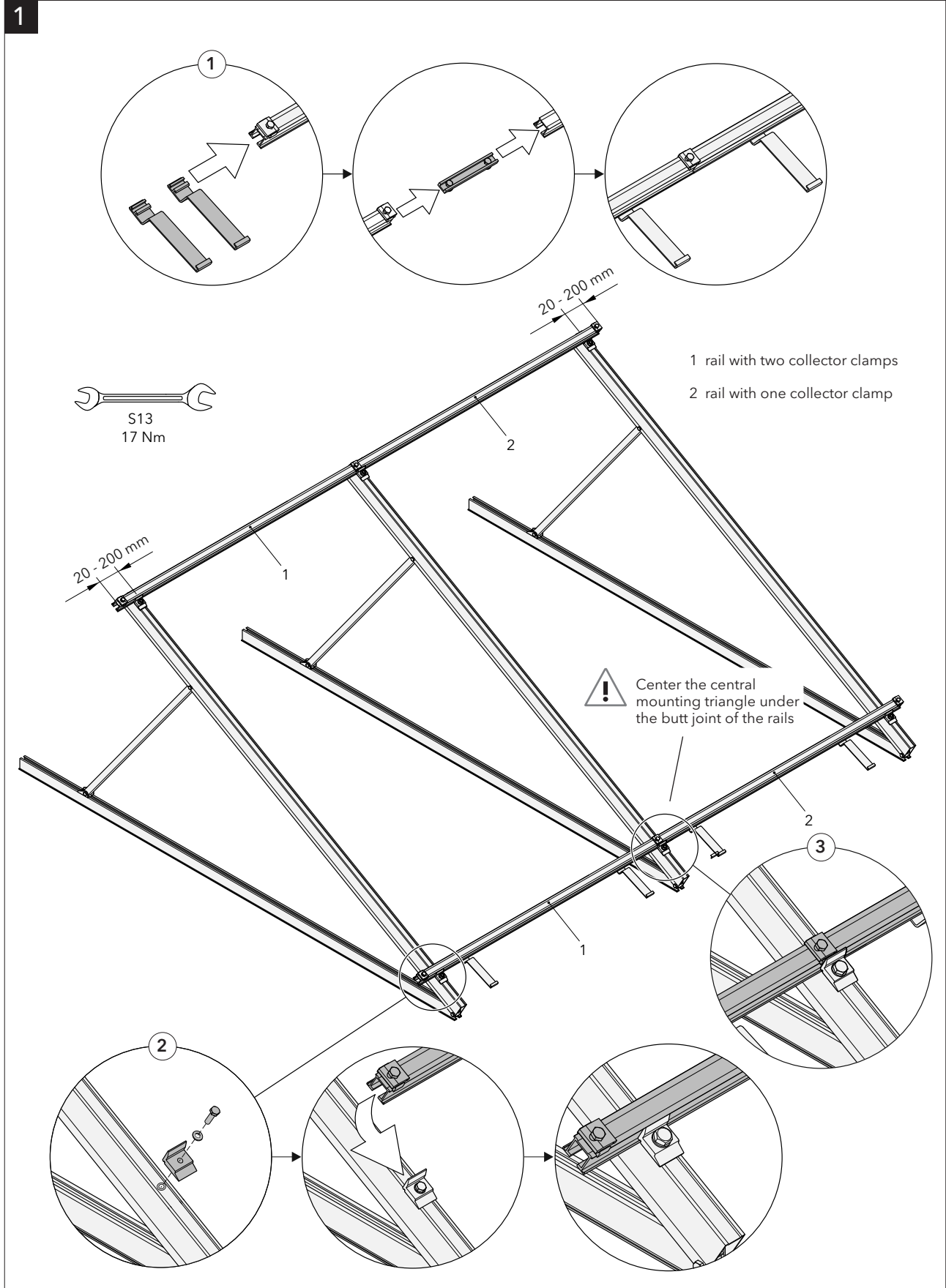





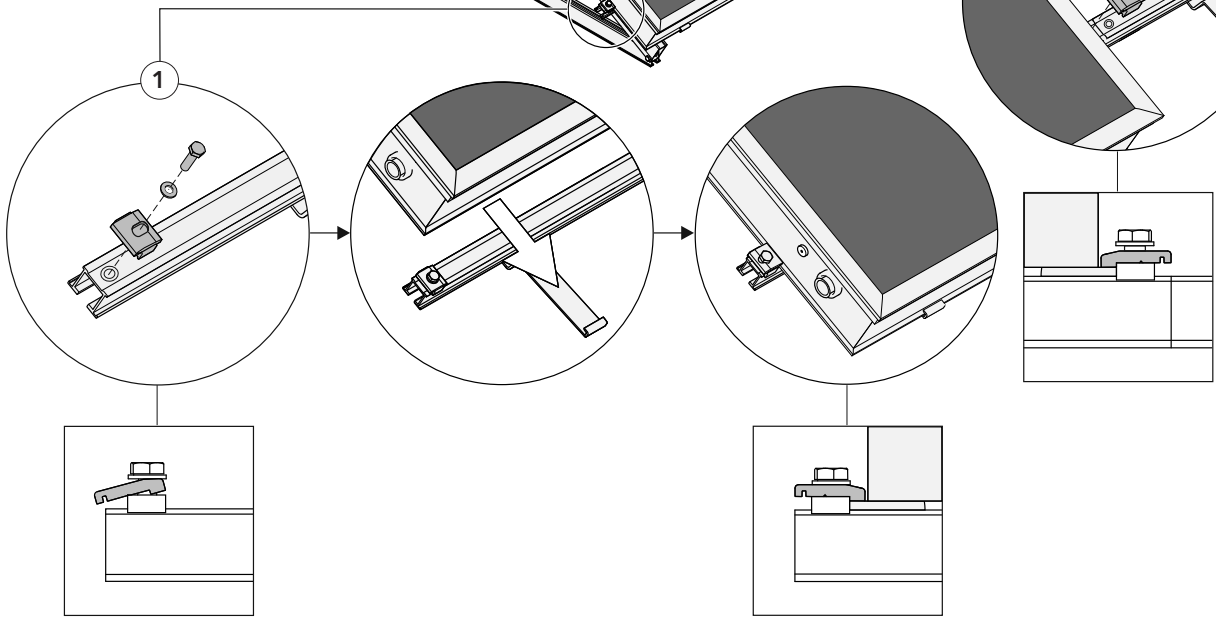
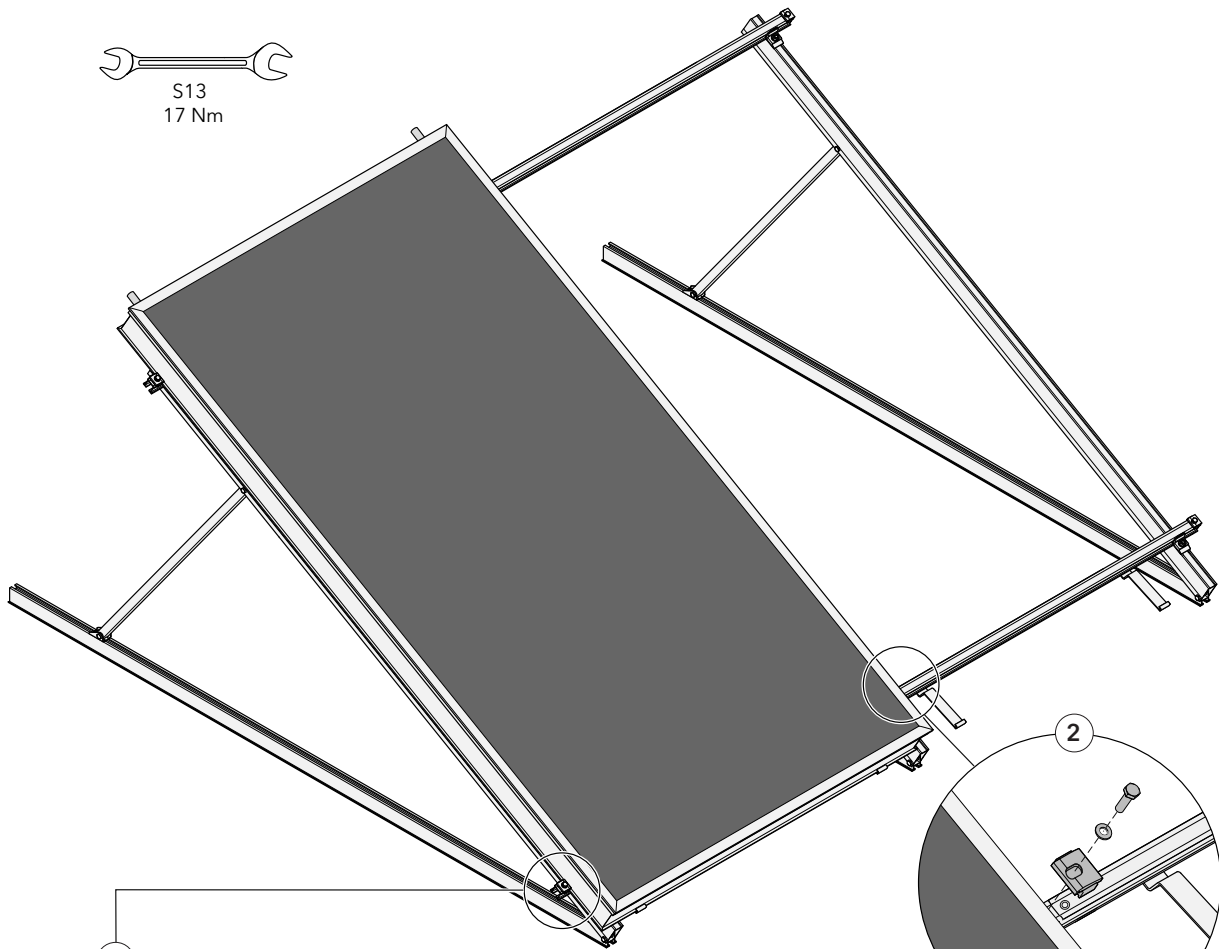
4 Horizontal Collector Installation

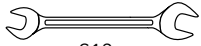


5 Vertical Collector Installation

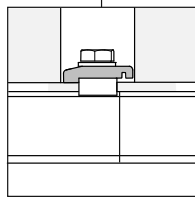
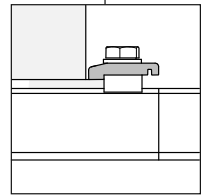
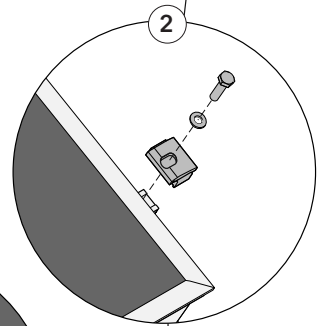
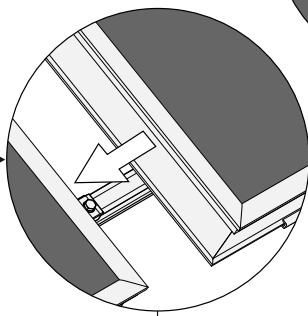
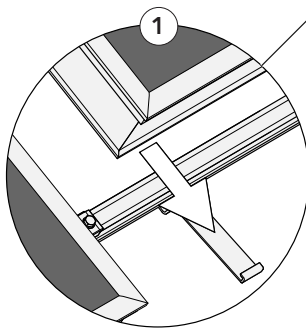
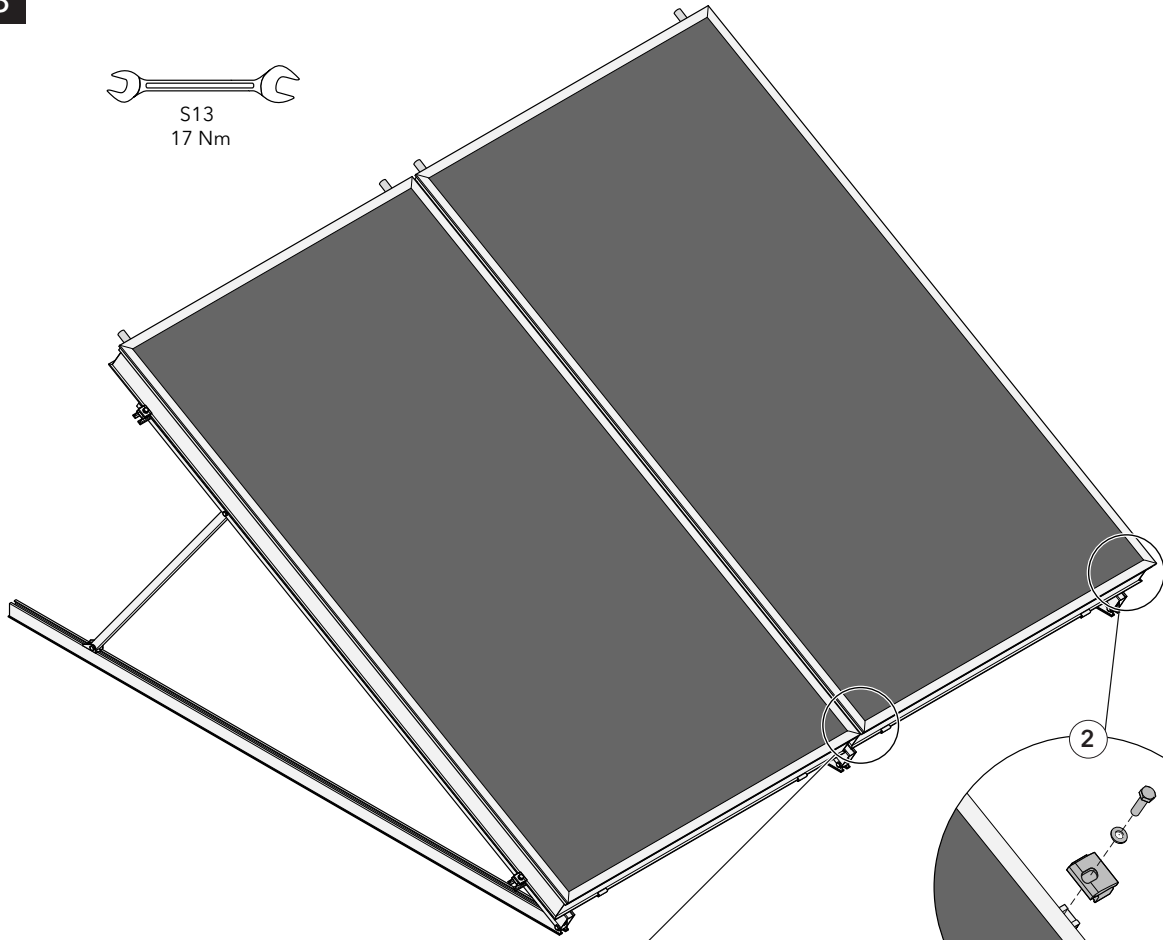



S13
17 Nm

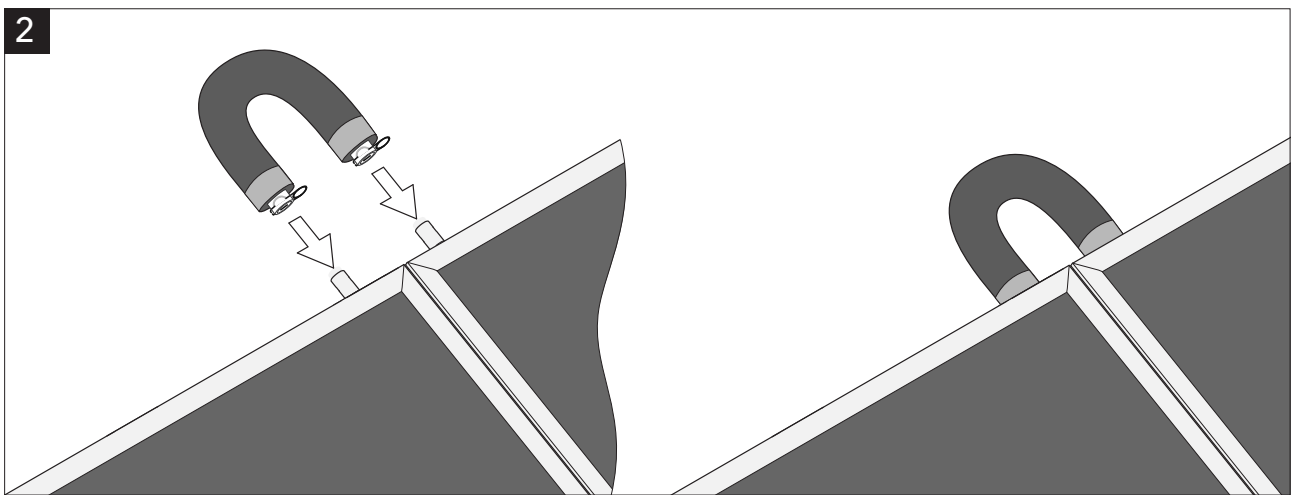
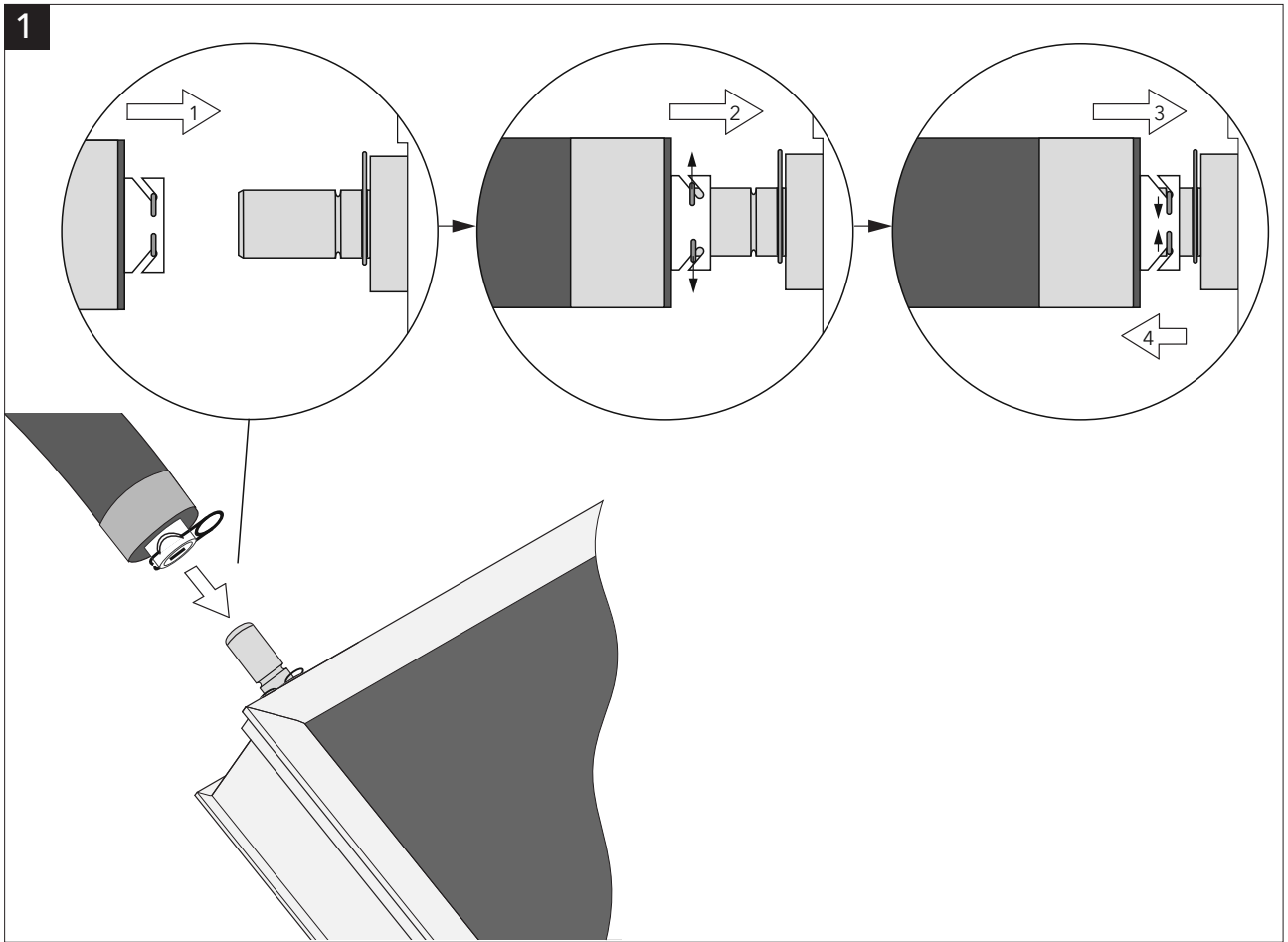


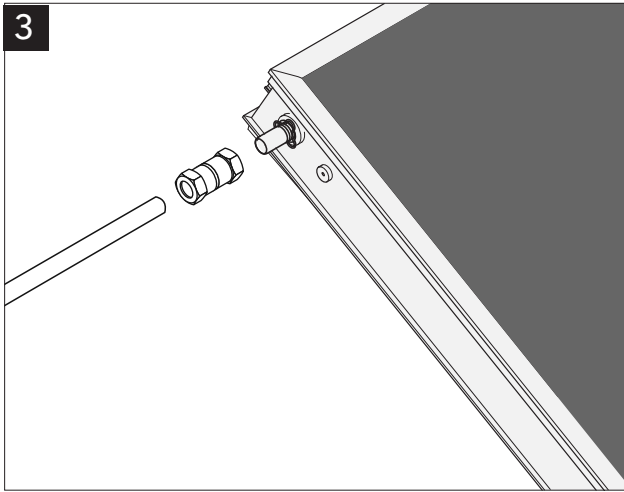


S13
17 Nm

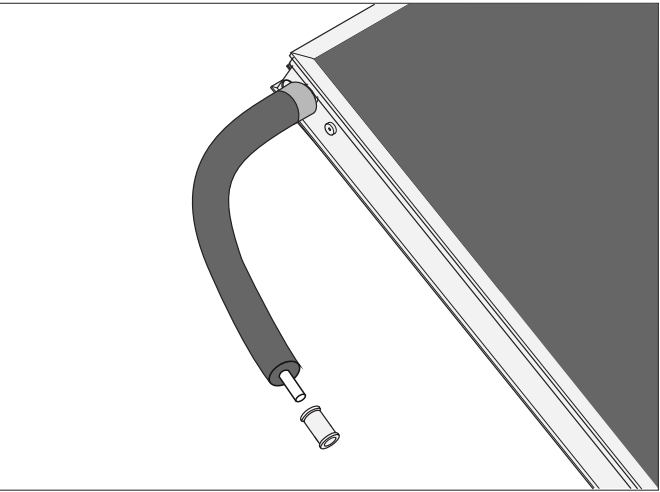


6 Collector Connections





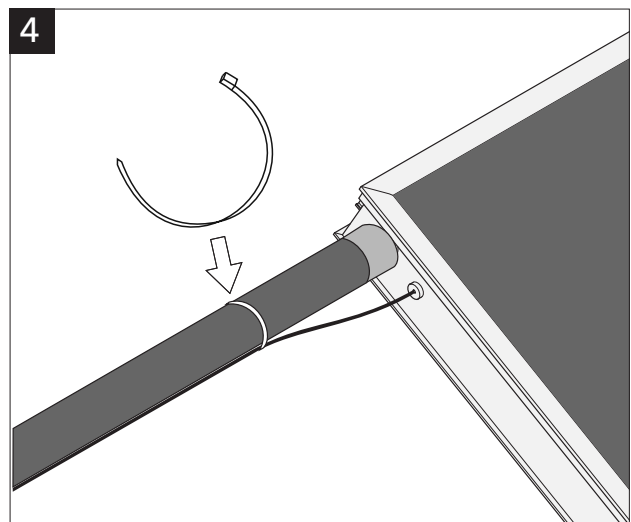
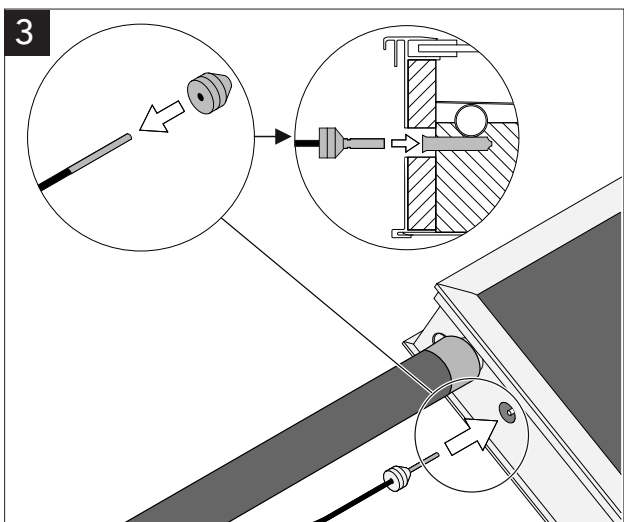
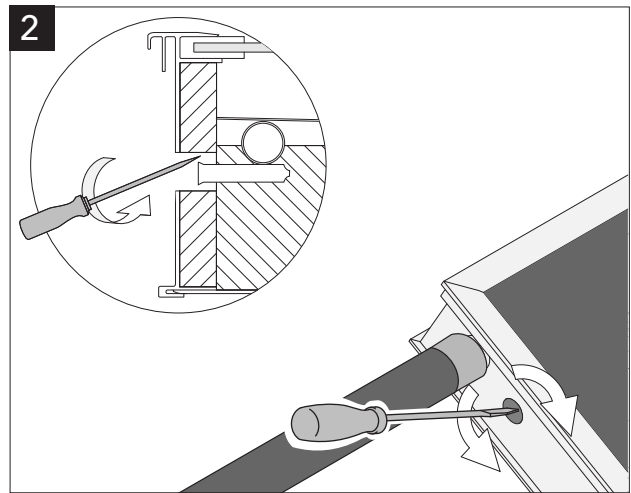
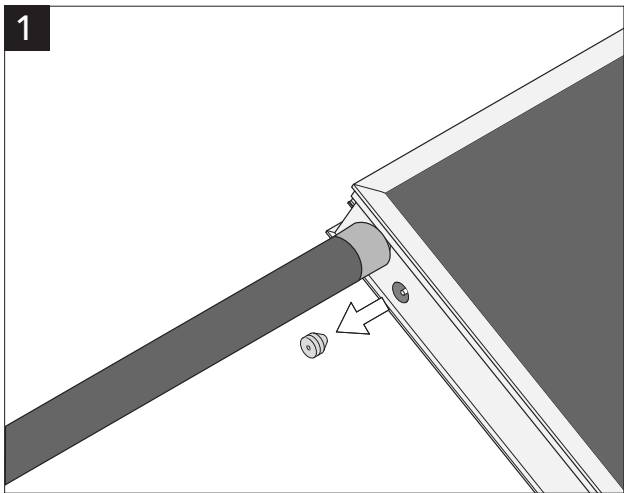
Direct connection to the solar circuit (18mm copper pipe) via screw-on compression ring fitting.



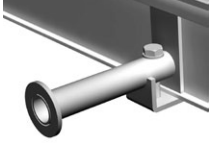



Connect the collector connection hose (stainless steel, 18 mm) to the solar circuit for example via double socket, compression ring coupling or solder connection. For soft solder connection to copper, make sure to use appropriate solder!



7 Collector Sensor Installation



8 Accessories

Accessory	Description
	2 collector handles for easy collector transport and handling
	Protection set against damage to the sensor cable from animal bites or bird pecking.
	Set of 2 with snap-on connection for toolless installation, 90 mm external, 900 mm length, for all common connection types
	Compression ring coupling for the direct connection of the collector to 18 mm copper pipe.

