

### Installation instructions for Extra gutters

- **Thermal movement**

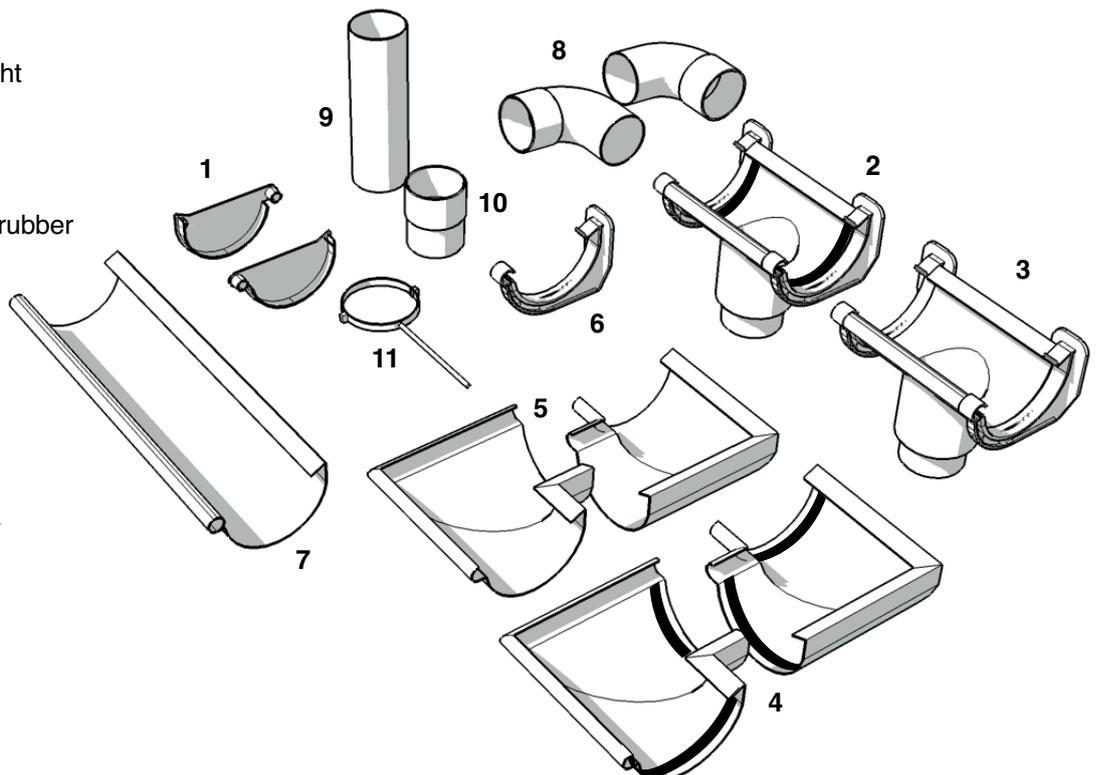
Under the influence of temperature-fluctuations, PVC-gutters will expand or contract. The exact ratio is 0,06 millimeters change per meter per 1°C change of temperature. For example: If the temperature rises 10°C, the length of a gutter of 4 meters will increase by 2,4 millimeters.

- If you use only rubber-fittings, this will not be a problem. The gutter has enough possibilities to absorb this change. However, if you use glue-fittings, you should also use at least 1 rubber fitting per 8 meters of gutter.

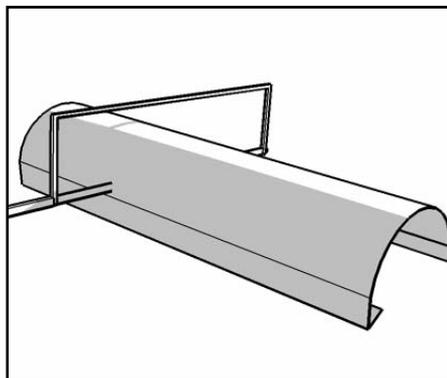
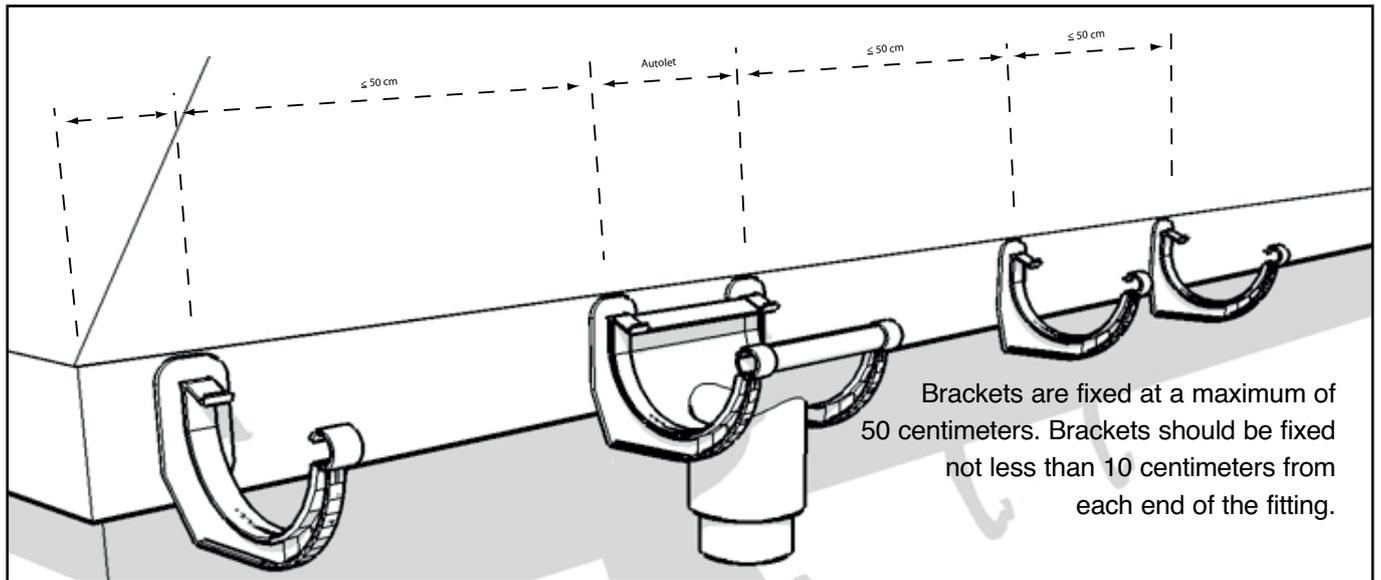
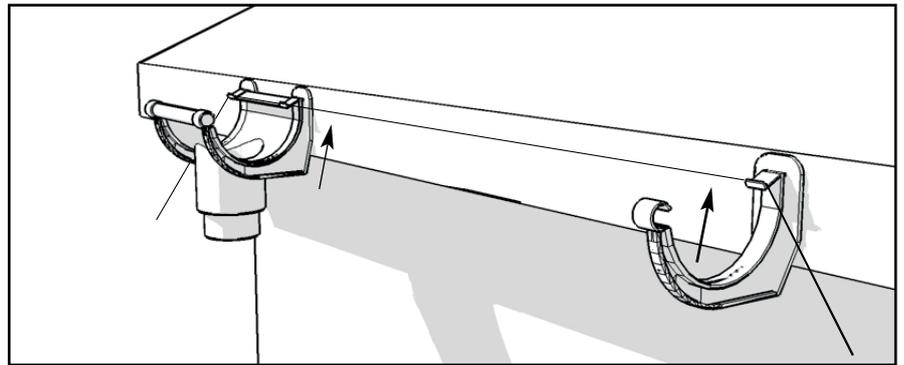
- **Slope**

Ofcourse, the water must always flow to the outlet. That means your gutter should have a 'slope' of 2,5 millimeters per meter towards the outlet.

- 1 ] stopend left/right
- 2 ] outlet rubber
- 3 ] outlet glue
- 4 ] in / out corner rubber
- 5 ] in / out corner
- 6 ] gutter bracket
- 7 ] gutter
- 8 ] elbow
- 9 ] downpipe
- 10 ] pipe connector
- 11 ] pipe bracket

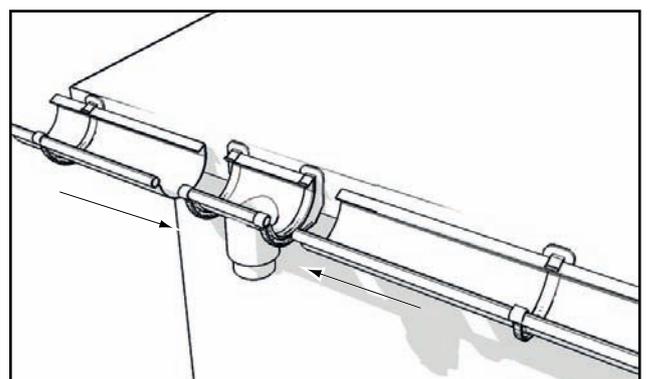
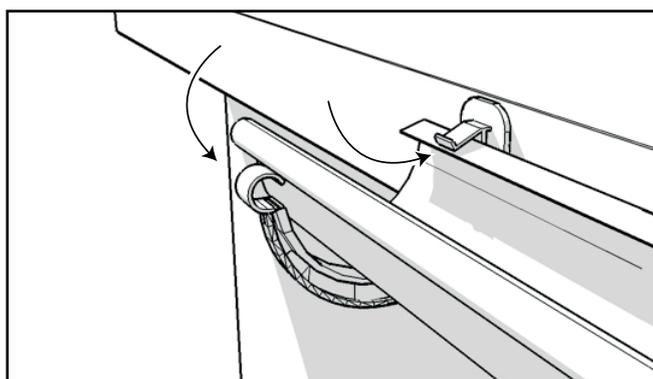


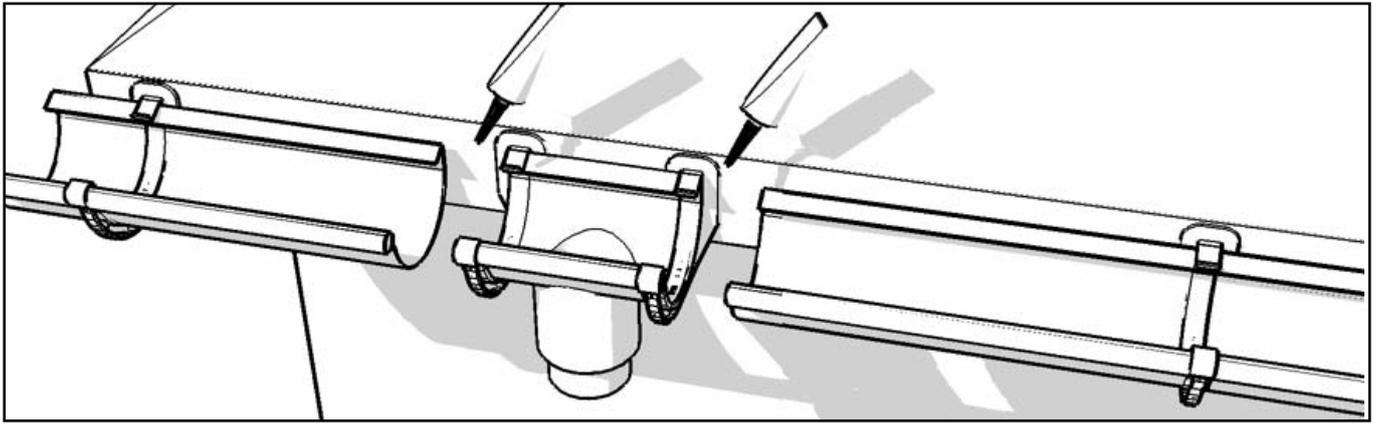
Determine the position of the outlet. That is automatically the lowest point. After that, you can also determine the highest point. Install a bracket at the lowest and one at the highest point. A string secured between both brackets will assist in installing the remaining hangers.



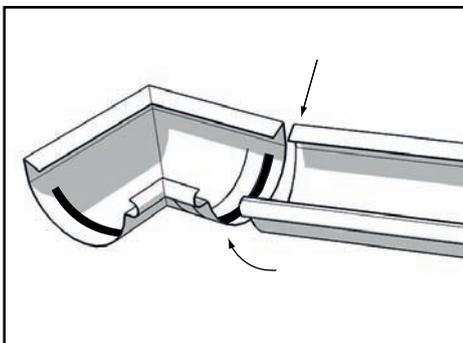
The gutters have to be cut in the correct length. PVC-gutters can be cut easily with a small saw. Make sure the cut is straight and clean. If necessary, you can clean the cut with a knife or a piece of sandpaper. Also wipe off remaining sawdust from the gutter.

If you use PVC hangers you first insert the backside of the gutter (1) into the hanger, then the frontside (2). If you use metal hangers, bend the metal strips inwards (3). Do not bend them too tightly, because that will obstruct the free movement of the gutter in the hangers.





If you use glue-fittings, the gutter can be glued into the fittings. Make sure the surface is clean before applying the glue. The seam in which the gutter is stuck, must be filled with glue. Afterwards, apply some additional glue along the inside seam.

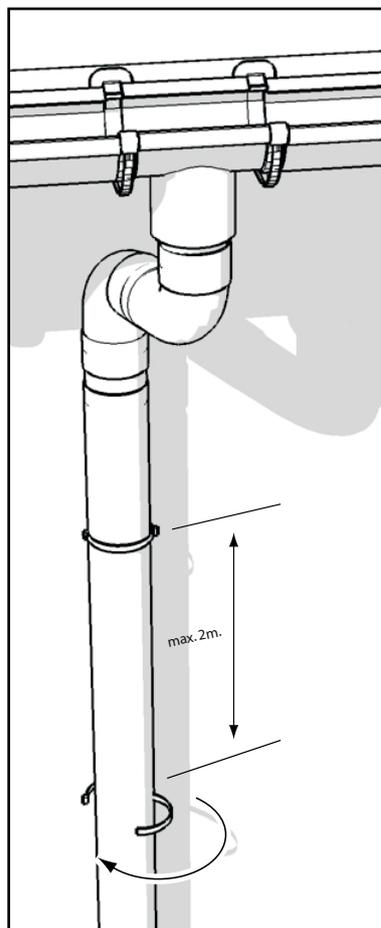
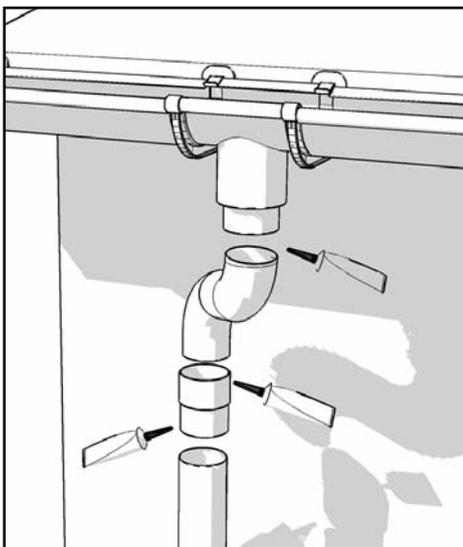
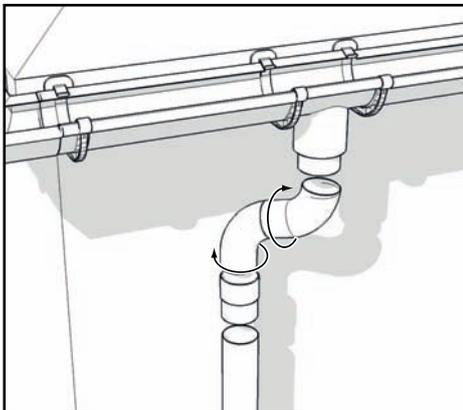


**Important: Use only PVC-gue!**

**Rubber-joiners and rubber-outlets also have to be fixed to the wall, boarding or rafter.**

If you use rubber-fittings, the gutter can be stuck into the fittings. First you 'click' the backside of the gutter into the fitting, then the frontside. Markings on the inside indicate the gap that must be left to accommodate thermal movement.

The rubber seals are pre-lubricated, however additional silicone may aid installation. With elbows you can guide the downpipe from the gutter outlet to the wall. Connect the downpipe and elbow by using glue.



Fix the pipe brackets at a maximum of 2 meters. Push the pipe into the brackets and close them.