Rainclear Systems

Installation Guide

BEFORE YOU START

General Site Working

BS 8000 Workmanship on building sites, Parts 13 through to 16 with respect to above ground drainage and sanitaryware appliances are relevant in general terms.

Handling and Storage

Gutters, downpipes and fittings, particularly with polyester powder coat finish should be handled with care and preferably stored under cover on racks to prevent scratching. Whilst not known to pose any health hazard, it is recommended that protective gloves be worn when handling mill finish aluminium.

All lengths are supplied in a protective polythene wrapping with components similarly wrapped and stored in cardboard boxes. If painted product is to be stored outside, cover with a tarpaulin to protect against rainfall and direct sunlight. Failure to do this may allow water to get trapped inside the protective wrapper and could lead to permanent watermarks on the paint finish. Mill finish items should be stored under cover to avoid uneven oxidization prior fitting.

Cutting and Drilling

Gutter sections may be cut and drilled on site using standard metalworking tools, however the use of angle grinders is not recommended. Where gutters or fittings are powder coated, then cut edges should be de-burred and repainted with touch-up paint.

Setting Out

Gutters may be installed level or to a fall of 1:600. If level, make sure that the gutter is set at the correct height at the centre point and use a string line or level make a series of marks to indicate the correct height along the run length. When trying to achieve a fall the lowest point needs to be the outlet, so mark this position first, followed by the end of the run and then use a string line to mark regular points of reference.

Materials Checklist

- Spirit level/straight edge ☐
- Suitable screwdriver/attachment ☐
- Sealant caulking gun ☐
- Pencil or chalk ☐
- String or laser line ☐
- Hacksaw/electric jigsaw/chopsaw ☐
- Tape measure ☐
- Small wrench ☐

Jointing

Any use of sealant must not be carried out in wet weather or in temperatures below 5°C or above 50°C. All Joint surfaces must be perfectly clean and dry. Only a low modulus sealant must be used to prevent early failure. Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement (3-4mm) within the gutter joint.

Fixing

It is important that all fixings are suitable for both the substrate and the load. They must therefore be of the appropriate size and of a compatible material to ensure no electrolytic corrosion occurs. ARP recommends that stainless steel (preferably austenitic) screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed.

Gutter Position

The current recommendations from the Metal Gutter Manufacturers Association (MGMA) is to position gutters as Fig 1.

Fig 1. As the line of the roof passes the gutter, a good proportion of debris sliding down the roof, such as leaves or snow will pass by without being collected. This position will also reduce potential snow build up back up the roof, which can put additional strain on brackets and fascia board adhesion.

There are certain conditions where a Fig 1 installation might allow water to over shoot the gutter in high wind conditions however this is deemed to be better than the above stated issues.

Fig 2. As the line of the roof sits inside the gutter profile, this encourages debris, such as leaves or snow, to be collected and could cause an increase in debris clearing regularity and issues with bracket and fascia board adhesion strength in heavy snow conditions.

Fig 1

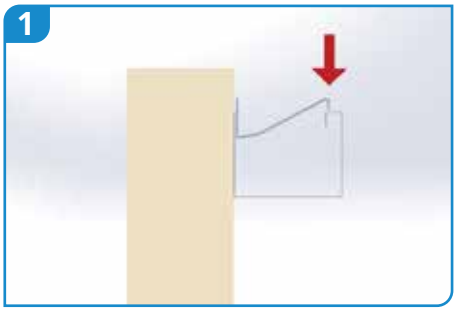
Fig 2

GUTTER FIXING

We advise that you ensure the fixing background (e.g fascia board) is securely fixed, level and able to support the weight of the gutter at full capacity and that the roof overhang is correct – see gutter position.

Legion box guttering can be directly fixed, so no need for extra bracketry.

1



Legion joggle joint guttering is fitted direct to the fascia board at 750 mm centres and has pre-drilled holes for fixing. Start by deciding whether to fit the gutter level or with a fall to 1:600.

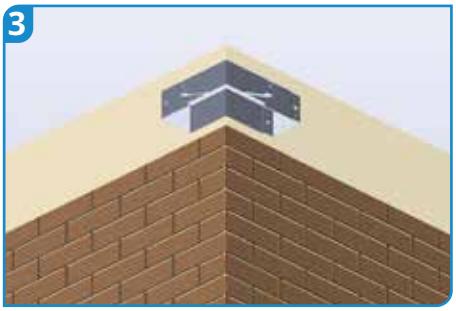
2

Ideally using a string line or laser level, set out position from bottom edge of gutter.

Fit outlets and angles first.

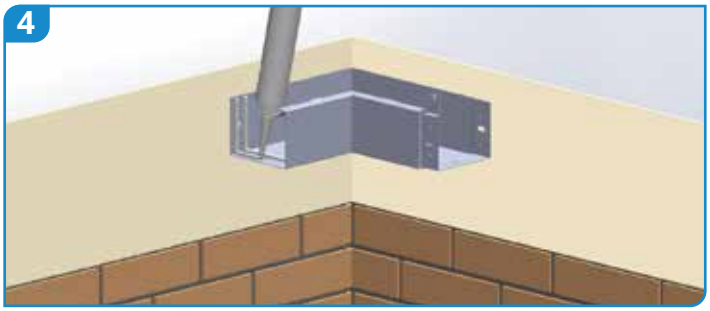
With the use of a plumb or laser line to set outlets over gullies.

3



Fix gutter lengths utilising the pre-drilled fixing holes at 750 mm centres in the rear face of the gutter.

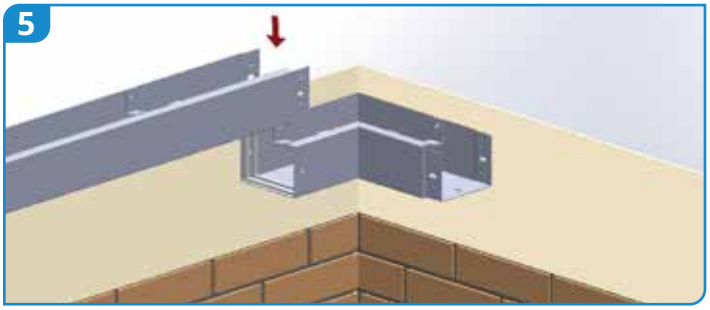
4



Ensure all fixing surfaces are clean and dry.

Apply 2 x 6 mm beads of low modulus sealant to the plain end of the gutter.

5

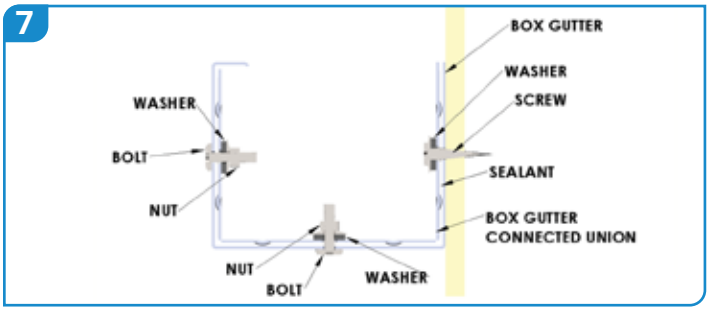


Position the spigot end over the joint, push bolts through the slots of the gutter from the outside, making sure the slotted holes are filled with sealant.

6

Apply nuts and washers and gently tighten (Do not overtighten as this may force the sealant out of the joint).

7



Clean off any excess sealant to either side of the joint or apply additional as required to create a smooth bead.

Any cut lengths should be de-burred and touched up with touch-up paint supplied prior to installation.
For more information or further assistance, please contact us.