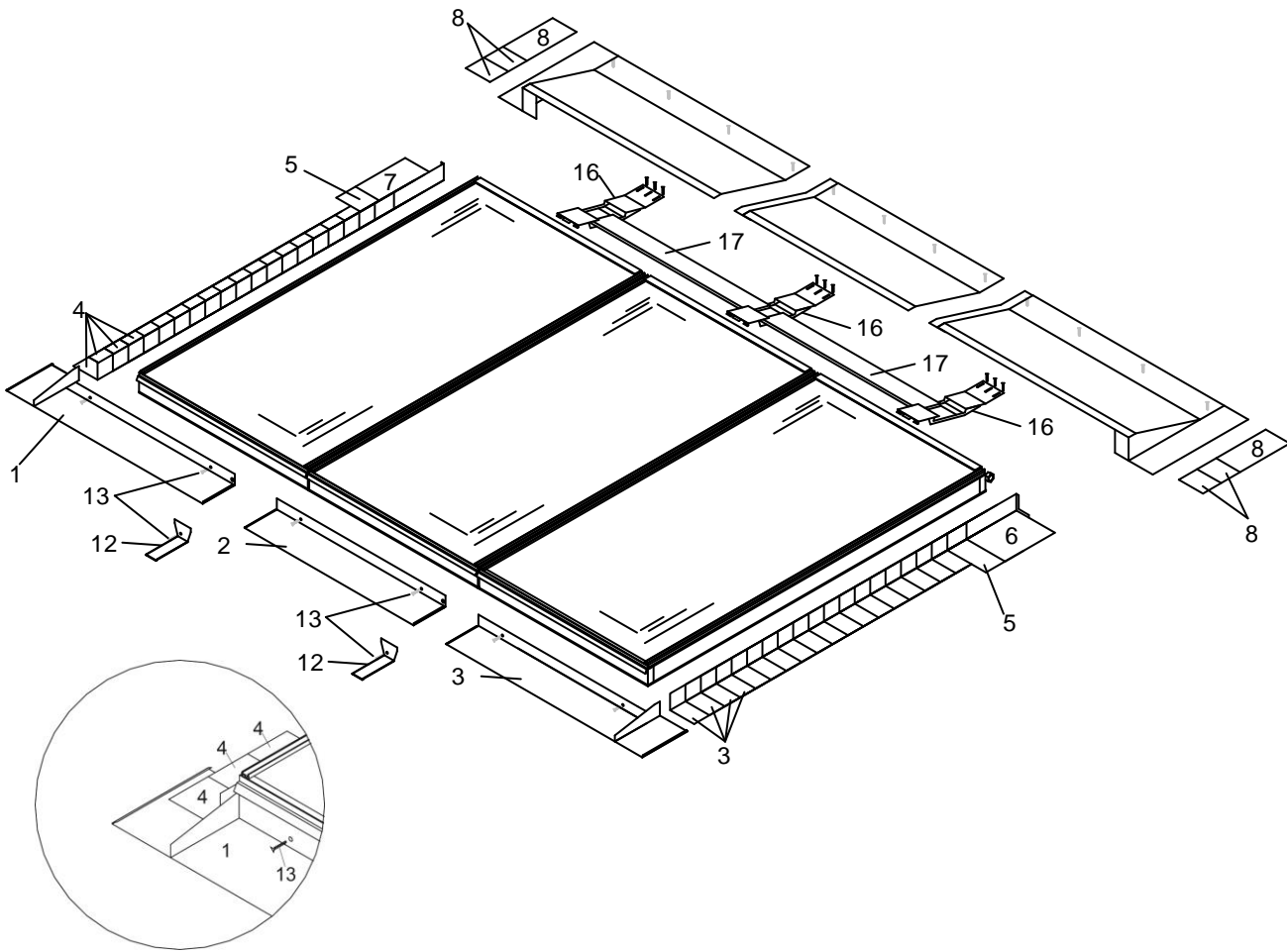




***Installation-instruction for flashing slates
for in-roof collectors topSol 22 / topSol 22M***

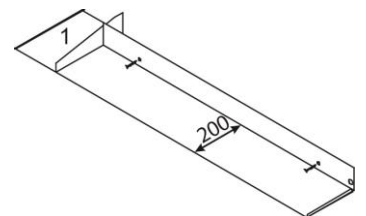


Installation-instruction for flashing slates for in-roof collectors topSol 22 / topSol 22M



The flashing is a weatherproof connection between the roof tiles and the solar collectors. It is made of powder coated aluminium sheet (RAL 7016). The flashing is easy to mount with the pre-formed parts and allows, using extension flashings, the installation of several solar collectors serially.

The flashing is suitable for slated roofs with an inclination of more than 23°.



In case the distances are too high additional roof battens have to be installed.

Pos.	Designation	1 Panel	2 Panels	1 Ext.
1	Lower left sheet	-	1	-
2	Lower middle sheet	-	-	1
3	Lower right sheet	-	1	-
4	Small side sheet	36	36	-
5	Large side sheet	2	2	-
6	Right hand gutter upper section	1	1	-
7	Left hand gutter upper section	1	1	-
8	Supporting sheet	6	6	-
9	Top left sheet	-	1	-
10	Top middle sheet	-	-	1
11	Top right sheet	-	1	-
12	Connection sleeve	-	1	1
13	Screw with washer 4,5 x 25 mm	6	13	7
14	Lower sheet single collector	1	-	-
15	Top sheet single collector	1	-	-
16	supporting sheet	1	2	1
17	wooden supporting board	-	1	1

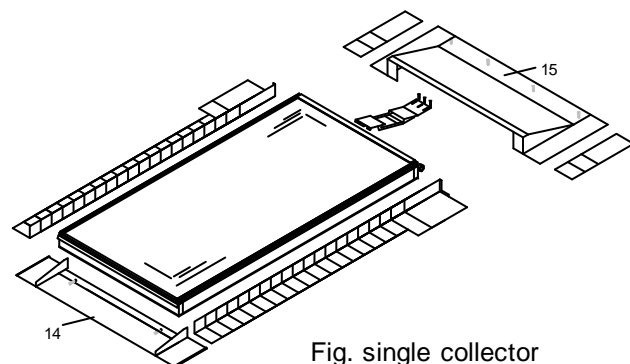


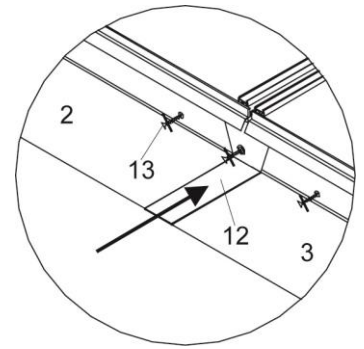
Fig. single collector



Installing instruction for flashing slates for in-roof collector topSol 22 / topSol 22M

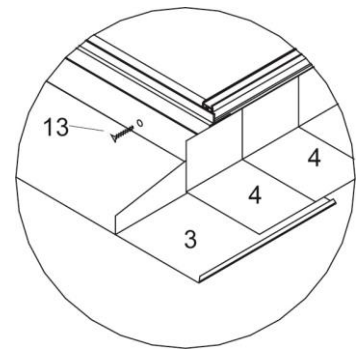
Installing – step by step:

1. The given distances between the roof batten and the collector have to be considered. The lower left sheet (pos. 1) of the flashing has to adjoin the outer edge of the collector completely and is fixed with two sealing screws to the wooden frame of the collector.
2. (only valid for more than 2 collectors) Fit the lower middle sheet (pos. 2) directly to the collector with 2 screws. **ATTENTION! The lower middle sheet has the same width as the collector.**

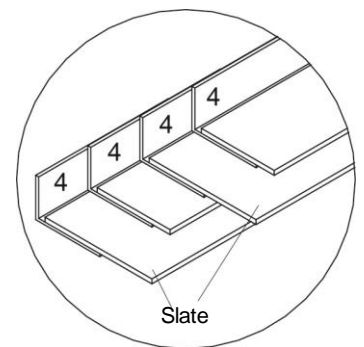


ATTENTION! The lower sheets must fit horizontally linearly to the collector! Between the lower sheets there must be a gap of about 8 mm. This gap is necessary for compensating the expansion of the aluminum.

3. Slide the connection sleeve (pos. 12) onto both lower sheets where they abut to cover the expansion gaps screwing them to the lower edge of the collector.
4. Install all lower sheets and connection sleeves in this manner.
5. The lower right sheet (pos. 3) has to adjoin the outer edge of the collector and is fixed with 2 screws (pos. 13) directly at the collector. The connection sleeve is installed and fixed like mentioned above.



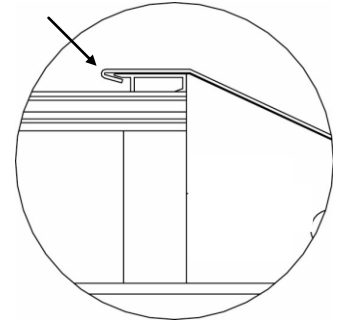
6. The small side sheets (pos. 4) are installed and fixed together with the roof covering – beginning at the bottom. Fit one side sheet under each slate. On the top of the collector the different side sheets have to be fixed. First the large side sheet (pos. 5) is installed above the small side sheets. Then the right and left hand gutters upper section (pos. 6, 7) are installed. They have to overlap about 2 – 3 mm or at least have to be flush with the upper edge of the collector.
7. The supporting sheet (pos. 16) has to be hooked in at the upper collector profile and fixed on the rafter behind using the screw. The supporting sheets are always installed in the central of the collector. You need one supporting sheet for every collector. If necessary install an additional rafter. The wooden supporting board is hooked in the supporting sheet (pos. 17). This board serves as base for the top sheets of the flashin (pos. 8)





Installation-instruction for flashing slates for in-roof collectors topSol 22 / topSol 22M

8. Slide the left top sheet (pos. 9) over the left side gutter (pos. 7). Take care that the upturn of the side gutter (pos. 7) is covered by the top sheet. Slide the top sheet up to engage the lip on the aluminum profile with the lip on the collector. Fix the top sheet at its upper end (2 - 3 cm from its edge) at the roof batten using 4 screws. If necessary install an additional roof batten before. Now the supporting sheets (pos. 8) are installed together with the slates (in the way the side sheets (pos. 4) were installed before).



ATTENTION! DO NOT deform the aluminum flashings as this may allow water to penetrate!

3. Slide the top middle sheet (pos. 10) into the given nut of the top left sheet and click on the upper profile of the collector. Fix it at the back edge using 4 screws.

10. Place the top right sheet (pos. 11) over the right hand gutter upper section (pos. 6). Take care that the upturn of the side gutter (pos. 6) is covered by the top sheet. Click the top sheet into the upper collector profile and fix it at the back edge using 4 screws. Now the supporting sheets (pos. 8) are installed like mentioned before.

