

Installation Guide

Congratulations with your good choice!

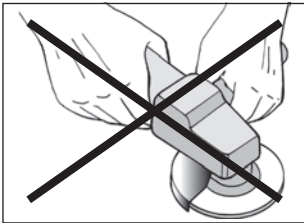
We would like to thank you for choosing our roof drainage system.

When installed and maintained correctly, you will have a gutter system that will last for many years to come. Read more about our extensive warranty on www.wijo.se

This guide will help you to install our products quickly and without any problems. You will need the following tools for the installation:

Folding rule, pencil, paper, hacksaw, pliers, screwdriver, sealant for plate, and possibly also a piece of string, spirit level and a bending tool for hooks - available at your dealer.

Take time to read through the whole installation guide before starting the actual installation work. Many steps can be prepared beforehand on the ground before installation on the building.

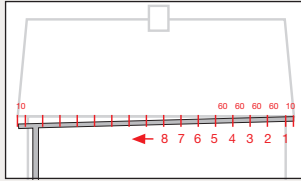


NOTE Never use an angle grinder.



1. Gutter hook

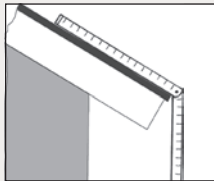
The gutter hooks holding the gutter are placed at 60 cm intervals on a slope. The first and the last hooks are fastened about 10 cm from the end of the gutter (*Picture A*).



Picture A

Gutter slope

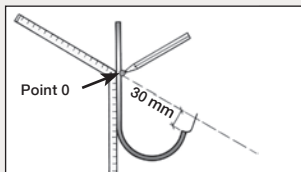
The gutter should have a slope of 3-5 mm/m along the fascia board, provided that the fascia board is horizontal. Check this using a spirit level. If the fascia board is not horizontal, you must compensate for this when calculating the gutter slope. The gutter should slope towards the down pipe. The gutter hooks are bent in increasing lengths to achieve the correct slope of the gutter.



Picture B

Bending of gutter hooks

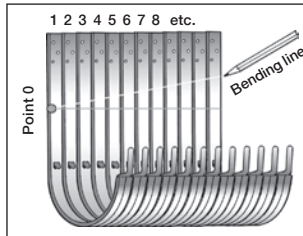
Before bending the first gutter hook you need to find out the roof pitch. Place a folding rule parallel to the roof and let it hang down vertically (*Picture B*). Copy the angle of the folding rule on a piece of paper and extend the line representing the roof (*Picture C*). Place a hook against the vertical line on the paper and position it so that the tip of the hook is 30 mm below the continuation of the roofline.



Picture C

The point at which the extended roofline intersects with the hook is the first bending mark, known as Point 0 (*Picture C*).

Line-up the other hooks alongside the one marked with Point 0 and draw a horizontal line from the first to the last hook (*Picture D*). The bending point on the last hook should be 3-5 mm x gutter length in meters above the 0-point line (e.g. for an 8 m long gutter the bending point should be 24-40 mm above the 0-point line). Then draw a line from this point to Point 0, which will indicate the correct bending point for each hook. It is best to use a special hook bender.



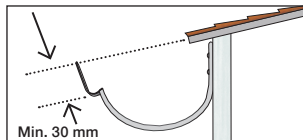
Picture D

Gutter hooks for fascia board

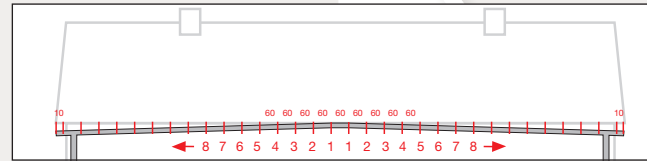
If the roof has a vertical fascia board the easiest way is to use a short or a compact hook which is fastened by screws on the fascia board (*Picture E*). If the fascia board is fixed at an angle you can use an adjustable gutter hook. See 9. Adjustable gutter hook.

Install the first hook so that the tip of the hook is at least 30 mm below the continuation of the roofline (*Picture E*). Fasten a piece of string at the gutter hook and fasten the other end of the string where the down pipe should be placed. Use a spirit level and make sure that the slope is 3-5 mm/m. Install the remaining hooks along the string.

If the roof is longer than 10 m you need one down pipe in each end of the gutter. The high point should be placed between the two down pipes and the gutter should slope from the high point down towards each of the down pipes (*Picture F*).



Picture E

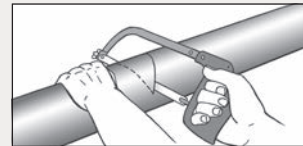


Picture F

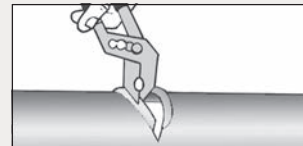
2. Gutter outlet

Before installing the gutter in the hooks you should prepare and assemble the gutter outlet on the ground.

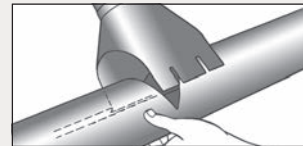
Mark the gutter at the point where the down pipe is to be located. Make two diagonal cuts with a hacksaw to create an aperture of approx. 10 cm (*Picture G*). Bend the edges of the gutter aperture down so that water will run off easily into the gutter outlet below (*Picture H*). Place the gutter outlet over the hole, ensuring that the hooked edge of the gutter outlet clips into the out-turned edge of the gutter. Press the gutter outlet against the gutter and fix it in place using the lugs on the rear (*Picture I & J*).



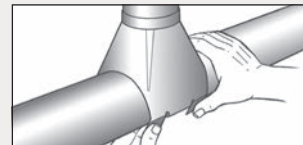
Picture G



Picture H



Picture I



Picture J

3. Gutter end

It is recommended to assemble the gutter end on the ground before installing the gutter. Fit the gutter end by twisting it into the end of the gutter, and apply a bead of metal sealant on the gutter (*Picture K*).

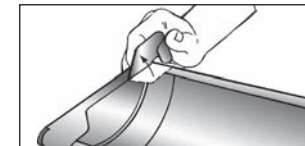
Press the gutter end down into the gutter and tap it into place (*Picture L*). The metal edge that is not required may, if you so wish, be snapped off at the existing notch (*Picture M*). Smooth out the sealant.



Picture K



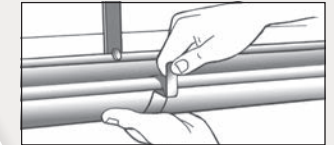
Picture L



Picture M

4. Gutter

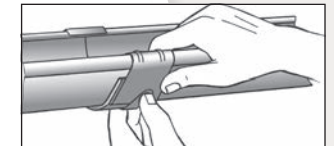
Place the gutters in position and fasten them to the back edge of the hooks. Press the gutter down into the hook and bend over the securing plate on the hook to secure the gutter in place (*Picture N*).



Picture N

5. Gutter joint

When joining sections of gutters, first hook the back edge of the gutter joint round the gutters. Make sure that the back edge of the gutter joint is in contact with the gutters when you put the front clip over the edge of the gutters and then press the clip down. Lock it in place with the small tongue (*Picture O*). It is important that the gutter joint is assembled straight against the gutter.

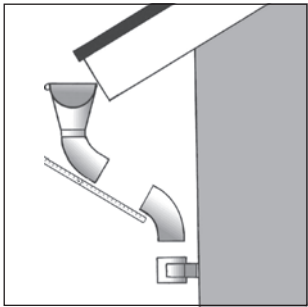


Picture O

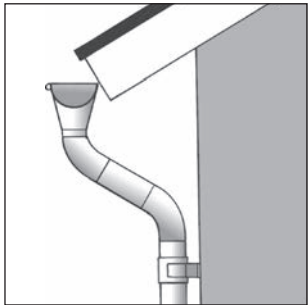


6. Pipe bend and intermediate pipe

Assemble a pipe bend on the gutter outlet. Measure the distance between the pipe bends (*Picture P*). Cut the intermediate pipe about 12 cm longer than the distance between the pipe bends. Put the intermediate pipe into the lower pipe bend and assemble on to the upper pipe bend. Then assemble the down pipe. (*Picture Q*)



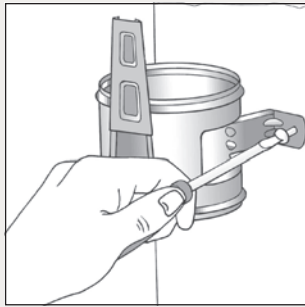
Picture P



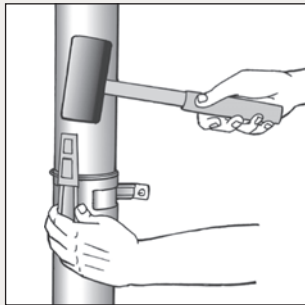
Picture Q

7. Pipe wrap

Fix a pipe wrap to the wall immediately below the completed bend (*Picture Q*). Fix the next pipe wrap straight below the first and so on. Max. 2 m between each wrap. Use screws if the pipe wraps are fastened in wood or screws and plugs when fastened in stone. There is also a special nail for fastening in stone walls available. When the pipe wraps are fastened on the wall the down pipe can be assembled. Press the pipe wrap together and tap the wedges into place using a block of wood or rubber mallet. (*Picture S*).



Picture R

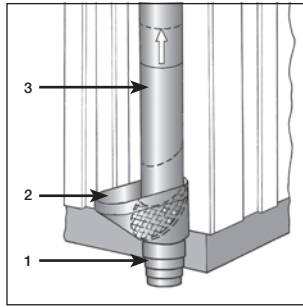


Picture S

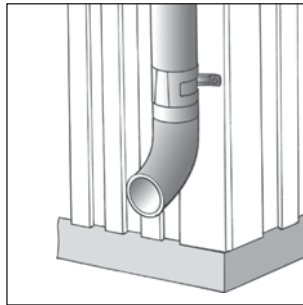
8. Water drainage

If connecting to the underground drainage system, fit a drain trap sleeve (1) and a drain trap (2). Fit an extension pipe (3) outside the down pipe and slide it down to the drain trap (*Picture T*).

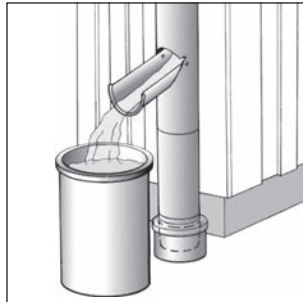
To simply conduct the water into the ground, fit a shoe on to the drain pipe (*Picture U*). If you wish to collect rainwater in a butt, fit a fold-out shoe. Fit, for example, a drain shoe to connect the down pipe to the drain (*Picture V*).



Picture T



Picture U



Picture V

9. Adjustable gutter hook

1. Find out the approximate angle of the roof/eaves board (e.g. if section X is 40 cm then the roof angle is 14°).
2. Set required angle by sliding the securing plate into the correct groove on the gutter hook.
3. Bend the securing plate to lock the gutter hook at the required angle. Press down the securing plate hard, use a suitable tool if necessary (for example pliers).
4. Check the angle setting before setting the other gutter hooks. The front edge of the gutter hook on the horizontal plane should be approximately 25-30 mm under the back edge (b).
5. When all hooks are set to required angle, screw them up with a horizontal slope of about 3-5 mm/m towards the down pipe (see also 1. Gutter hook).

