# **STEEL GUTTERING SYSTEMS**



# TINSTALLATION MANUAL



## **INSTALLATION OF GALECO STEEL GUTTERS**

As with all gutter installations regardless of materials, the installation of our steel guttering follows a logical sequence. Please follow the instructions below for a trouble-free installation. If at any time you need any points clarified, please do not hesitate to contact us.



The only tools you will need are as follows;

- Spirit Level & string line
- Screwdriver
- Hammer Drill (for fixing pipe clips)
- Hacksaw
- Pliers

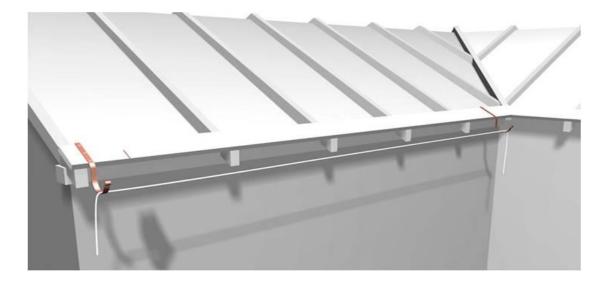


### <u>Fall</u>

Steel gutters can be laid level, as water will always find the outlet, but we recommend a fall of between 1 in 600 (17mm in a 10m run) and 1 in 350 (30mm in a 10m run).

### Fascia Brackets

Start by marking the position of the outlet. This is generally governed by the position of the drainage connection – the outlet will be directly above this point. Mark this position and fix the two outermost brackets (standard fascia brackets or rafter brackets), and stretch a string line between these two points. The line should fall towards the outlet by between 17-30mm in every 10m as stated above.



All other brackets should be fixed at 800mm centres. In areas of potentially heavy snowfall we suggest that 600mm centres are used. Brackets are screwed to the fascia board using 25mm BZP screws. Fascia brackets should be installed within 150mm of any angle or running outlet to ensure the fitting is properly supported.



Once the brackets are in place, any fixed unions should be installed and running outlets should be prepared for installation.

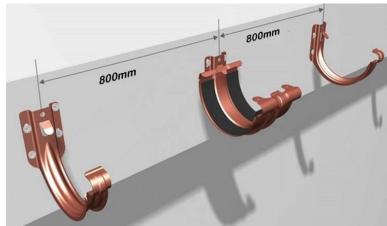
### **Gutter Unions**

Gutter unions are used to join individual length of gutter. A 2mm expansion gap should be left between each length. Gutter Supplies offer two types of unions, one with a support fixing and one without. The fixing methods differ slightly for each type;

TOP TIP

### Union with support bracket

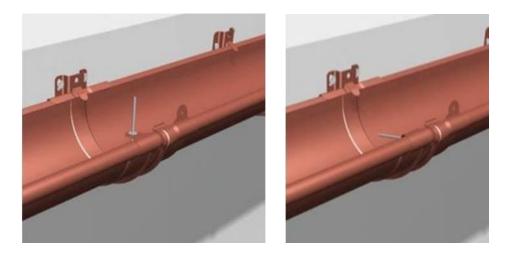
When using the supported union, fix as shown below;



In areas of potentially heavy snowfall you should reduce the fixing centres to 600mm

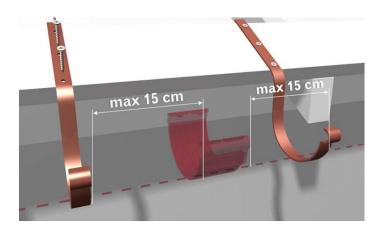
The supported union uses a key clamp method to lock the gutter in place;





### **Union without Support Bracket**

When using the Union that has no support fixings, fascia brackets (or rafter brackets as shown) should be installed within 150mm of the outside edge of the union as per the diagram below;







# INSTALL

The union without the support bracket is fitted with a lever type clamp and a tab - the gutter should first be inserted onto the seals (leaving a 2mm gap between each length) and connected at the rear of the union against the fascia. To fully secure the connection, the clamp on the front of the union facing away from the property should be brought up and fitted on the rim of the union. The small metal tab on the outside of the union can then be temporarily bent down using a screwdriver in order to place the bottom of the clamp inside and then bent back up again to finish the joint.

TOP TIP

To improve the seal adhesion we always recommend that all seals are sprayed with silicon prior to the gutters being installed.



### **Running Outlet**

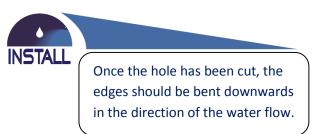
The outlet is actually installed once the gutter is in place, but the hole in the gutter is cut prior to this point. First, mark the gutter in the position where the outlet is to be fitted. Next, offer the pipe up to the gutter and mark around the hole, which can then be cut out using a hacksaw.





Note: Never use an angle grinder to cut the gutter as it will burn the polymer layer and could possibly lead to corrosion – always use a hacksaw.





Once the gutter has been clipped into place the outlet is then fixed in place using the locking tabs.







### **Installing the Gutter**

First, remove the protective film from the lengths of gutter. Then, ensuring the gutter is correctly positioned, insert the rear edge of the gutter under the tabs of the brackets and unions and then insert the front edge.



Note - If you are using side rafter brackets as opposed to standard fascia brackets, the front edge of the gutter should be inserted first and then the back edge pulled down into position.

### **Gutter Angles**

### 90°Gutter Angles

Unlike most steel gutter systems, Galeco 120mm 90° steel gutter angles come with a clamp and seal, reducing the need for additional unions and allowing for quick and easy fit. Angles should be supported by installing a fascia bracket with 150mm of the corner as shown below.



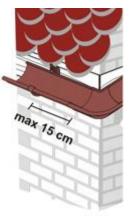
On the 135mm system, the 90° and 135° angles use the key assembly system, also incorporating the 70mm seal so as with the 120mm system no additional unions are required.



### **Adjustable Gutter Angles**

In the 135mm system we also offer an angle that adjusts between 100° and 165°. This enables awkward angles to be incorporated into the system with a minimum of fuss. As with the standard angles, these fittings should be supported by fascia brackets sited within 150mm of the angle.

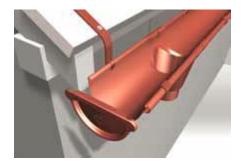


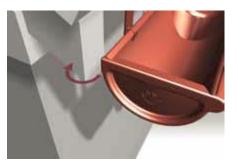




### Stop Ends

Our stop ends feature a rubber seal and are installed by pressing or tapping the stop end in place using a soft faced hammer. We recommend using a small bead of silicon around the inside of the gutter at the joint. The rear top tab should be bent around the back of the gutter.

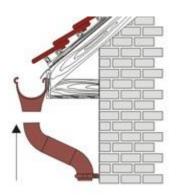


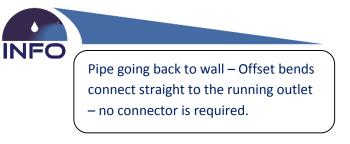


### **Downpipes**

With all of the gutter and fittings in place, downpipes can now be installed. First, remove the protective film from the pipe. Downpipes should be connected to the outlets using a socket or pipe connector. Where offset bends are used to make a swan neck to return the pipe to the wall, the bends fit straight onto the outlet and a short piece of pipe is cut to suit and used between the two bends.

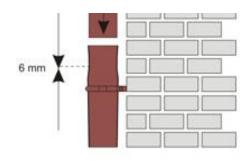






### **Connecting Pipes Together**

Where two pipes are connected together, a pipe connector should be used. A gap of 6mm should be left to allow for any possible expansion as shown below.





### **Downpipe Clips**

Our downpipe clips are extremely well engineered to ensure a secure fit. Using a 12mm masonry bit, drill the brickwork and insert the rawlplug supplied with the clip. Then, using either a pair of pliers or a small adjustable spanner, insert the metal screw into the plug. Next, screw the metal backplate onto the protruding thread, and secure the pipe clip with the brass key provided.



Drill masonry and inset plug and screw







Attach the clip using the threaded key



 Note – Never exceed the maximum distance of 1.8m between pipe clips
 9

### **Drain Connection**

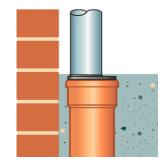
For 87mm downpipes, these can be connected to 110mm Drainage using a D96 adaptor. Insert the adaptor onto the steel downpipe prior to inserting it into the drainage pipe or fitting. In the case of 100mm downpipes (for the 150mm gutter system) these can be connected directly into a 110 mm ring seal connection.

max 1,8m



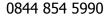


The round end of the D96 Universal Drain adaptor is pushed onto the steel pipe, which can then be inserted directly into the 110mm Drainage System.











www.guttersupplies.co.uk

sales@guttersupplies.co.uk