

### Installation instructions for GD gutters

- **Thermal movement**

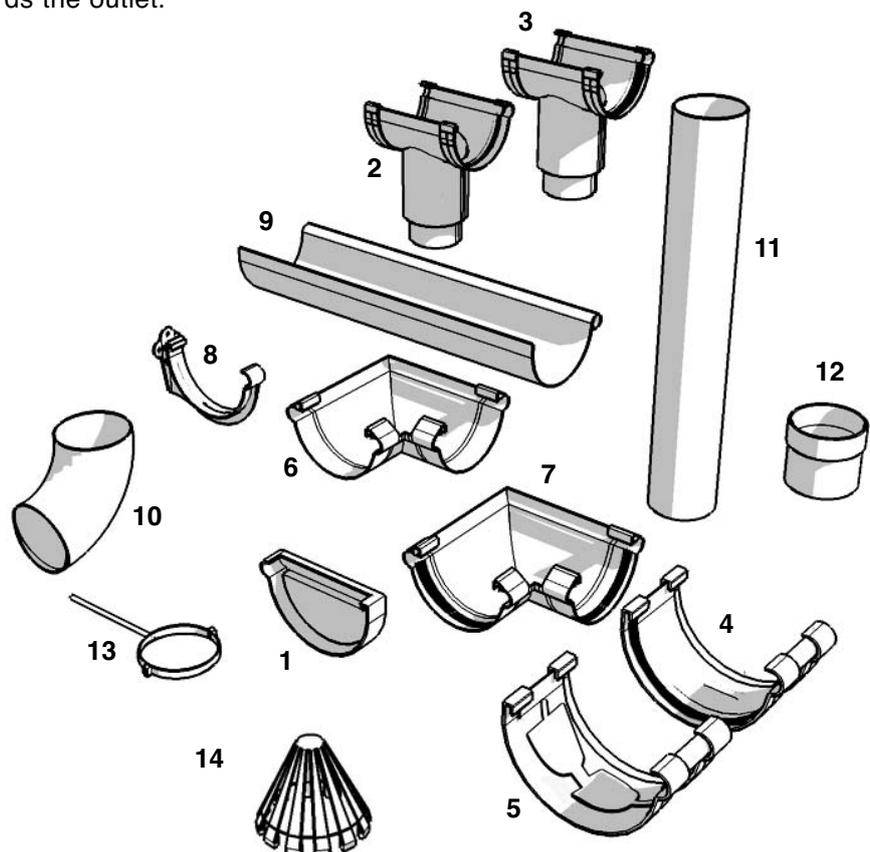
Under the influence of temperature fluctuations, PVC gutters will expand or contract. The exact ratio is 0,06 millimeter change per meter per 1°C change of temperature. For example: If the temperature rises 10°C, the length of a gutter of 4 meters will increase by 2,4 millimeter.

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

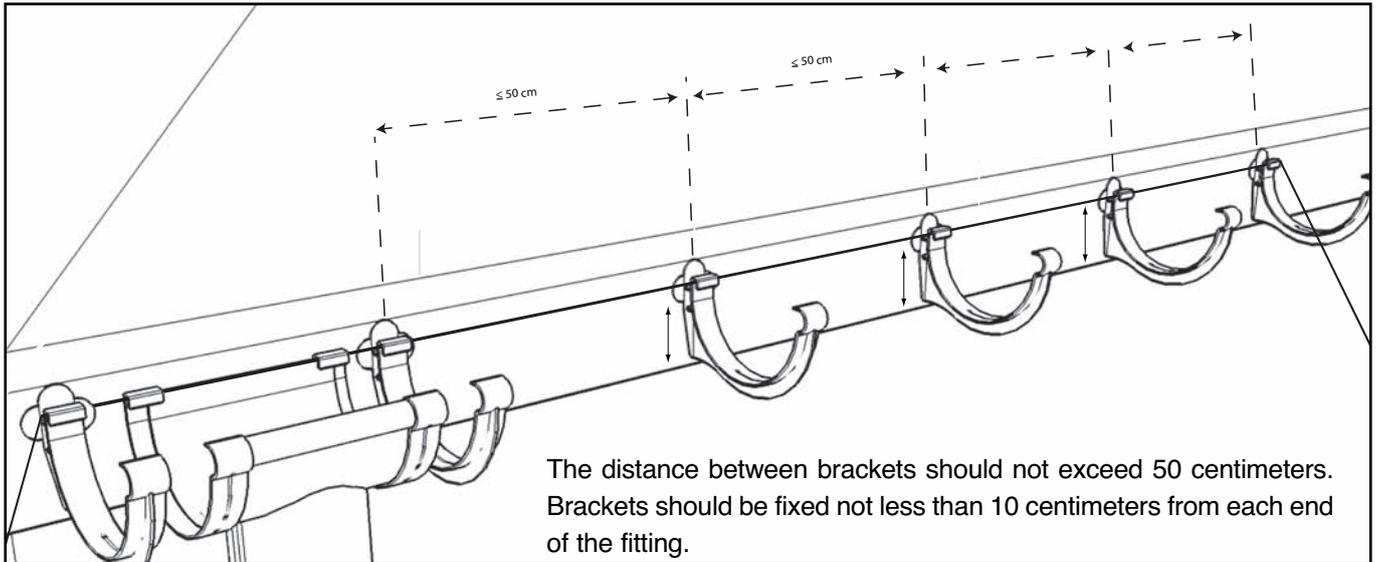
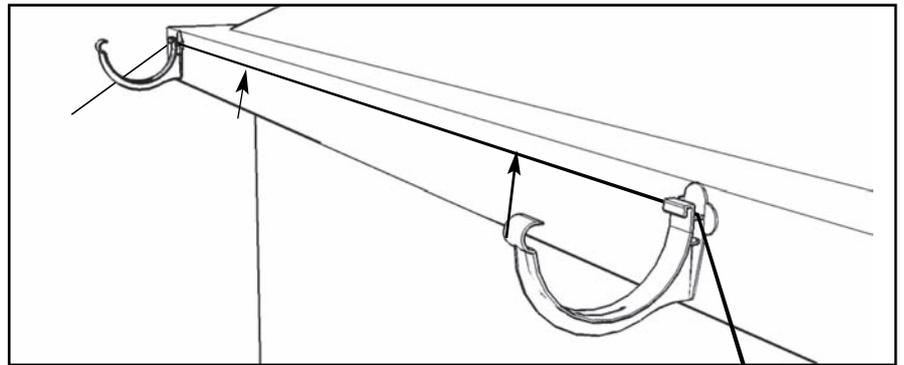
- **Slope**

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

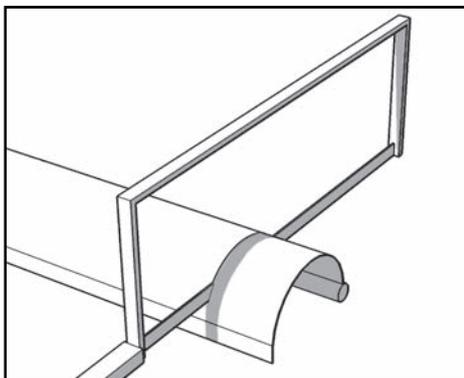
- 1 ] stopend left/right
- 2 ] outlet glue
- 3 ] outlet rubber
- 4 ] joiner rubber
- 5 ] joiner glue
- 6 ] universal corner glue
- 7 ] universal corner rubber
- 8 ] gutter bracket
- 9 ] gutter
- 10 ] elbow
- 11 ] downpipe
- 12 ] pipe connector
- 13 ] pipeclip
- 14 ] leaf protector



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 brackets.

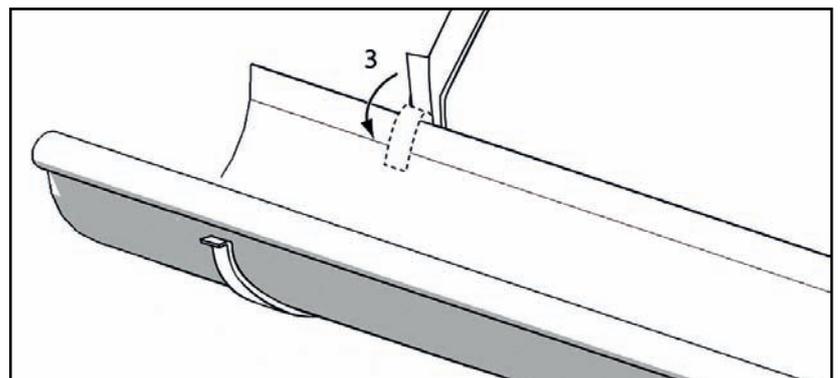
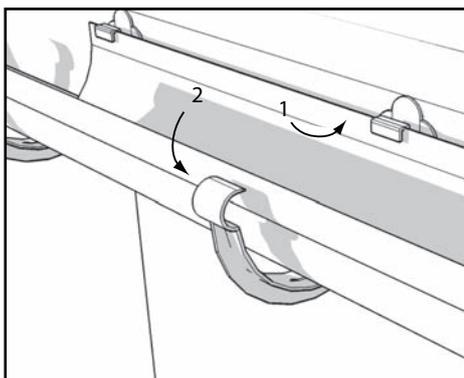


The distance between brackets should not exceed 50 centimeters. Brackets should be fixed not less than 10 centimeters from each end of the fitting.



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.

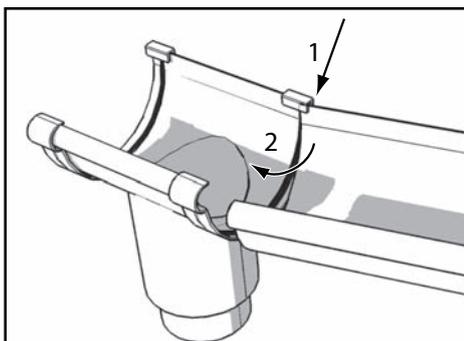
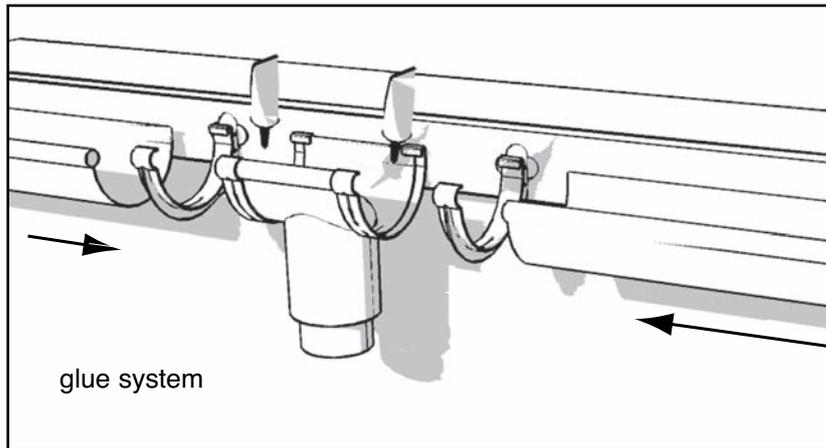
If you use PVC brackets you first insert the backside (1) into the brackets, then the frontside (2). If you use metal brackets, bend the metal strips inwards (3). Do not bend them too tightly, because that will obstruct the free movement of the gutter in the brackets.



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-glu!**

**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 (1), then the frontside (2). 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 clips at a maximum of 2 meters.

Push the pipe into the clips and close them.

