



***Installation manual – arrangement above each other for topSol 22 / topSol 22M***

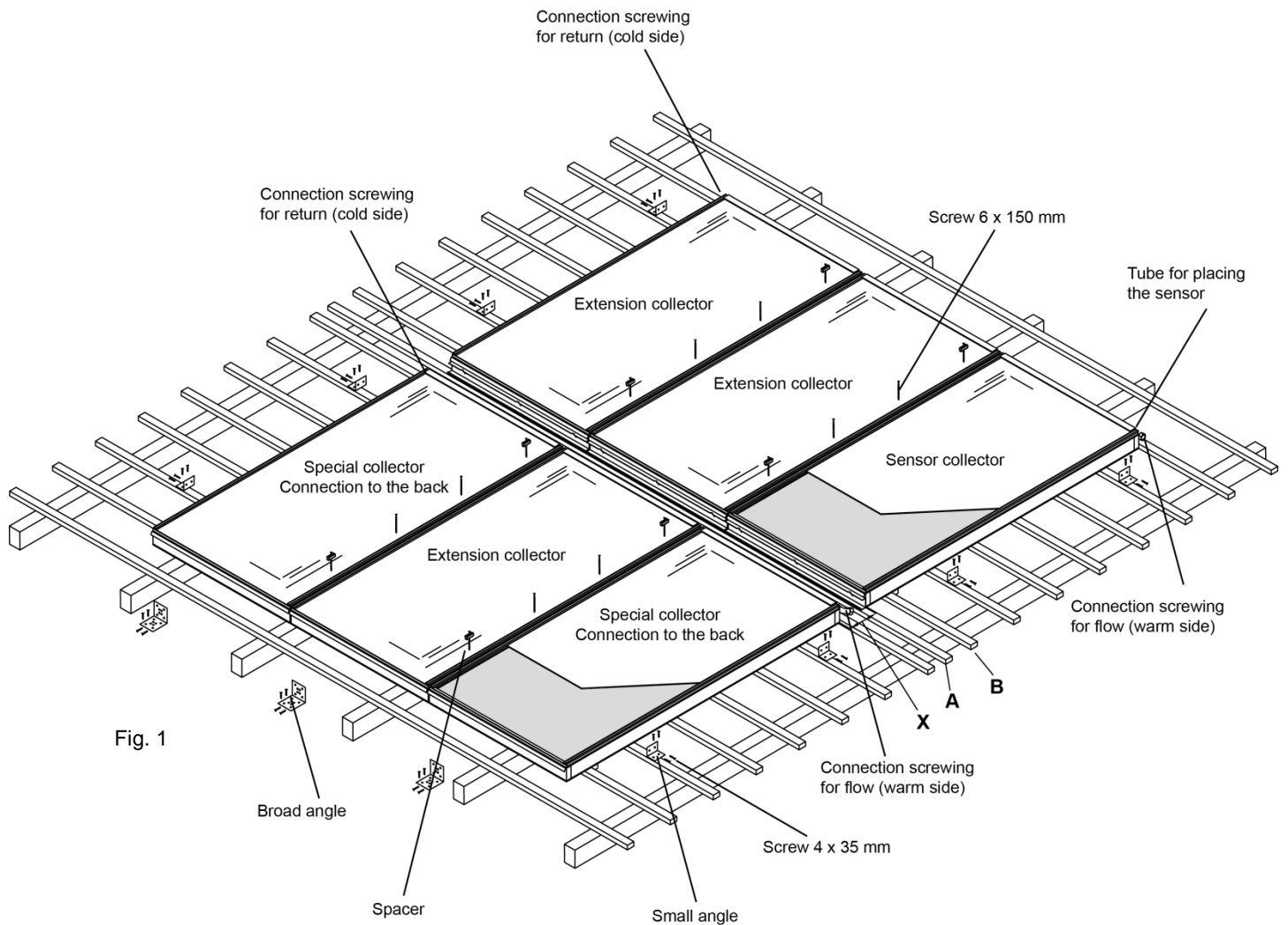


Fig. 1

1. Determine the position of the collectors on the roof. Remove the tiles in this area (+1 m around the collectors). Please note, that the upper part of the flashing should be at least 2 tile rows below the ridge!
2. There are straps to carry on the upper and under side of the collector. **Never carry the collector by the connecting sockets!**
3. First install the lower collector row on the cleared part of the roof. **Please note, starting with the special collector (with connections to the back) on the right side of the array.** There is a roof batten on the back of each collector which hooks over an exiting roofing batten. This prevents the collector from sliding down the roof until it is fixed (Fig. 1).
4. The extension collectors are also placed on the roof battens. Slide them from the left side to the next collector until the joining edges interlink (see Fig. 1 and Fig. 2). **The last collector of the lower collector field is the other special collector (with connections to the back).**
5. Every collector is fixed on the lower side using a broad mounting angle.
6. The hydraulic connection is made by connecting the unions between the collectors.  
**NOTE! Care should be taken to avoid the connecting pipes rotating, which could damage the absorber in the collector!**
7. Using a flexible connection set (optionally available) the connection of the lower collector field to the interior is made.

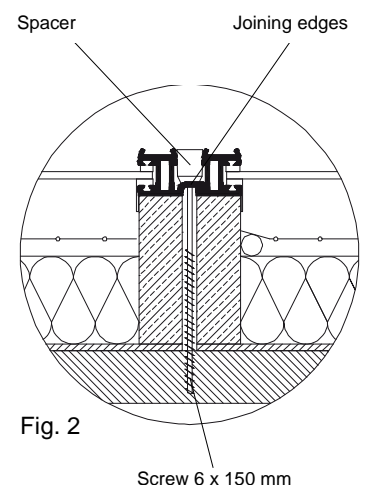
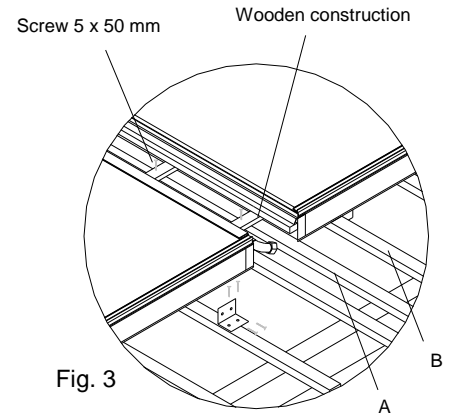
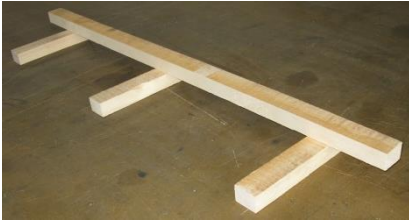


Fig. 2

9. For the assembling of the upper collector-row on the roof 2 additional roof battens have to be installed on site (Fig. 1 and Fig. 3, A + B). The roof batten B has to be fixed in a way that the distance between the collector-rows measures 200 mm (length X, Fig. 1). Between the upper and the lower row the supplied wood-construction has to be placed. Each distance-rail is fixed 3 times on the additionally mounted roof-batten with screws of dimension 5 x 50 mm (see Fig. 1 and Fig. 3). Afterwards the upper collector-row can be fixed.



10. Using a flexible connection set (optionally available) the connection of the upper collector field to the interior is made. **Please note, that the collector on the right side is the flow (warm side) and the left collector is the return (cold side) – see Fig. 1!**
11. Now the density of the solar system is tested. Therefore a pressure test with at least 12 bar is made. Check all solderings and connections for about 20 minutes. **NOTE! If there is a risk of freeze the system has to be filled with a mixture of water and antifreeze as the solar system can't be emptied completely!**
12. Using the torx screws 6 x 150 mm and the long slots the collectors are fixed at the roof battens (Fig. 1 and 2). **NOTE! For achieving the correct distance between the collectors the spacers have to be placed (Fig. 1, 2 and 4)!**
13. Using the small mounting angles the collectors are fixed twice at the roof battens on the left and the right side of the complete collector field (Fig. 1).
14. Fix the moulded cover at the lower cover profile using the attached self drilling screws 3,9 x 13 mm, for covering the gaps (Fig. 5).
15. Now clips the pre-drilled middle cover profile on the upper side of the collector (Fig. 6 and 7). Start "clipping" at the upper part of the profile using a rubber mallet until it joins completely. **NOTE! The lateral cover profiles are installed after the installation of the lateral flashings!**
16. Fix the cover profiles at the collector using the self drilling screws 4,2 x 22 mm and the pre-drilled hole at the upper side of the collector (Fig. 7).
17. The collector sensor packed to the controller (sensor with red silicone cable) has to be inserted into the rubber tube which is installed at the sensor collector, until to the rendering on the sensor tube.

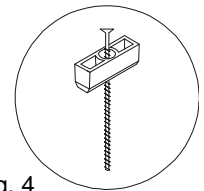


Fig. 4

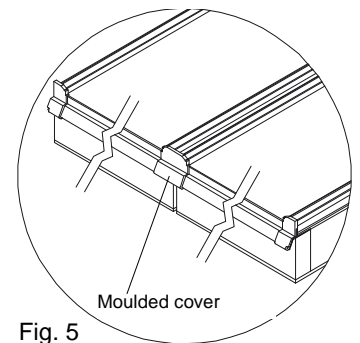


Fig. 5

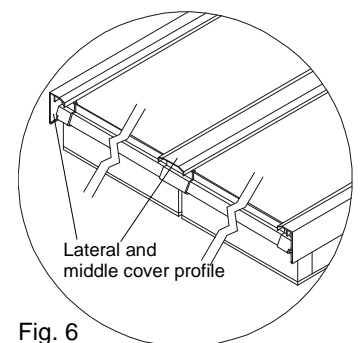
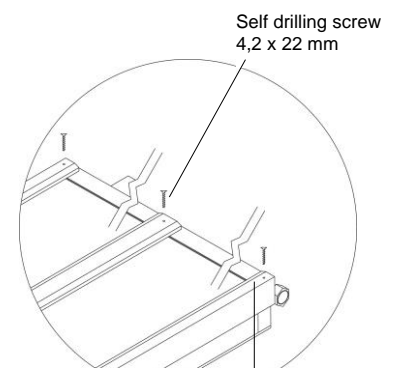


Fig. 6



The cover profiles are flush with the upper part of the collector and protrude on the lower part of the collector.

### ATTENTION!

If the sun is shining during the installation of the collectors high temperatures may arise – especially at the collecting pipe and the screw connections!

Take adequate measures for preventing accidents for activities made on the roof! Consider the valid accident prevention regulations!

Secure the area below the installation site!