Cascade

CAST IRON STYLE RAINWATER AND SOIL SYSTEM

DRAINAGECENTRAL
DRAINAGE, PLUMBING & RAINWATER

# Installation of Gutters

The Brett Martin Cast Iron Style gutter systems are specially coated versions of the existing ranges and follow the usual installation procedures as standard PVCu systems.

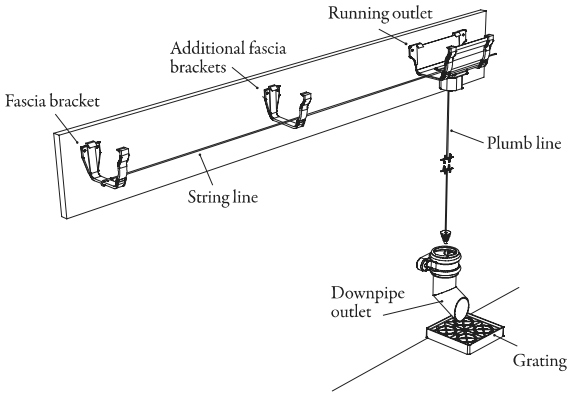
Brett Martin Rainwater gutters can be efficiently installed if the following procedures are followed. Rainwater systems are supported by the outlet joint/union bracket and external angles as well as the gutter support brackets, all of which must be fixed, wherever possible to the fascia or support bracket. Alternatively the rainwater system can be securely held by rise and fall brackets, to ensure trouble-free lifetime service.

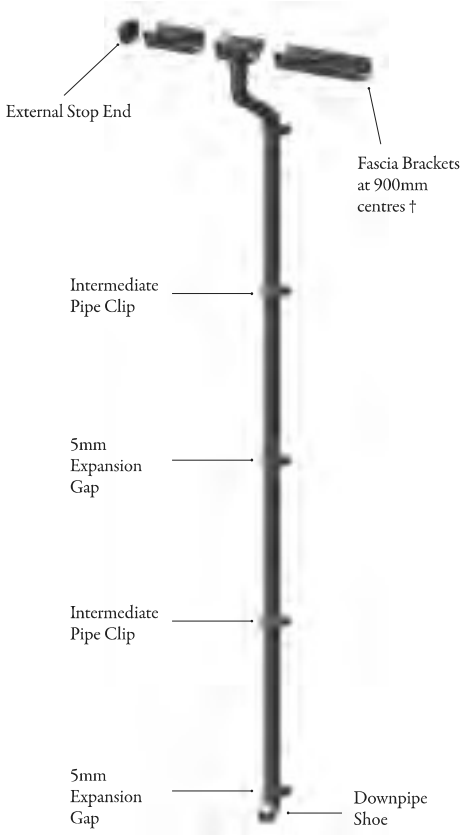
## Installation sequence

- Position the gutter outlet vertically above the drain inlet or gully from which the rainwater will be conveyed to the underground drainage system.
- Fix the outlet in position on the fascia allowing for whatever fall, if any, is required.
- Fix the gutter support bracket furthest from the outlet at a position on the fascia which will produce a run of gutter either horizontal or to the desired fall.
- Stretch a line taut between the fixed outlet and support bracket, establishing a straight gutter line.
- Fix the remainder of the fittings to the fascia following this line, a joint bracket being positioned at each junction of two gutter sections.
- Where, due to the absence of a fascia or the design of the building support fittings cannot be fixed, the rafter top bracket and side bracket provide alternatives.
- Rise and fall brackets driven into the wall will support the gutter system where there is no fascia and rafter brackets are impractical. Position these against alternate sides of joint brackets, running outlets or angles along the installation to prevent excessive thermal movement in any one direction.

## Gutter Support Spacing

Gutter support spacing should normally NOT EXCEED 900mm. Roofs with a pitch exceeding 35° and/or with SMOOTH SURFACES and/or are subject to HEAVY SNOW LOADING, support spacing should not exceed 600mm. Various gutter angles incorporate fixing positions which can be drilled for fixing. If the angle is fixed to the fascia board, adjacent support brackets should be no more than 900mm away. If the angle is not fixed the brackets should be no more than 150mm away.



DRAINAGECENTRAL
DRAINAGE, PLUMBING & RAINWATER

# Installation of Downpipes

The Cast Iron Style pipes are specially coated to provide the 'cast' effect on the pipes that cannot be obtained through the normal extrusion manufacturing process.

Although pipes are strong and resilient, as with any such plastic pipework, they can become distorted if stored or transported without care or adequate support. To eliminate any such circumstances affecting the systems appearance, Brett Martin recommends that intermediate pipe clips be used to ensure that pipe alignment is maintained, especially on uneven brickwork.

### Step 1

Using a plumbline from the centre of the gutter outlet or offset spigot, determine the position of the pipework to ensure a vertical alignment to the underground drainage system. To maximise the traditional appearance of the system, it is recommended that a shoe (code BR216LCI) is used to discharge the rainwater into the underground drainage system. (Fig. 1)

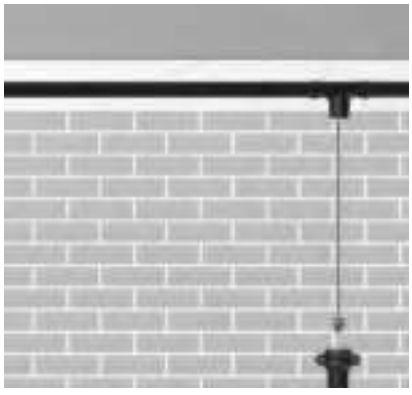


Fig. 1

### Step 2

The socket of the pipe, (code BR2018LCI) is offered up to the gutter outlet, or relevant offset spigot, and positioned in line with the plumbline. The wall should be lightly marked at intervals to ensure correct alignment with the plumbline throughout the length of the installation.

### Step 3

Mark the wall, using the holes in the pipe socket lugs as guides, then drill, plug and fix the pipe, using the Brett Martin fixing packs, (code BRFP55CI), which contain 10No 55mm screws, plugs and washers.

### Step 4

Repeat until the last full length is fixed, ensuring in each case that the pipe socket is pushed fully onto the receiving pipe, and then retracted 5mm before the socket is fixed to the wall. This is especially important during cold weather installations and a requirement in the installation of all plastic pipework.

### Step 5

The lowest length of pipe is then cut to length to allow the shoe (code BR216LCI) to be positioned directly above the drainage connection.

It is recommended that intermediate pipe clips are used where uneven brickwork is encountered to help maintain alignment. Instructions are the same for 100mm x 75mm and 105mm dia pipework, using fixing packs BRFP75CI, which contain 75mm screws.

## Expansion Allowance

It is essential that there is sufficient allowance to accommodate any expansion that may take place in the pipework system, especially when installing during cold weather.

Therefore, please ensure that for the 68mm and 65mm ranges, pipes are marked and withdrawn 5mm from the lower socket before fixing. For the 105mm range this allowance must be 10mm and for the 100mm x 75mm range 20mm expansion must be accommodated for in the same way. If pipes are installed without this expansion allowance it is likely that the pipes may move in hot weather. Where coloured systems are being installed, all sizes of pipe will require a 20mm expansion allowance. If installation is carried out in very hot weather, these allowances should be halved.

Simply push the pipe spigot fully into the receiving socket, mark the spigot and withdraw 5mm/10mm/ 20mm as required prior to fixing the socket to the wall.

Pipes as well as gutters, can easily be cut to size using a normal hacksaw, with any small adjustments simply made using a sharp blade.

A range of hoppers are offered, some of which can be adapted to include specific dates or designs as a costed option.

BRETT MARTIN
Plumbing & Drainage