



# Copper

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## Installation Guide

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# Copper/Zinc/Stainless - Fitting Instructions

## Gutter Installation Introduction

When installing any of our gutter brackets it is advisable to put all the brackets in a perfectly level line. The various gutter profiles we offer are deep enough to allow for a proper flow of the rainwater from the gutter to the downpipe outlets.

Check where the gutter will sit once the brackets are installed so that the rainwater run off from the roof is properly caught by the gutter (Fig1) If wrongly positioned, the rainwater may run off the roof and shoot over the gutter. Also take care to ensure the gutter runs just past the end of the tiles.



Fig 1

## Fitting Fascia Brackets

First install a fascia bracket 150mm from the end of the fascia board at both ends of a straight run of gutter. (Fig 2) A level string line should then be run between them to ensure they are exactly the same height. The intermediate brackets should then be spaced equidistant apart, but at no more than 1.0m centres, and fixed level with the string. In areas where snow may be a problem it is recommended that the centres be reduced to 500mm.

If several elevations of the property are to be fitted with a continuous link of gutter it is advisable to fit all the brackets at each corner first to ensure that they are all at the same height.



Fig 2

## Fitting Rafter Brackets

First install a rafter bracket on the last roof truss at both ends of a straight run of gutter. A level string line should then be run between them to ensure they are exactly the same height. The intermediate brackets should then be spaced equidistant every other truss, but at no more than 1.0m centres, and fixed level with the string. In areas where snow may be a problem it is recommended that the centres be reduced to 500mm in some cases this may mean every truss.

For installations where the bracket is to be fixed to the top of the truss place the bracket in a vice and bend to the correct angle. Leave this in the vice so others can be bent to match.

If the brackets are to be fixed after the roof has been tiled or its an existing roof then the brackets have to be bent to the correct roof pitch and then twisted through 90° so it can be screwed to the side of the truss. (Fig 3)



Fig 3

## Fitting Fascia Brackets

Firstly a level line marking the top rear edge of the gutter being fitted needs to be made along the fascia board.

Ideally the brackets should be fitted onto the gutter sections prior to putting the gutter into position. They should be positioned approximately 600mm apart. Line up the guttering with the internal brackets fitted so that the top rear edge of the gutter runs along the level line that has been marked on the fascia board.

When properly in position screw the internal brackets at each end of the gutter to the fascia board. (Fig 4) Then continue with the intermediate brackets. An additional pair of hands is useful for this method of installation.



Fig 4

## Fitting Gutter Outlets

If using running outlets then please skip this section and move to appropriate profile section.

**Fitting Swiss Outlets.** Mark where on the gutter length the outlet is to be fitted. (Fig 5) Cut out the hole for the outlet either with nibblers or by carefully drilling using a hole saw. (Fig 6) Place the Swiss outlet into position, bend the back tags over to hold it in place. Drill and rivet the Swiss outlet to the front of the gutter using 2 rivets. (Fig 7).

**Fitting Loose Outlets.** Mark where on the gutter length the outlet is to be fitted. Cut out the hole for the outlet either with nibblers or by carefully drilling using a hole saw either 75mm or 92mm Dia depending on the size of the pipe to be fitted. Place the Loose outlet into position applying sealant around the lip to make it watertight. (Fig 8).



Fig 5



Fig 6



Fig 7



Fig 8

## Fitting Half Round Gutter

Pop rivet and then bond any stop ends in place using silicone sealant. (Fig 9) Fit your first section of gutter in place at one end of your first straight run of gutter. (Fig 10) The next section of gutter needs to overlap the first by about 30 to 50mm. Before sliding sections together ensure there is sufficient sealant to make the joint watertight. All joints must be pop riveted through the overlap and an additional layer of sealant applied inside. The final length of gutter can be cut using nibblers or a hacksaw.

When fitting corners to the lengths use the same principals as detailed above. Once the joined lengths of gutter are all correctly positioned the guttering can then be secured to the brackets. Firstly bend over the back bracket tags to hold the gutter in place. (Fig 11) and then fit a pop rivet through the top front of the guttering and bracket ensure the gutter is sat firmly in the bracket. (Fig 12) If using internal brackets then each complete section of gutter can be screwed to the fascia.



Fig 9



Fig 10



Fig 11



Fig 12



Fig 13



Fig 14

## Fitting MOG and Box Gutter

Pop rivet and then bond any stop ends in place using silicone sealant. (Fig 13) The MOG and box style gutter are joined using our special internal joints clips. (Fig 14) See below. Fit your first section of gutter in place at one end of your first straight run of gutter. (Fig 15) The final length of gutter can be cut using nibblers or a hacksaw.

When fitting corners to the lengths use the same principals as detailed above. Once the joined lengths of gutter are all correctly positioned the guttering can then be secured to the brackets. Firstly bend over the back bracket tags to hold the gutter in place. (Fig 11) and then fit a pop rivet through the top front of the guttering and bracket ensure the gutter is sat firmly in the bracket. (Fig 12) If using internal brackets then each complete section of gutter can be screwed to the fascia. (Fig 16)



Fig 15



Fig 16

## Fitting MOG and Box Gutter Joints

Ideally measure up the straight run of the gutter required and put together on the ground lifting up the whole length and fitting in one operation. (Fig 17) Apply the sealant along the grooves in the internal joint clip so it is one continuous bead going around the full profile of the joint.

Slide the two sections of gutter to be joined together. Once in position you may find it easier to press the joint firmly into the gutter using a clamp and two pieces of timber to prevent marking of the gutter (Fig 18) before applying two pop rivets to each side. To make sure the joint does not leak additional sealant can be applied to the inside of the gutter each side of the joint and around the rivets.

If the sections are joined insitu (Fig 19) use the sealant around the joint clip channels and the joint can just be slid into place. (Fig 20) Again additional sealant can be run around the internal joints and rivets as extra security.



Fig 17



Fig 18



Fig 19



Fig 20

## Fitting Down Pipes

If the downpipe outlet is some distance from the wall then it will be necessary to fit an extendable swan neck or make up a swan neck using two bends. A short length of pipe may be needed between them to give the desired projection. (Fig 21). The downpipe is held to the wall using pipe brackets which are supplied with the necessary fittings. Different screw lengths can be supplied depending on distance required. (Fig 22)



Fig 21



Fig 22



Fig 23

Use a spirit level or plumb bob to find a vertical line. Fit pipe brackets 3 per length or 1500mm centres. (Fig 21) One bracket should be as near the top of the pipe as possible and one near the bottom above the drain. The down pipes can be cut using nibblers or a hacksaw. (Fig 23) Remember to allow for shoes when cutting to length. The swaged ends of the pipes should be uppermost as this acts as a female joint.

For additional information contact our Sales Office on **0113 2795854** or email [info@rainguard.co.uk](mailto:info@rainguard.co.uk)