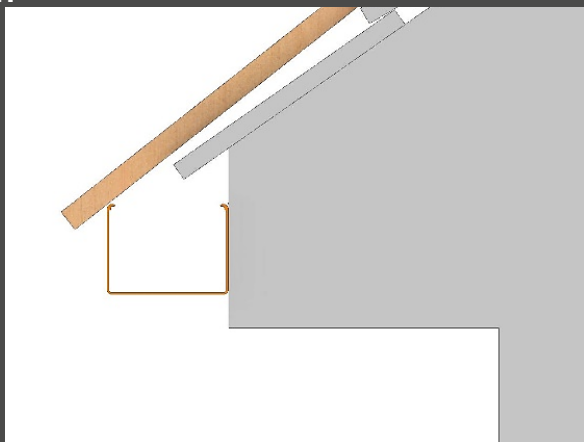


1.



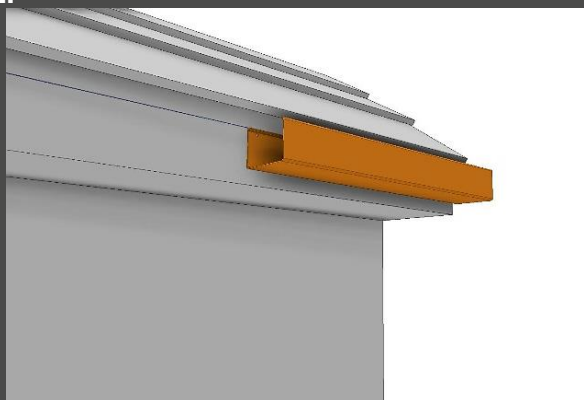
1. Fixing gutter at correct height

BS & EN standards recommend that gutters be fixed so that the front lip aligns with the pitch line of the roof. This reduces possible damage from sliding snow impact.

Establish the correct height by laying a straight batten over the finished roof surface to project beyond the gutter width. Place a section of gutter level to the underside of the projecting batten, then mark the highest fixing position via one of the gutter fixing slots. Fix the gutter at 600mm centre's using compatible Code SU3 Austenitic stainless steel screws and SU4 backing washers, via the fixing slots provided.

All gutter joints must have a 3-4mm expansion gap.

2.



2. Gutter levels

If fixing the gutter nominally level, transfer and mark the highest fixing position around the fascia where gutters are to be fitted.

If fixing the gutter to "falls" calculate falls at 1:600 away from the highest fixing position to the outlet location.

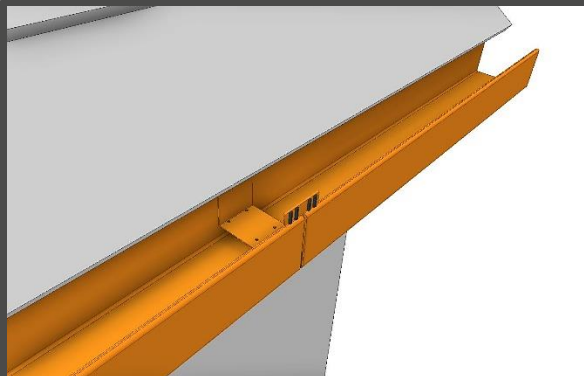
3. Cutting gutters to length

Placing a gutter jointer inside the gutter with the edge next to the cut line and using the jointer as cutting guide will assist to achieve a neat/square cut.

Cut gutters to length with either 18 teeth to an inch hacksaw or mechanical saw with appropriate metal cutting blade. Under no circumstances should angle grinders be used.

All cut edges should be filed smooth, cleaned and carefully painted with Code SU6 touch up paint.

3.



4. Jointing

Ensure the joint areas are perfectly clean. Clip a gutter jointer centrally over the gutter joint. Place and hold firmly the sealant tube nozzle into one of the injection holes located at the internal corner of the jointer; inject silicone sealant Code SU1 until it oozes from the top and central hole in the base of the jointer. Repeat this process to the three remaining internal corner injection holes.

General Installation Guidance

Backgrounds

Ensure the fascia boards or fixing background is in good condition and capable of withstanding the weight of a gutter full of water, ice or snow.

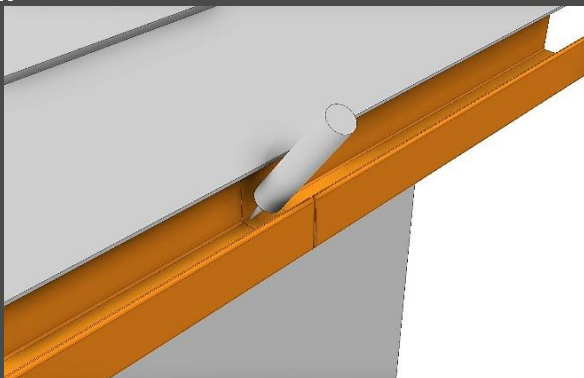
Snow Loading

Modern construction with highly insulated roofs encourage the accumulation of snow on roofs which may slide off during a sudden thaw, often damaging gutters installed too high. Ensure gutters are installed at the recommended height.

Fascia Alignment

Lateral alignment of the fascia board is key to a good gutter installation allowing the gutter system unrestricted thermal movement. Check the fascia alignment. If the fascia board is more than 2mm+/- out of lateral alignment, shim out the gutter brackets or fixings with a compatible material.

4.



Cont.

Material Storage

All items will be supplied in protective polythene sleeving. Ensure that the materials are stored in a dry place away from direct sunlight. If moisture enters the polythene sleeving and the materials are stored outside and exposed to the sunlight, this may permanently discolour the Polyester Powder Coated surfaces.

Testing

We strongly recommend that the gutter system be tested on completion. Blank off the gutter outlets with Duct Tape or similar, fill the gutter to overflow level. Leave for 5 minutes, and then check for leaks. Once the gutter test is complete, unblock the gutter outlets and discharge the water into the rainwater pipes to check the pipe joint for leaks. Any leaking joints should be stripped, thoroughly cleaned and resealed.

Gutter Alignment & Bracket Fixings

Fascia boards may not be level, hence do not determine gutter levels by measuring from the base of the fascia board. It is recommended to use a water level (a clear plastic hose with water) to establish correct gutter fixing levels. Once the gutter high point is established, as illustrated in the individual gutter installation recommendations, this datum can be transferred to all areas where gutters are to be installed by use of a water level. Traditional string lines will sag, move in the wind or snag on installed gutter brackets. Using a spirit level from bracket to bracket is also not recommended as this an inaccurate method of installation.

Jointing

Silicone jointing must not be carried out in wet weather or temperatures below 5 °C or above 35 °C Aluminum is a conductor of both heat and cold hence will become colder or hotter than the outside temperature. All jointing surfaces must be dry and clean prior to application of silicone sealant. Check the 'Use By Date' on the tube prior to use. The recommended joint sealant Code SU1 sealant is a High Performance Low Modulus Pure Silicone specifically designed and tested for use as a gutter sealant. Use of another sealant may result in early joint failure.

Fixing

All our recommended fixing screws and bolts etc. are made of Austenitic stainless steel and compatible to aluminium and will resist both atmospheric and bi-metallic electrolytic corrosion. Gutter support screws are intended for fixing to timber backgrounds with or without metal fascia linings. If fixing gutters to a stone background, the length of fixing screw needs to be determined dependent on the type and condition of the masonry. Be cautious of fixing to thin PVCu fascia boards with no timber backing boards.