

Cascade

CAST IRON STYLE RAINWATER AND SOIL SYSTEM



Cascade is available from Builders Merchants and Providers nationwide. For details of your nearest stockist or for further information please contact:

Irish Sales and Head Office:
24 Roughfort Road
Mallusk, Co. Antrim
Northern Ireland, BT36 4RB
Tel: 028 9084 9999
Fax: 028 9083 6666
Sales Counter: 028 9084 8999
Email: mail@brettmartin.com

GB Sales:
Speedwell Ind. Estate
Staveley, Derbyshire
England S43 3JP
Tel: 01246 280000
Fax: 01246 280001
Email: building@brettmartin.com



Certificate No. 009125
BS EN ISO
9001:2008



Plumbing & Drainage



Plumbing & Drainage

Cascade

CAST IRON STYLE RAINWATER AND SOIL SYSTEM



Contents

Cast Iron Style Rainwater and Soil System	3-4
Cast Iron Style Domestic Rainwater Systems	
106mm Prostyle and 65mm Square Downpipe	5-6
112mm Roundstyle and 68mm Round Downpipe	7-8
115mm Deepstyle and 68mm Round Downpipe	9-10
Cast Iron Style High Capacity Rainwater System	
160mm Roundstyle and Downpipes	11-12
Cast Iron Style Hoppers	13-14
Cast Iron Style Soil	15-16
Cast Iron Style Colour Options	17-18
Installation	19-21
Guarantee	22

Cast Iron has shaped the architectural landscape of our towns and cities since the industrial revolution. Inspired by this heritage, Brett Martin have applied over 50 years experience at the forefront of plastics technology to develop Cascade, a range of gutter and downpipe profiles which provide authentic cast iron styling in plastic.



A unique patented manufacturing process combines with original cast iron detailing on pipework, fittings and hoppers to give the full appearance of cast iron with all the benefits of modern plastic products. This allows the architect to achieve their architectural vision without compromising the requirements of today's fast paced construction contracts on time, money or safety.

- Authentic cast iron architectural detailing
- Extensive choice of styles
- An affordable cast iron alternative
- Quick and easy to install
- Ready to fit
- Lightweight, robust materials
- Fully UV stabilised
- Durable and corrosion resistant
- Compatible with existing rainwater systems

The Cascade range has been sympathetically designed with full consideration to original features, dimensions and detailing to provide heritage style without compromising the architectural integrity of traditionally designed building and renovation projects. In addition to Classic Black, Cascade is available in a choice of heritage colours including Oxford Blue, Olive Green, Graphite Grey, Sandstone and Porcelain White.

DOMESTIC SYSTEMS

- 106mm Prostyle Gutter
- 112mm Roundstyle Gutter
- 115mm Deepstyle Gutter
- 65mm Square Downpipe
- 68mm Round Downpipe
- Fittings and Hoppers

HIGH CAPACITY SYSTEM

- 160mm Roundstyle Gutter
- 105mm Round Downpipe
- 100mm x 75mm (4" x 3") Rectangular Downpipe
- Fittings and Hoppers

SOIL SYSTEM

- 110mm Soil Pipe
- Soil Stack Shroud
- Access Fittings and Adaptors

Domestic Rainwater System

- 106mm Prostyle.

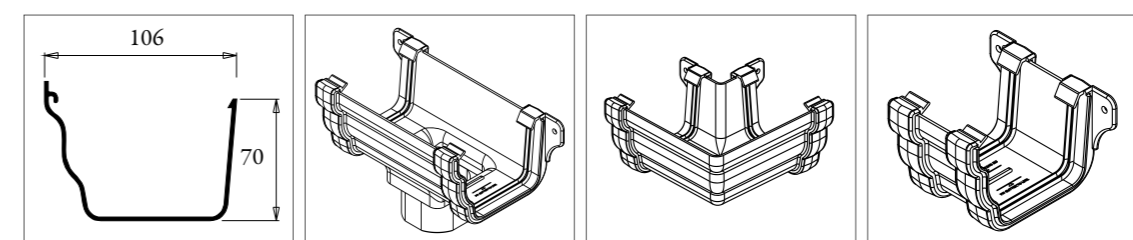


The sleek lines and modern styling of the Prostyle Cast Iron Style Rainwater System provide a more contemporary finish with a quality Cast Iron look and feel. Offering a modern twist on heritage styling, the Prostyle system is ideally suited to traditionally styled new build projects.

- Authentic detailing and finish on downpipe, guttering, hoppers and fittings
- Fully compatible with the Cast Iron Style Soil System
- Incorporates 65mm Square Downpipe
- Choice of Ogee, Bath, Gothic and motiffed hopper designs
- Available in six colour options: Classic Black, Oxford Blue, Olive Green, Graphite Grey, Sandstone, Porcelain White

Cast Iron Style Gutter Capacities

		Gutter Flow Capacity Litres per second		Maximum Roof Area m ²	
		Level	1:600	Level	1:600
106mm	Outlet at one end	2.05	2.55	97	121
Prostyle	Outlet at centre	4.1	5.1	195	242



Domestic Rainwater System

- 112mm Roundstyle.

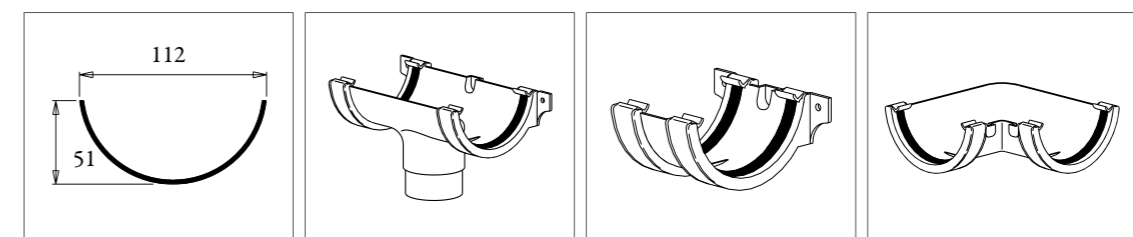


The Roundstyle Cast Iron Style Rainwater System is synonymous with traditional cast iron styling and blends perfectly with the architectural detailing on heritage buildings, being virtually indistinguishable from original Cast Iron systems. The authentic styling of the Roundstyle system is suitable for both period styled new build and renovation projects alike.

- Authentic detailing and finish on guttering, downpipe, hoppers and fittings
- Fully compatible with the Cast Iron Style Soil System and traditional Cast Iron
- Incorporates 68mm Round Downpipe
- Choice of Ogee, Bath, Gothic and motiffed hopper designs
- Available in six colour options: Classic Black, Oxford Blue, Olive Green, Graphite Grey, Sandstone, Porcelain White

Cast Iron Style Gutter Capacities

	Gutter Flow Capacity Litres per second		Maximum Roof Area m ²	
	Level	1:600	Level	1:600
112mm Outlet at one end	1.00	1.3	48	62
Roundstyle Outlet at centre	1.82	2.43	87	116



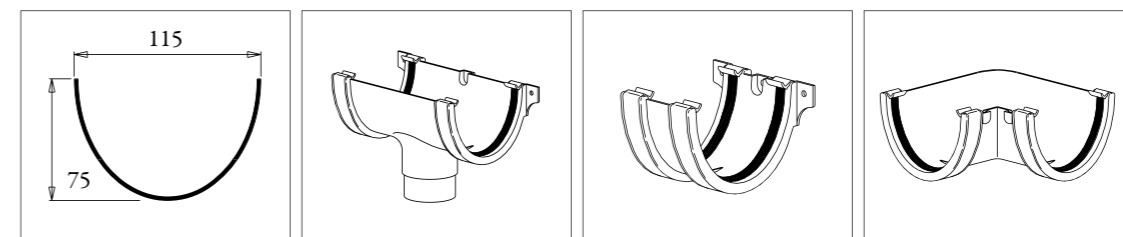


Combining period Cast Iron detailing and styling, Deepstyle is a higher capacity semi elliptical rainwater system, providing greater drainage efficiency on larger roof areas.

- Authentic detailing and finish on downpipe, guttering, hoppers and fittings
- Fully compatible with the Cast Iron Style Soil System
- Incorporates 68mm Round Downpipe
- Choice of Ogee, Bath, Gothic and motiffed hopper designs
- Available in six colour options: Classic Black, Oxford Blue, Olive Green, Graphite Grey, Sandstone, Porcelain White

Cast Iron Style Gutter Capacities

	Gutter Flow Capacity Litres per second		Maximum Roof Area m ²	
	Level	1:600	Level	1:600
115mm Outlet at one end	1.88	2.30	90	110
Deepstyle Outlet at centre	3.75	4.58	180	220



High Capacity Rainwater System

- 160mm Roundstyle.

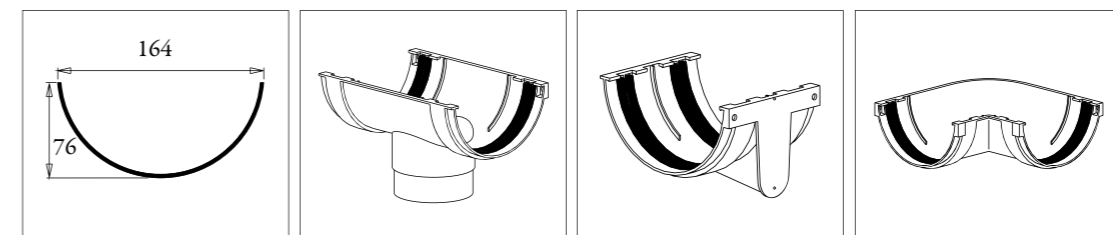


The High Capacity Cast Iron Style Rainwater System is ideally suited to traditionally styled buildings with larger roof areas. Period style detailing combined with very high levels of roof drainage ensure that this system can be used on a wide variety of large heritage style buildings. Featuring 105mm Round Downpipe and 100 x 75mm Rectangular Downpipe, this system has been purposefully designed with close attention to detail. This authentic looking system can be used as a direct refurbishment replacement of Cast Iron in commercial buildings, churches, Georgian and Victorian shop frontage and larger period dwellings. Double seals on outlets, unions and angles guarantee optimum performance of this large, robust Cast Iron Style gutter system.

- Authentic detailing and finish on downpipe, guttering and fittings
- Fully compatible with the Cast Iron Style Soil System and traditional Cast Iron
- Double seals on outlet, unions and angles
- Incorporates 105mm Round Downpipe and 100 x 75mm Rectangular Downpipe
- Choice of Ogee, Bath, Gothic and motiffed hopper designs
- Available in six colour options: Classic Black, Oxford Blue, Olive Green, Graphite Grey, Sandstone, Porcelain White

Cast Iron Style Gutter Capacities

		Gutter Flow Capacity Litres per second	Maximum Roof Area m ²
		1:600	1:600
160mm	Outlet at one end	3.23	155
Roundstyle	Outlet at centre	6.47	310



Hoppers



Brett Martin's extensive range of authentic hopper styles and designs provides the opportunity for the designer and home owner to individualise their rainwater system. The hopper designs include traditional Ogee, Bath and Gothic hoppers and a choice of period motifs including Tudor Rose, Fleur de Lys, Lion and Gargoyles.



Ogee



Gothic



Bath

Hopper Motifs



i. Fleur de lys



ii. Lion



iii. Tudor Rose



iv. Leaf



v. Gargoyle



vi. Date



vii. Four Leaf Square



Cast Iron Style Soil System



To complement Cast Iron Style Domestic and High Capacity Rainwater Systems, the Cascade range includes a comprehensive Cast Iron Soil System with a realistic cast iron finish. Designed to incorporate traditional cast iron detailing with all the benefits of a plastic system, the Cast Iron Soil System completes the range providing a cost effective alternative to Cast Iron in renovation or new build projects.

- 110mm Soil Pipe
- Soil Stack Shroud
- Access Fittings and Adaptors

Push Fit

Fully sealed, Cast Iron Style Soil is a Push-fit Soil System which offers fast installation and maximum durability. Due to the system's range of seals and adaptors, it is fully compatible with other systems. The provision of long lasting rubber seals, retained by strong snap caps, gives the convenience of Push-fit installation plus prolonged reliability. At ground level the Cast Iron Soil System fully integrates with Brett Martin's Underground Drainage Systems.

- Authentic detailing and finish on guttering, downpipe, shroud, clips and fittings
- Fully compatible with the Cast Iron Style rainwater systems and traditional Cast Iron
- Convenient push fit installation
- Fully sealed, reliable system
- Integrates with Brett Martin Underground Drainage Systems
- Available in six colour options: Classic Black, Oxford Blue, Olive Green, Graphite Grey, Sandstone, Porcelain White

Colours



Cascade Cast Iron Style Rainwater and Soil System is available in a choice of heritage colours to cater for the subtle nuances of local architectural vernacular. In addition to Classic Black, there is a choice of Oxford Blue, Olive Green, Graphite Grey, Sandstone and Porcelain White which reflect the trend for priming and painting traditional systems. The complete colour range delivers the traditional appearance of Cast Iron with the convenience of modern plastic materials.



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.

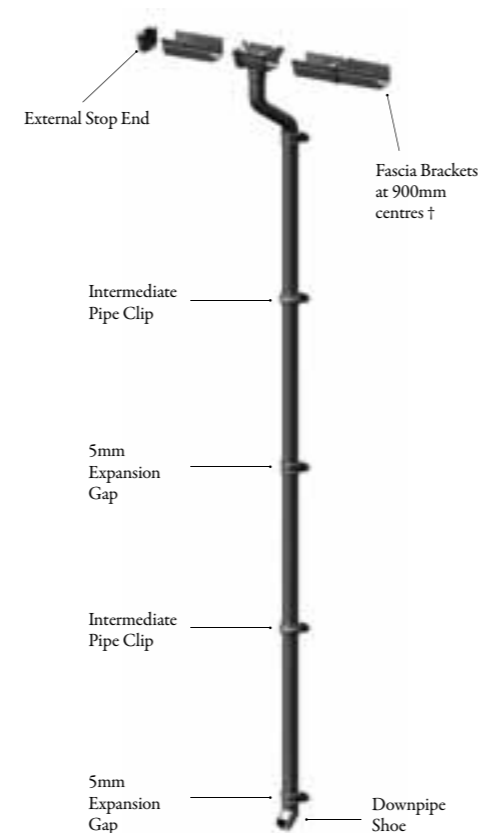
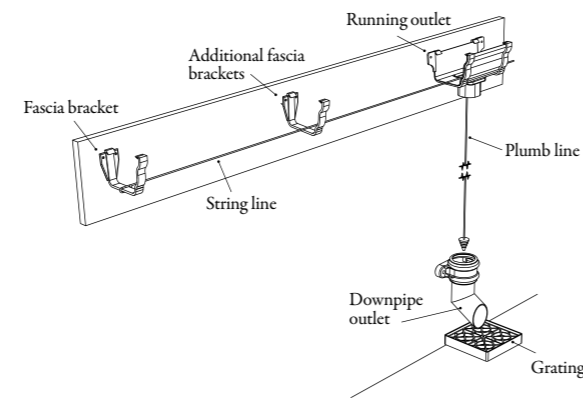
Brett Martin Rainwater gutters can be efficiently installed if the following procedures are followed. Rainwater systems are supported by the outlet joint/union bracket and external angles as well as the gutter support brackets, all of which must be fixed, wherever possible to the fascia or support bracket. 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.



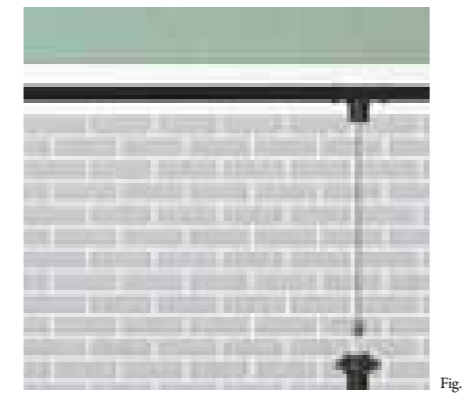
Installation of Downpipes

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)



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.

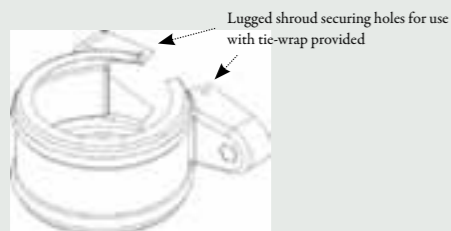
A range of hoppers are offered, some of which can be adapted to include specific dates or designs as a costed option.

Installation of Soil System

As the Brett Martin Cast Iron Style Soil system is a coated version of the standard range, fixing instructions are predominately the same, details of which are available in the Brett Martin technical brochure, available on request.

However, due to the special coating, it is not possible to solvent weld any pipe and fittings together, which has dictated the selected range of fittings offered.

To maximise the traditional appearance of the range, special shrouds have been developed to fit around sockets to give a full cast iron socket effect. 2.5m socketed pipes are offered and a clip should be placed around each pipe socket to secure the stack to the wall. A lugged shroud (code BSS1LCI) can then be fitted over the clip and socket. Plain Socket Shrouds (code BSS2CI) can then be fitted over all other plain sockets to complete the full traditional appearance.



Lugged Soil 'Shroud' (BSS1LCI) Fitting Instructions

- Orientate the shroud so that the securing holes cannot be seen from eye level then snap shroud into position
The shroud should be fitted so that the underside face of the shroud is located against the top face of the clipped socketed pipe
- Thread the tie-wrap provided through the securing holes and tighten until shroud grips and the lugs fit back to the wall
Pulling each ear away from the wall to feed the tie wrap through each securing hole will aid fitting
- Repeat the above procedure on all clipped pipe fixings points



To connect Waste pipes to the stack, fit the relevant rubber Waste adaptor, (codes BW1, 2 or 3), into the relevant boss upstand and push the lubricated Waste pipe spigot fully into the adaptor.

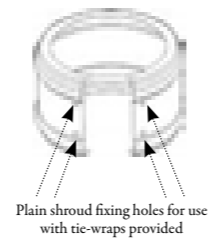
When installing a soil stack, it is essential that all spigots are lubricated prior to being inserted into the lubricated ring seal joint and that an expansion allowance of 10mm is provided. Simply push the lubricated spigot fully into the socket, lightly mark the spigot and then withdraw the spigot 10mm.

Care should be taken to prevent lubricant from staining the surface of the pipework during installation. We strongly recommend the use of our water based lubricant, code B9333, which is easily removable with soap and water should the surface appearance be affected.

To form an offset in the Soil stack, use the Offset Pipe (code BS500CI) to form the relevant offset length between two relevant bends and coupler, if required. This negates the need to cut a full length of pipe and reduces the cost of the installation.

Care should be taken to ensure a vertical installation of the main stack for both appearance and to ensure suitable falls can be obtained for any connecting pipework.

Read the label inside the plain shroud to identify the fitting side and the pipe side



Plain Soil 'Shroud' (BSS2CI) Fitting Instructions

- Snap shroud into position ensuring that the shroud is correctly orientated
- Spin the plain shroud so that the securing holes face you
- Thread the tie-wraps provided through the securing holes and tighten until shroud grips the fitting and pipe
Ensure that the shroud is in the correct orientation and positioned against the upstand as shown
- Spin the plain shroud back into position so the tie wrap is hidden
Repeat the above for every plain shroud

Each rainwater system has been designed to facilitate fast, efficient, economical installation combined with exceptional reliability. All the domestic systems feature fixing arrangements for easy and straight screwdriver access, incorporating the popular Brett Martin clip fixing system, creating a neat and secure installation every time.

No matter which Rainwater system is selected, you are assured of an excellent high performance product offering unbeatable durability and low maintenance whilst ensuring ease of installation and will stay looking good and working well for years to come.

Brett Martin's Rainwater systems have been fully tested for accelerated ageing in accordance with BS EN 607:1995 and the excellence of Brett Martin Rainwater systems is recognized through the company's achievement of BS EN ISO 9001:2008. You can be confident that, as a BSI Registered Firm, our Quality Assurance programme guarantees that Brett Martin's Rainwater is a first class product.

Following on from our investment in Research, Development, Quality Assurance and our focus on Customer Satisfaction, Brett Martin's Rainwater systems are covered by our extended Warranty and Guarantee package. This Guarantee covers a period of 10 years from date of purchase and covers unusual warping, splitting and discolouration providing the system has been installed following manufacturer's instructions and excludes any coating, paint or other surface treatment applied to the system (with the exception of the Cast Iron Style range where a specific Brett Martin formulated coating has been applied to components), damage caused by external agents, fair wear and tear from normal aging and does not apply to consequential losses but to replacement of defective materials. Full warranty details are available on request from Brett Martin Ltd.

Rainwater is just part of Brett Martin's complete drainage and plumbing programme. The Rainwater range is complimented by the Brett Martin Drainage, Sewer, Surface Water, Soil and Waste systems to provide a complete sustainable solution for all your water cycle requirements.

Full technical and installation instructions are detailed on the company's web site at www.brettmartin.com and listed in the rainwater technical guide, which is available on request. The company's sales and technical departments are always available to answer any queries and offer a complete design service.