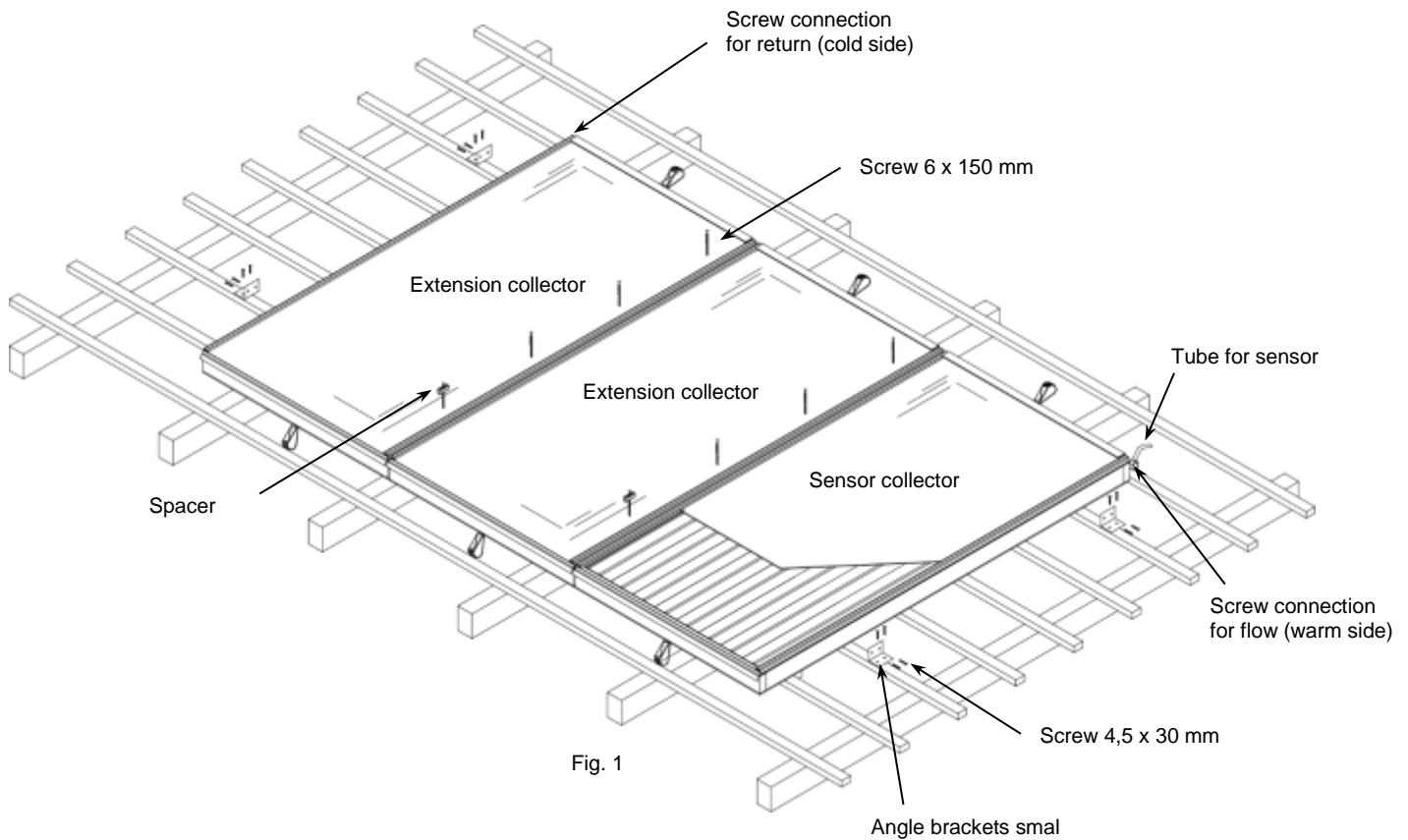




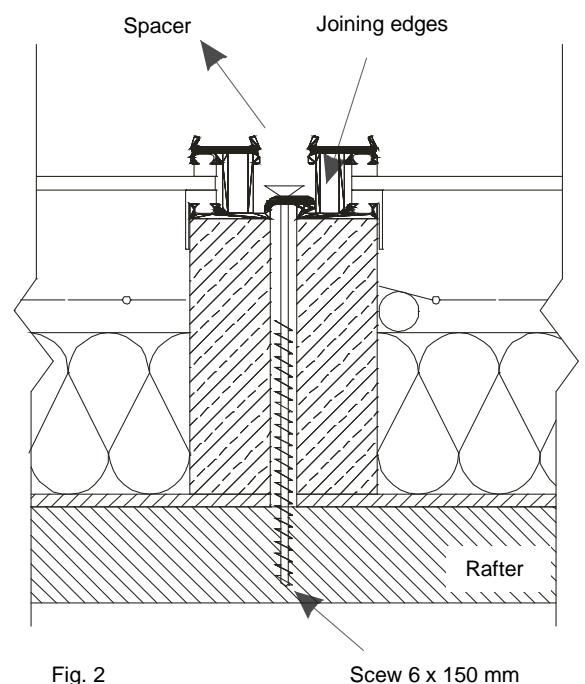
# **Installing instruction for in-roof collectors topSol 22 / topSol 22M**



## Correct installation – step by step:

**Please read before installation our General Assembling- and Safety instructions carefully!**

1. Choose the situation of the collector-field. Remove the roof tiles/slates from the chosen area on your South facing roof (allow 1 m on each side of the panels). 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 at the connecting sockets!**
3. Place the panels on the cleared part of the roof. At the beginning, install the sensor collector on the right hand side of the array (this collector is marked with a sticker at the top right corner). On the back of each collector is a lath which hooks over a roofing batten. This prevents the collector from sliding down the roof until it is fixed.
4. Additional collectors are placed on the roof. Slide them from the left side to the next collector until the joining edges interlink (Fig. 2).



# Installing instruction for in-roof collectors topSol 22 / topSol 22M

5. The hydraulic connection is made by connecting the unions between the collectors (see Fig. 3 for topSol 22 and Fig. 8 for topSol 22M).

**Note! Care should be taken to avoid the connecting pipes rotating, which could damage the absorber!**

6. With the flexible connection set of GASOKOL (optionally available) the connection into the roof is made. Note that the panel on the right hand side is the hottest – this is the flow to the tank. The collector on the left hand side is the return from the tank.

7. The collectors should now be checked for leaks. Test to at least 12 bar with water/antifreeze. Each connection must be checked over a period of at least 20 minutes.

**Note! It is not possible to drain the collector therefore a water/antifreeze mixture (CorroStar) must be used!**

8. Fixing between the collectors is by means of 6 x 150 mm screws through the elongated holes in the aluminum profile to the roof rafters/noggins (Fig. 1, Fig. 2).

**Note! To keep the right distance between the collectors it is necessary to use the black spacers (Fig. 1, Fig. 2, Fig. 7)!**

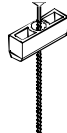


Fig. 7

9. The outside collectors are fixed on their edges to the roof rafters/noggins with the enclosed angle brackets (Fig. 1, Fig. 3).

10. The moulded covers are fitted now with screws (3,9 x 13 mm) to the aluminium profile at the bottom of the collectors to cover the gaps between the collectors (Fig. 4).

11. Afterwards the middle aluminium-cover-strips can now be fitted (Fig. 5).

**Note! The countersunk hole in the strips must be at the top of the cover (Fig. 6)! Tap with the rubber mallet downwards the collector until the cover strip clicks into place.**

**Note! The 2 side strips are mounted after fitting the flashing!**

12. Fix the cover strips with the screws of dimension 4,2 x 22 mm through the pre-assembled hole to the collector (Fig. 6).

13. The collector sensor of the solar controller is inserted into the tube till to the marked position which is situated on the very right hand collector.

14. Special arrangement for more than 9 topSol 22 resp. 5 topSol 22M in a row – optically one field, but hydraulically separated.

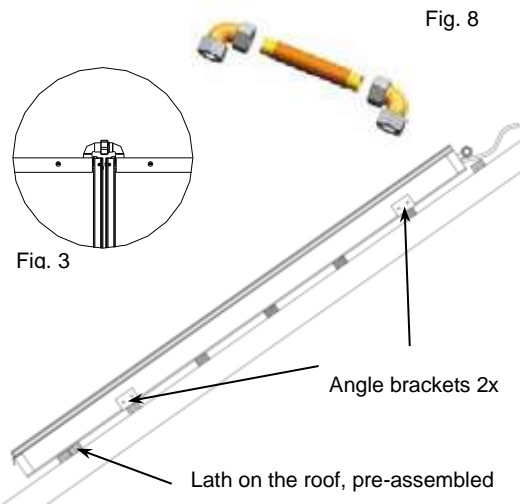


Fig. 8

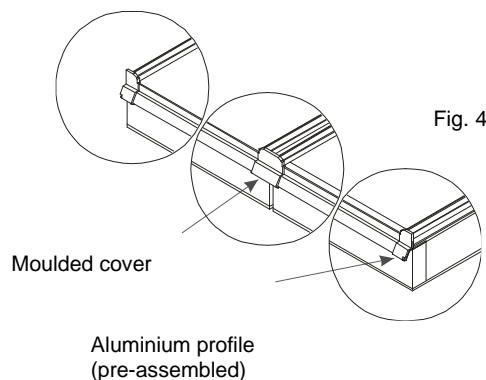


Fig. 4

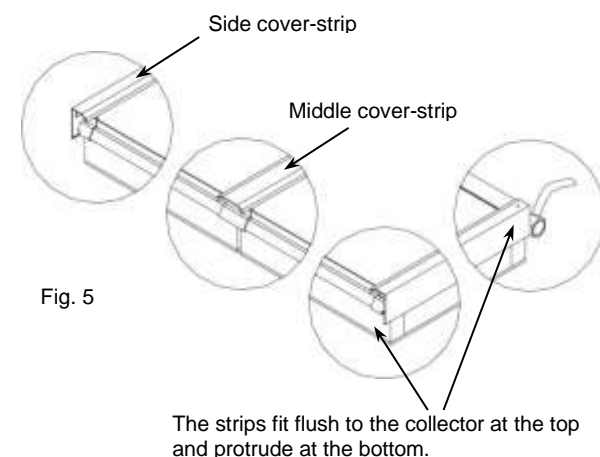


Fig. 5

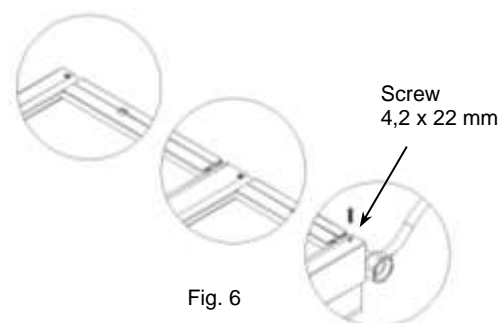


Fig. 6