# General Guidance

#### Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment.

The fascia should be capable of supporting the gutter when full of water, ice or snow. Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework is installed behind the fascia to provide a straight and secure fixing surface.

Use standard metal work tools to cut or drill aluminium gutters. Angle grinders are not recommended. Where gutter or fittings are polyester powder coated, cut edges should be deburred and repainted with touch up paint, SC880.

## **Gutter position**

Gutters must be installed level or to a fall of 1:600. The gutter should not be positioned at a level which causes rainfall to overshoot the gutter, i.e. too low, or where it is damaged by the high velocity impact of sliding snow, i.e. too high.

#### Snowloading

Heavy snowfall coupled with highly insulated roofs is causing accumulation of snow on roofs. A sudden thaw will then cause the snow to slide down the roof and rest against the gutters if they are fixed too high. Greater care must be taken to make sure the gutters will not impede sliding snow. However, for the ultimate protection, snow guards must be installed.

## Jointing

Joint sealing must not be carried out in wet weather or in temperatures below  $5^{\circ}\text{C}$  or above  $40^{\circ}\text{C}$ . Joint surfaces must be perfectly clean and dry. Use a clean cloth and solvent cleaner SC108 to remove all traces of dirt or grease, which may not be visible.

Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint.

Only Alutec high performance low modulus sealant SC101 must be used. Use of other sealants may result in early joint failure. Sealant over nine months old must not be used.

## Fixing

To ensure the long term durability of aluminium gutter systems, it is vitally important to ensure that the fixing components are equally durable and capable of providing the necessary support. They must therefore be non corrosive, of a compatible material to ensure no electrolytic corrosion occurs and of the appropriate size.

Only the recommended austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed. If fixing to fascia boards made of materials other than wood or Alutec aluminium composites, please call the Alutec Technical Services Department.

## Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to overflow level and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.



1. Set gutter height by laying a straight batten on the lowest profile of the roof

Place the gutter outlet under the batten so that they are touching and mark the screw holes.



 Fix fascia brackets with Alutec 32mm x No. 10 roundhead screws, code SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Insert screw into lower slot and adjust to the string line.

Drilling pilot holes first is recommended.



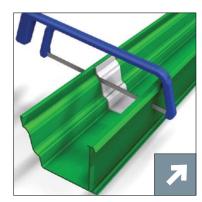
Fix fascia brackets at 750mm centres.For best flow rate, fix to a fall of 1:600 or alternatively nominally level.



 Fix an additional fascia bracket centrally to one side of each angle and centrally to each outlet.



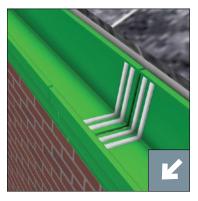
 Check fascia board alignment; if required, shim out brackets using appropriate shim plates. Deepflow: SC380, Ogee No. 46, Boxer 135x100mm and Boxer 160x100mm: SC381, Boxer 120x80mm: SC382.



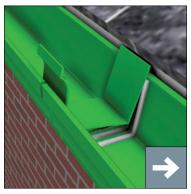
To achieve a neat cut through the gutter, place a union into the gutter and use as a cutting guide.



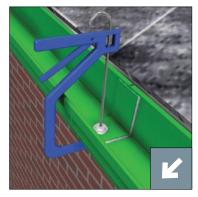
 Hook the rear of the gutter over the top of the fascia brackets and then swing down to secure into the base of the fascia brackets.



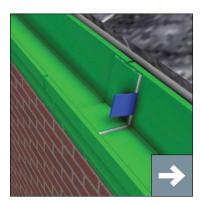
 Clean all joint surfaces using a clean cloth and Alutec solvent cleaner, code SC108. Ensure all surfaces are dry and then apply two 8mm parallel beads of Alutec sealant, code SC101 to each gutter end.



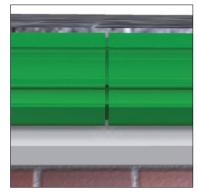
 Check that the factory fitted rubber compression spacers are fitted to the underside of the unions. Insert union, taking care not to remove sealant from the vertical faces.



 Secure union into gutter by engaging into the rear upstand and then the front using Alutec gutter compression tool, code SC104.



 Point excess sealant well into the joint edges adding additional sealant if required.



 Clean off any excess sealant to visible surfaces using Alutec solvent cleaner, code SC108 and ensure that all joints have a 3-4mm expansion gap.