



ROYALTY RANGE

ALUMINIUM GUTTERING



The new Royalty range from Rainmen Ltd Rainwater Systems gives Architects and Designers innovative and exciting options on guttering.

With our Royalty range you can transform guttering into an attractive main feature - enhancing the appearance of any property and increasing its value.

The aesthetic beauty of the king and queen brackets complete with Tudor Rose Emblem, together with our new ClipFit Aluminium guttering has the following benefits:

- Concealed gutter joints with no visible fixings.
- A really strong gutter bracket support system.
- Anti wind-lift Gutter Brackets.

- Fully recyclable - a 'green' product.
- 25 year powder coating Guarantee.
- Can be powder coated in our cast-alike finish to give a cast-iron effect.
- Tudor Roses can also be used on the square down pipe collars.
- The roses are removable for re-coating if a different colour is required.
- Choose from over 200 RAL colours.

Make a difference - fit the Royalty Range!

**For more information, phone us on 0161 303 1163
www.rainmen.co.uk**



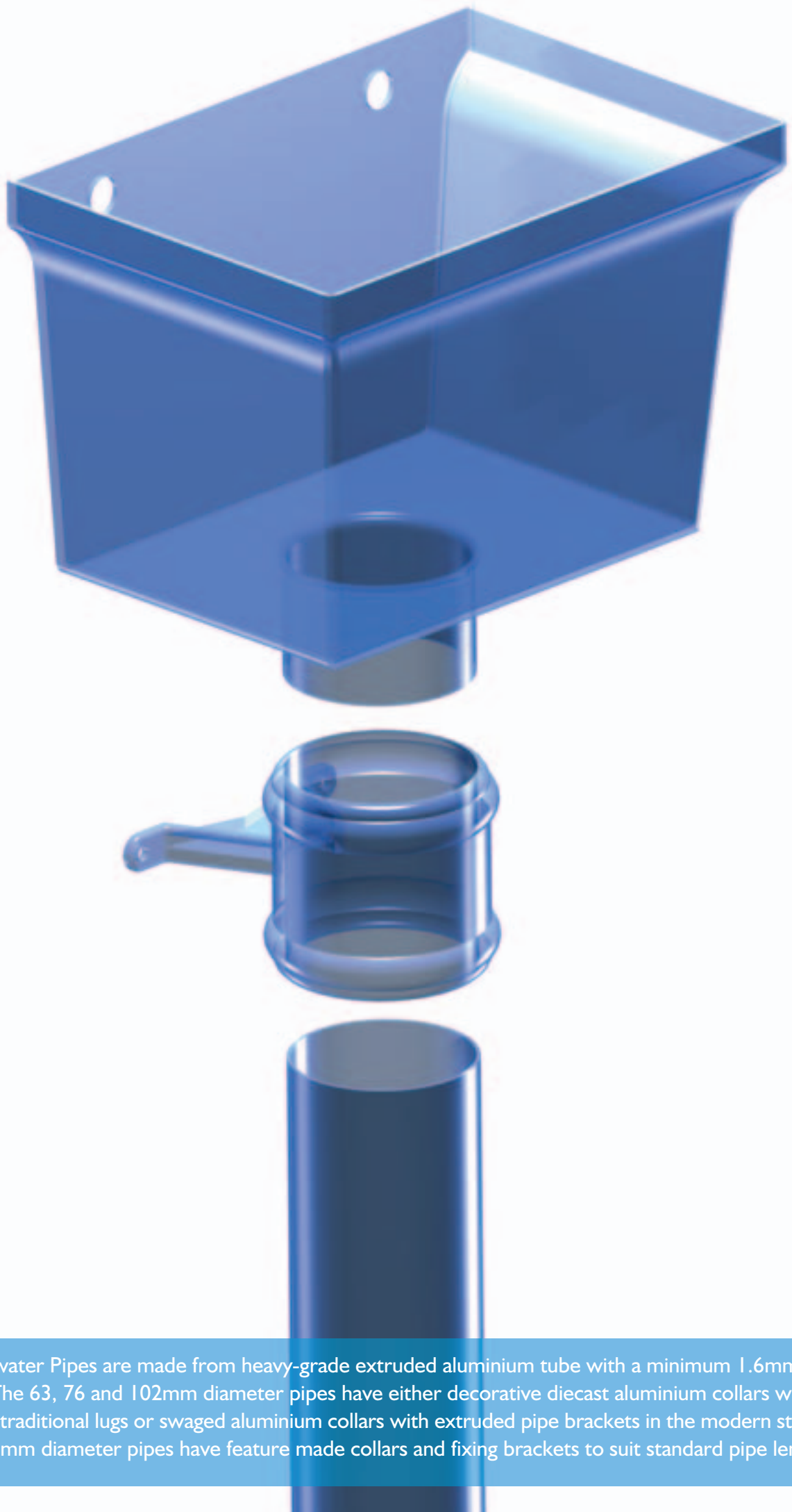
Refer to our on-line gallery for more colour options



**BEAUTIFUL
BUILDINGS
DESERVE
BEAUTIFUL
GUTTERS**

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All Rainwater Pipes are made from heavy-grade extruded aluminium tube with a minimum 1.6mm wall gauge. The 63, 76 and 102mm diameter pipes have either decorative diecast aluminium collars with or without traditional lugs or swaged aluminium collars with extruded pipe brackets in the modern style. The 150mm diameter pipes have feature made collars and fixing brackets to suit standard pipe lengths.

Cast Collar Circular Rainwater Pipes

RAINWATER PIPE INC CAST COLLAR



Length	63mm	76mm	102mm
3.0m	PR63/1c	PR76/1c	PR102/1c
2.5m	PR63/2c	PR76/2c	PR102/2c
2.0m	PR63/3c	PR76/3c	PR102/3c
1.0m	PR63/4c	PR76/4c	PR102/4c
0.5m	PR63/5c	PR76/5c	PR102/5c

RAINWATER SHOE



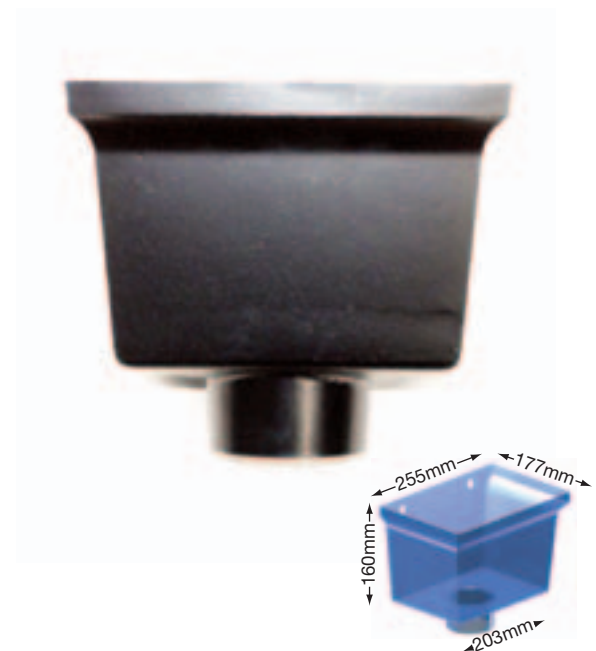
63mm	76mm	102mm
PR63/27c	PR76/27c	PR102/27c

RAINWATER BENDS



Angle	63mm	76mm	102mm
92.5°	PR63/6c	PR76/6c	PR102/6c
112.5°	PR63/7c	PR76/7c	PR102/7c
135°	PR63/8c	PR76/8c	PR102/8c
Non Standard	PR63/9c	PR76/9c	PR102/9c

STANDARD HOPPER HEADS



Universal	63mm	76mm	102mm
	PR63/29c	PR76/29c	PR102/29c

Cast Collar Circular Rainwater Pipes

SINGLE BRANCH JUNCTION



Angle	63mm	76mm	102mm
92.5°	PR63/10c	PR76/10c	PR102/10c
112.5°	PR63/11c	PR76/11c	PR102/11c
135°	PR63/12c	PR76/12c	PR102/12c
Non Standard	PR63/13c	PR76/13c	PR102/13c

ONE PART PROJECTION



One part projections are available to your specific measurements in the below range.

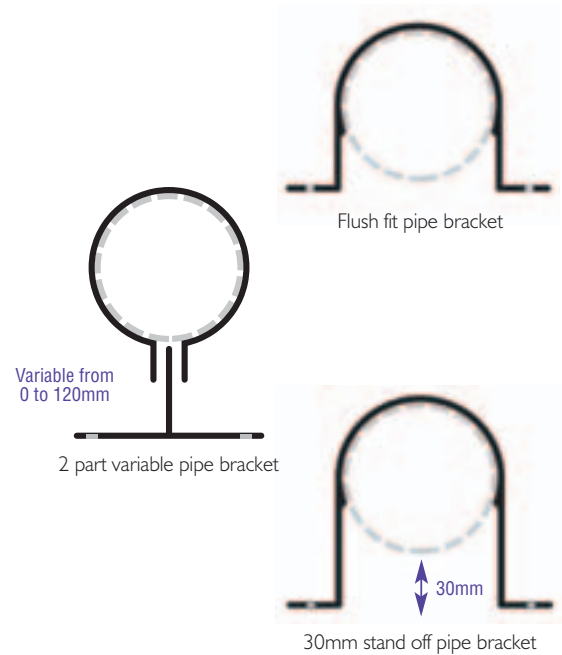
Offset	63mm	76mm	102mm
63-149mm	PR63/18c	PR76/18c	PR102/18c

DOUBLE BRANCH JUNCTION



Angle	63mm	76mm	102mm
92.5°	PR63/14c	PR76/14c	PR102/14c
112.5°	PR63/15c	PR76/15c	PR102/15c
135°	PR63/16c	PR76/16c	PR102/16c
Non Standard	PR63/17c	PR76/17c	PR102/17c

PIPE BRACKET



	63mm	76mm	102mm
Flush	PR63/22c	PR76/22c	PR102/22c
30mm Stand off	PR63/23c	PR76/23c	PR102/23c
2 part variable	PR63/24c	PR76/24c	PR102/24c

Cast Collar Circular Rainwater Pipes

ADJUSTABLE PROJECTION



Adjustable projections are available to your specific measurements in the below range.

Offset	63mm	76mm	102mm
150 - 400mm	PR63/19c	PR76/19c	PR102/19c
401 - 750mm	PR63/20c	PR76/20c	PR102/20c
751 - 1000mm	PR63/21c	PR76/21c	PR102/21c

RAINWATER RODDING ACCESS PLATE



63mm	76mm	102mm
PR63/28c	PR76/28c	PR102/28c

EARED CAST COLLAR



63mm	76mm	102mm
PR63/26c	PR76/26c	PR102/26c

NON-EARED CAST COLLAR



63mm	76mm	102mm
PR25/25c	PR76/25c	PR102/25c

Swaged / Welded Circular Rainwater Pipes

RAINWATER PIPE INC SOCKET



Length	63mm	76mm	102mm	150mm
3.0m	PR63/1s	PR76/1s	PR102/1s	PR152/1w
2.5m	PR63/2s	PR76/2s	PR102/2s	PR152/2w
2.0m	PR63/3s	PR76/3s	PR102/3s	PR152/3w
1.0m	PR63/4s	PR76/4s	PR102/4s	PR152/4w
0.5m	PR63/5s	PR76/5s	PR102/5s	PR152/5w

RAINWATER SHOE



63mm	76mm	102mm	150mm
PR63/27s	PR76/27s	PR102/27s	PR152/27w

RAINWATER BENDS



Angle	63mm	76mm	102mm	150mm
92.5°	PR63/6s	PR76/6s	PR102/6s	PR152/6w
112.5°	PR63/7s	PR76/7s	PR102/7s	PR152/7w
135°	PR63/8s	PR76/8s	PR102/8s	PR152/8w
Non Standard	PR63/9s	PR76/9s	PR102/9s	PR152/9w

RAINWATER PIPES

The majority of our rainwater pipes have either decorative diecast aluminium collars with or without traditional lugs or swaged aluminium collars with extruded brackets in the contemporary style.

The 63mm, 76mm and 102mm diameter pipes are available with a swaged collar. However, the 150mm diameter cannot be swaged. As an alternative, this size comes complete with a feature made welded collar that creates a swage effect and looks almost identical.

For further information or to request samples or a price list, please contact our Sales Team on **0161 303 1163**

Swaged / Welded Circular Rainwater Pipes

SINGLE BRANCH JUNCTION



Angle	63mm	76mm	102mm	150mm
92.5°	PR63/10s	PR76/10s	PR102/10s	PR152/10w
112.5°	PR63/11s	PR76/11s	PR102/11s	PR152/11w
135°	PR63/12s	PR76/12s	PR102/12s	PR152/12w
Non Standard	PR63/13s	PR76/13s	PR102/13s	PR152/13w

ONE PART PROJECTION



One part projections are available to your specific measurements in the below range.

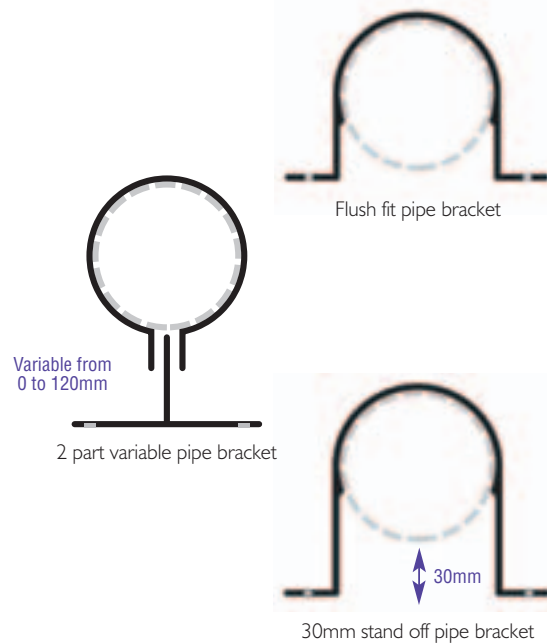
Offset	63mm	76mm	102mm	150mm
63-149mm	PR63/18s	PR76/18s	PR102/18s	PR152/18w

DOUBLE BRANCH JUNCTION



Angle	63mm	76mm	102mm	150mm
92.5°	PR63/14s	PR76/14s	PR102/14s	PR152/14w
112.5°	PR63/15s	PR76/15s	PR102/15s	PR152/15w
135°	PR63/16s	PR76/16s	PR102/16s	PR152/16w
Non Standard	PR63/17s	PR76/17s	PR102/17s	PR152/17w

PIPE BRACKET



	63mm	76mm	102mm	150mm
Flush	PR63/22s	PR76/22s	PR102/22s	N/A
30mm Stand off	PR63/23s	PR76/23s	PR102/23s	N/A
2 part variable	PR63/24s	PR76/24s	PR102/24s	PR152/24w

Swaged / Welded Circular Rainwater Pipes

ADJUSTABLE PROJECTION



Adjustable projections are available to your specific measurements in the below range.

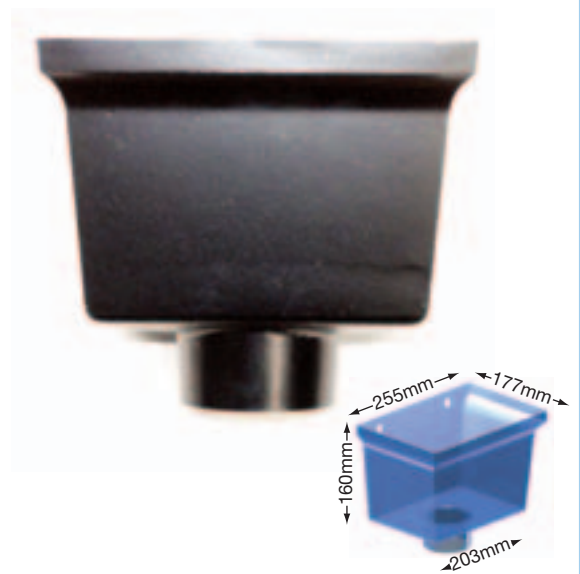
Offset	63mm	76mm	102mm	150mm
150-400mm	PR63/19s	PR76/19s	PR102/19s	PR152/19w
401-750mm	PR63/20s	PR76/20s	PR102/20s	PR152/20w
751-1000mm	PR63/21s	PR76/21s	PR102/21s	PR152/21w

RAINWATER RODDING ACCESS PLATE



63mm	76mm	102mm	150mm
PR63/28s	PR76/28s	PR102/28s	PR152/28w

STANDARD HOPPER HEADS



Universal	63mm	76mm	102mm	150mm
	PR63/29s	PR76/29s	PR102/29s	PR152/29w



All Rainwater Pipes are made from heavy-grade extruded aluminium tube with a minimum 1.6mm wall gauge. The pipes have decorative diecast aluminium collars with or without traditional lugs or fabricated collars. The 76x76mm pipe may also be supplied with swaged sockets with loose extruded pipe brackets to be positioned where required. The 150x150mm pipes have feature made collars and fixing brackets to suit.

Rainwater Pipe inc. Loose Cast Collar

RAINWATER PIPE INC EARED CAST COLLAR



Length	76x76mm	102x76mm	102x102mm
3.0m	PS76/1c	PS43/1c	PS102/1c
2.5m	PS76/2c	PS43/2c	PS102/2c
2.0m	PS76/3c	PS43/3c	PS102/3c
1.0m	PS76/4c	PS43/4c	PS102/4c
0.5m	PS76/5c	PS43/5c	PS102/5c

RAINWATER SHOE



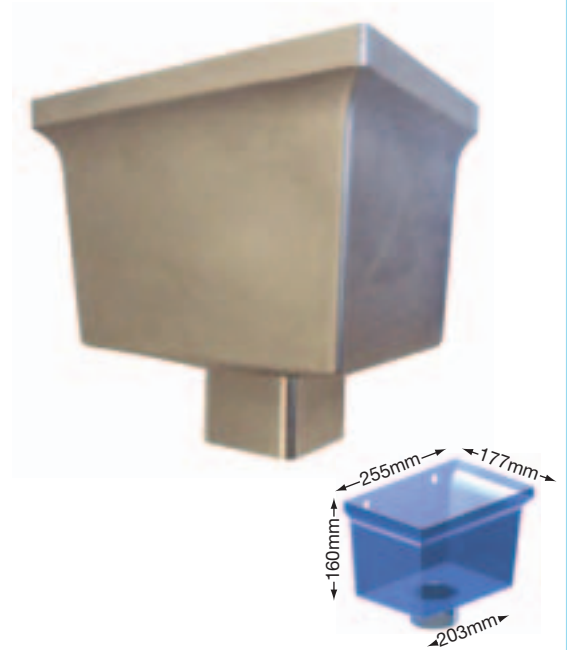
76x76mm	102x76mm	102x102mm
PS76/27c	PS43/27c	PS102/27c

RAINWATER BENDS



Angle	76x76mm	102x76mm	102x102mm
92.5°	PS76/6c	PS43/6c	PS102/6c
112.5°	PS76/7c	PS43/7c	PS102/7c
135°	PS76/8c	PS43/8c	PS102/8c
Non Standard	PS76/9c	PS43/9c	PS102/9c

STANDARD HOPPER HEADS



Universal	76x76mm	102x76mm	102x102mm
	PS76/29c	PS43/29c	PS102/29c

Cast Collar Square & Rectangular Rainwater Pipes

SINGLE BRANCH JUNCTION



Angle	76x76mm	102x76mm	102x102mm
92.5°	PS76/10c	PS43/10c	PS102/10c
112.5°	PS76/11c	PS43/11c	PS102/11c
135°	PS76/12c	PS43/12c	PS102/12c
Non Standard	PS76/13c	PS43/13c	PS102/13c

ONE PART PROJECTION



One part projections are available to your specific measurements in the below range.

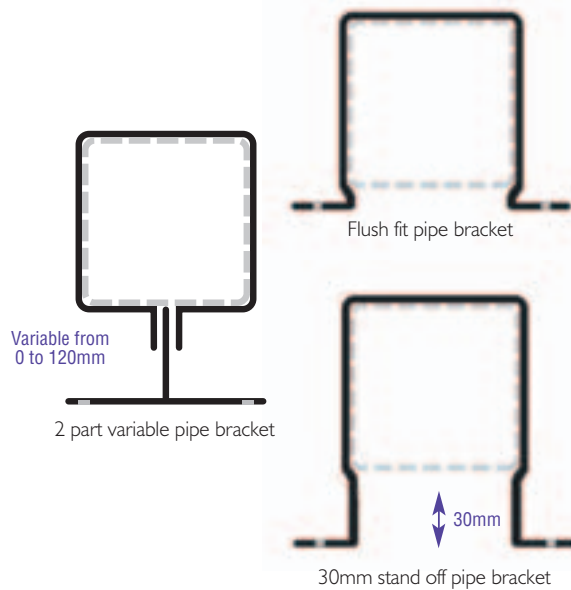
Offset	76x76mm	102x76mm	102x102mm
63-149mm	PS76/18c	PS43/18c	PS102/18c

DOUBLE BRANCH JUNCTION



Angle	76x76mm	102x76mm	102x102mm
92.5°	PS76/14c	PS43/14c	PS102/14c
112.5°	PS76/15c	PS43/15c	PS102/15c
135°	PS76/16c	PS43/16c	PS102/16c
Non Standard	PS76/17c	PS43/17c	PS102/17c

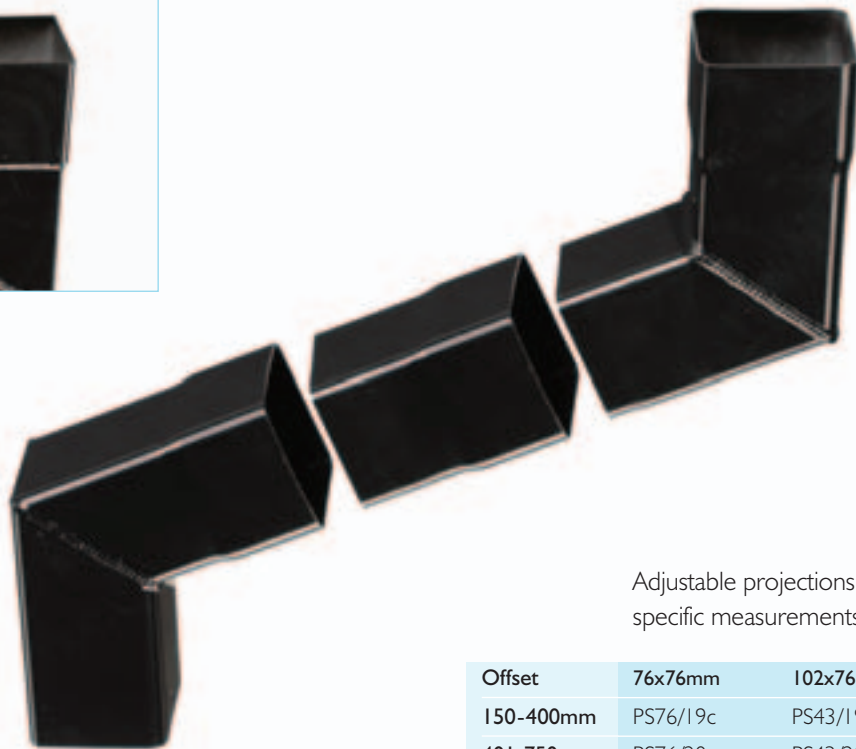
PIPE BRACKET



	76x76mm	102x76mm	102x102mm
Flush	PS76/22c	PS43/22c	PS102/22c
30mm Stand off	PS76/23c	PS43/23	PS102/23c
2 part variable	PS76/24	PS43/24	PS102/24

Cast Collar Square & Rectangular Rainwater Pipes

ADJUSTABLE PROJECTION



Adjustable projections are available to your specific measurements in the below range.

Offset	76x76mm	102x76mm	102x102mm
150-400mm	PS76/19c	PS43/19c	PS102/19c
401-750mm	PS76/20c	PS43/20c	PS102/20c
751-1000mm	PS76/21c	PS43/21c	PS102/21c

RAINWATER RODDING ACCESS PLATE



76x76mm	102x76mm	102x102mm
PS76/28c	PS43/28c	PS102/28c

EARED CAST COLLAR



76x76mm	102x76mm	102x102mm
PS76/26c	PS43/26c	PS102/26c

NON-EARED CAST COLLAR



76x76mm	102x76mm	102x102mm
PS76/25c	PS43/25c	PS102/25c

Swaged / Welded Square & Rectangular Rainwater Pipes

RAINWATER PIPE SWAGED



Length	76x76mm	102x76mm	102x102mm	150x150mm
3.0m	PS76/1s	PS43/1w	PS102/1w	PS152/1w
2.5m	PS76/2s	PS43/2w	PS102/2w	PS152/2w
2.0m	PS76/3s	PS43/3w	PS102/3w	PS152/3w
1.0m	PS76/4s	PS43/4w	PS102/4w	PS152/4w
0.5m	PS76/5s	PS43/5w	PS102/5w	PS152/5w

RAINWATER SHOE



76x76mm	102x76mm	102x102mm	150x150mm
PS76/27s	PS43/27w	PS102/27w	PS152/27w

RAINWATER BENDS



Angle	76x76mm	102x76mm	102x102mm	150x150mm
92.5°	PS76/6s	PS43/6w	PS102/6w	PS152/6w
112.5°	PS76/7s	PS43/7w	PS102/7w	PS152/7w
135°	PS76/8s	PS43/8w	PS102/8w	PS152/8w
Non Standard	PS76/9s	PS43/9w	PS102/9w	PS152/9w

RAINWATER PIPES

The majority of our rainwater pipes have either decorative diecast aluminium collars with or without traditional lugs or swaged aluminium collars with extruded brackets in the contemporary style.

The 76x76mm is available with a swaged collar. However, the 102x76mm, 102x102mm and 150x150mm pipes cannot be swaged. As an alternative, these sizes come complete with feature made welded collars that create a swage effect and look almost identical.

For further information or to request samples or a price list, please contact our Sales Team on **0161 303 1163**

Swaged / Welded Square & Rectangular Rainwater Pipes

SINGLE BRANCH JUNCTION



Angle	76x76mm	102x76mm	102x102mm	150x150mm
92.5°	PS76/10s	PS43/10w	PS102/10w	PS152/10w
112.5°	PS76/11s	PS43/11w	PS102/11w	PS152/11w
135°	PS76/12s	PS43/11w	PS102/11w	PS152/11w
Non Standard	PS76/13s	PS43/13w	PS102/13w	PS152/13w

ONE PART PROJECTION



One part projections are available to your specific measurements in the below range.

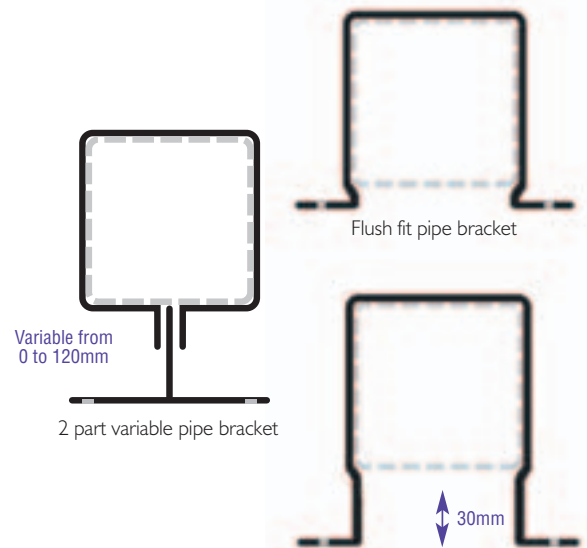
Offset	76x76mm	102x76mm	102x102mm	150x150mm
63-149mm	PS76/18s	PS43/18w	PS102/18w	PS152/18w

DOUBLE BRANCH JUNCTION



Angle	76x76mm	102x76mm	102x102mm	150x150mm
92.5°	PS76/14s	PS43/14w	PS102/14w	PS152/14w
112.5°	PS76/15s	PS43/15w	PS102/15w	PS152/15w
135°	PS76/16s	PS43/16w	PS102/16w	PS152/16w
Non Standard	PS76/17s	PS43/17w	PS102/17w	PS152/17w

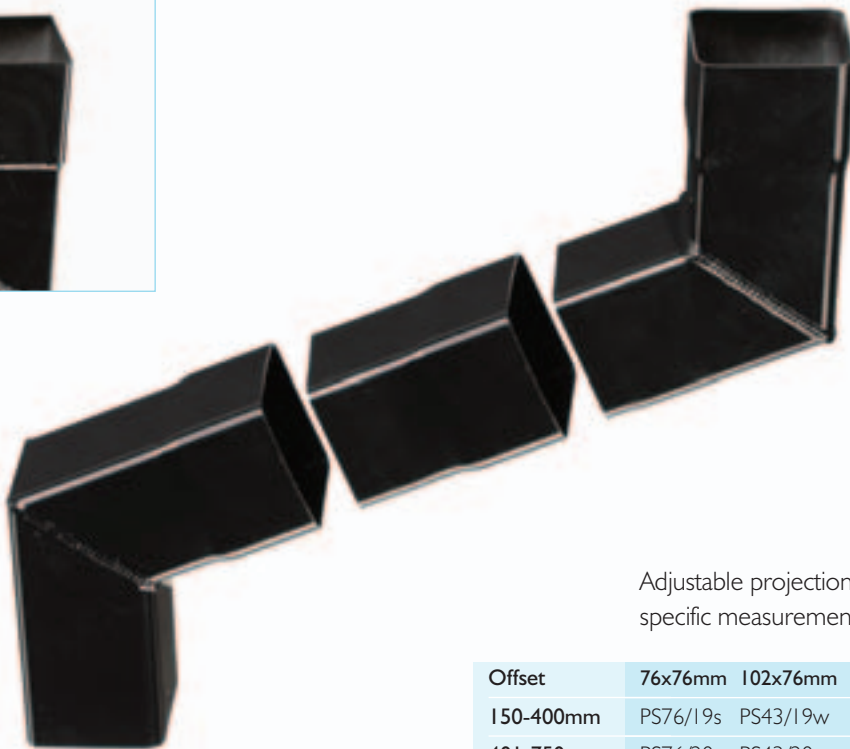
PIPE BRACKET



	76x76mm	102x76mm	102x102mm	150x150mm
Flush	PS76/22s	PS43/22w	PS102/22w	PS152/22w
30mm Stand off	PS76/23s	N/A	PS102/23w	PS152/23w
2 part variable	PS76/24s	PS43/24w	PS102/24w	PS152/24w

Swaged / Welded Square & Rectangular Rainwater Pipes

ADJUSTABLE PROJECTION



Adjustable projections are available to your specific measurements in the below range.

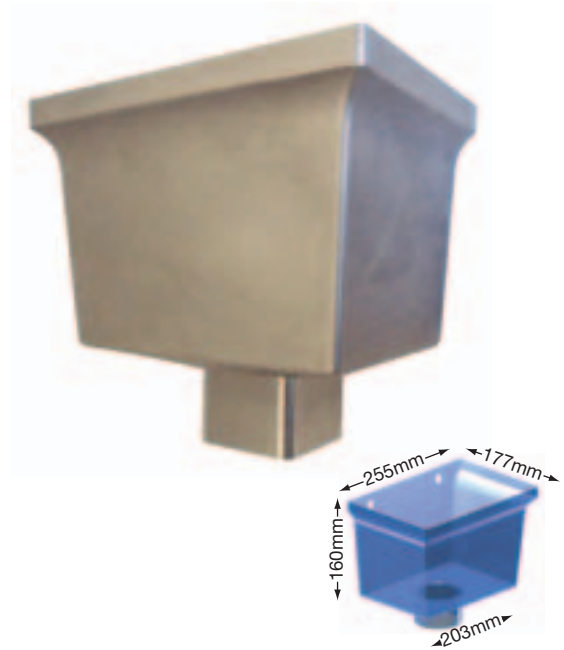
Offset	76x76mm	102x76mm	102x102mm	150x150mm
150-400mm	PS76/19s	PS43/19w	PS102/19w	PS152/19w
401-750mm	PS76/20s	PS43/20w	PS102/20w	PS152/20w
751-1000mm	PS76/21s	PS43/21w	PS102/21w	PS152/21w

RAINWATER RODDING ACCESS PLATE



76x76mm	102x76mm	102x102mm	150x150mm
PS76/28s	PS43/28w	PS102/28w	PS152/28w

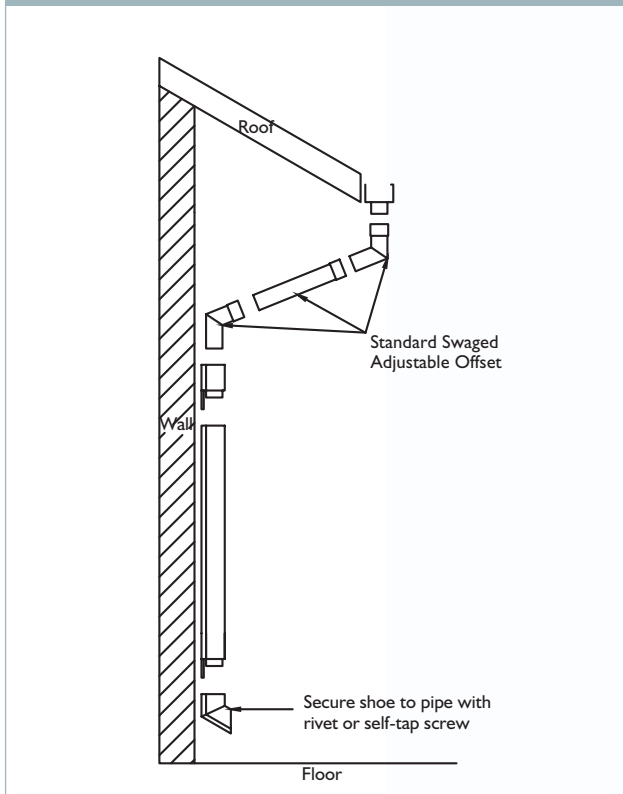
STANDARD HOPPER HEADS



Universal	76x76mm	76x76mm	102x76mm	102x102mm
	PS76/29s	PS43/29w	PS102/29w	PS152/29w

Security Rainwater Pipes

ROUND SECURITY PIPE



SQUARE SECURITY PIPE



SECURITY PIPES

Security Anti-Vandal pipes are available in 6 standard profiles, of 100x75mm, 76x76, 100x100 and 150x150mm, and round pipes of 76mm and 102mm diameter. Designed to provide unrippable flush fitting pipes with concealed joints and fixings, the range is ideal for areas of high vandalism and security conscious environments.

Installed from the top down the systems are made on a bespoke project to project basis. Please contact our sales department to discuss your specific requirements.

Due to various fixing applications we do not supply screws or bolts.

SECURITY RAINWATER PIPES



Cast-a-Like Powder Coating

THE CAST-A-LIKE FINISH

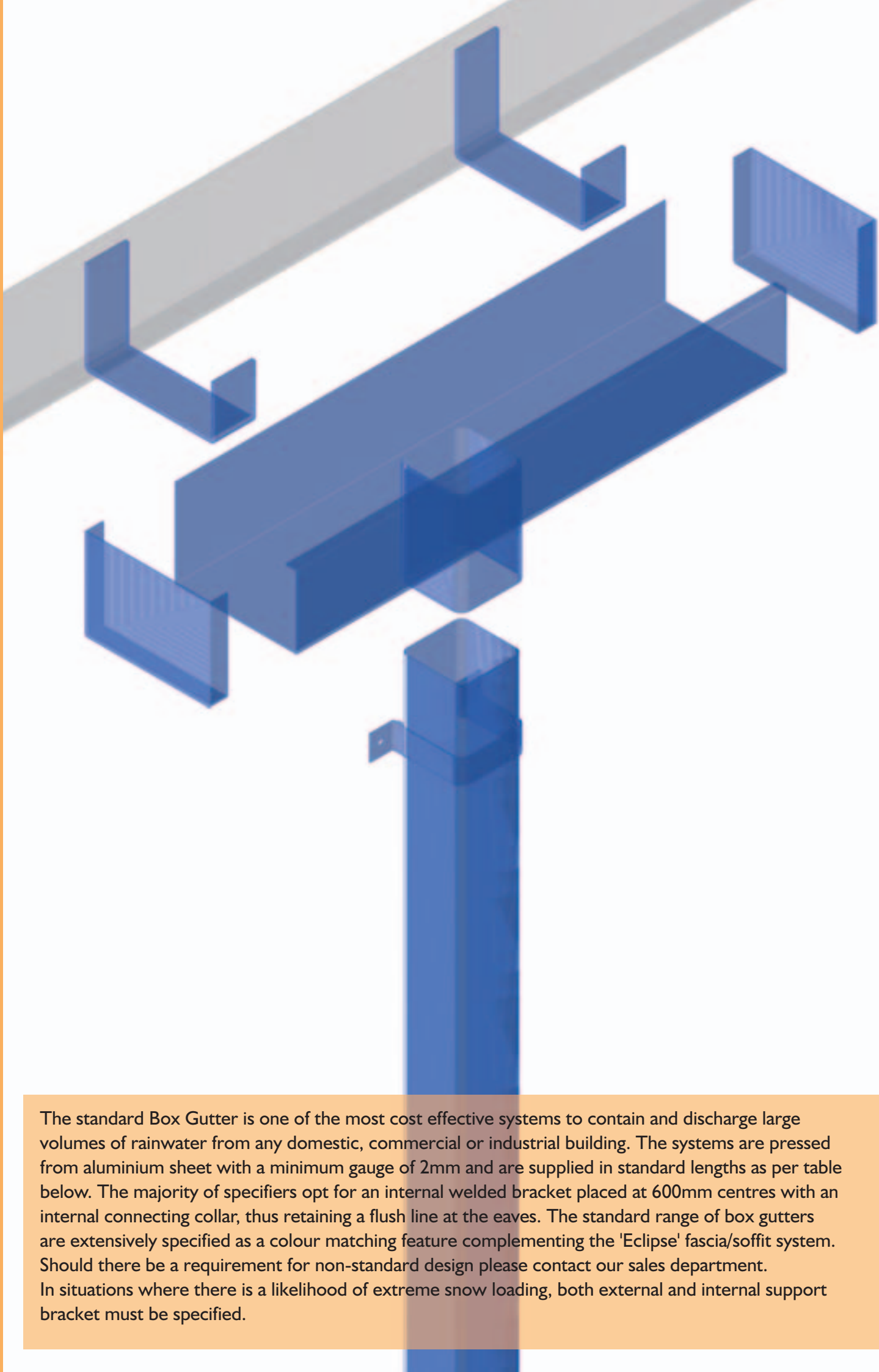
'Cast-a-like' is a special Powder Coating finish that is available on all our rainwater goods. It is intended, as the name suggests, to give aluminium the appearance and feel of cast iron. The disadvantages of cast iron are its weight and its susceptibility to rust. Until recently, its dimpled appearance was unique. However, the cast-a-like finish that is now available combines the appearance of a cast product with the durability of aluminium. The result is a product that has a traditional look and feel, is easy to fit and has a long life span.

The Cast-a-like finish is widely being considered as not only an acceptable alternative but also a superior replacement to cast iron. However, many projects on listed buildings are restricted to the use of traditional products.

In addition to the range of extruded aluminium guttering available (see pages 20-28) we can also supply a range of cast aluminium gutters if this is specified. Please contact our Sales Team for more information.

The cast-a-like finish is available on all products and in all colours.



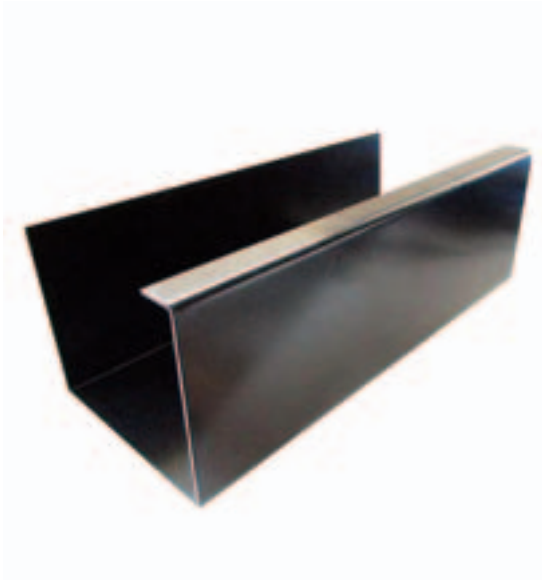


The standard Box Gutter is one of the most cost effective systems to contain and discharge large volumes of rainwater from any domestic, commercial or industrial building. The systems are pressed from aluminium sheet with a minimum gauge of 2mm and are supplied in standard lengths as per table below. The majority of specifiers opt for an internal welded bracket placed at 600mm centres with an internal connecting collar, thus retaining a flush line at the eaves. The standard range of box gutters are extensively specified as a colour matching feature complementing the 'Eclipse' fascia/soffit system. Should there be a requirement for non-standard design please contact our sales department. In situations where there is a likelihood of extreme snow loading, both external and internal support bracket must be specified.

Eclipse Box Gutters

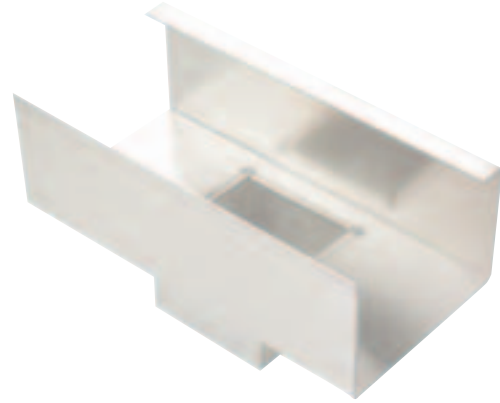
Can be manufactured to any girth size and shape. Standard sizes are shown, bespoke sizes and shapes on request.

GUTTER LENGTHS



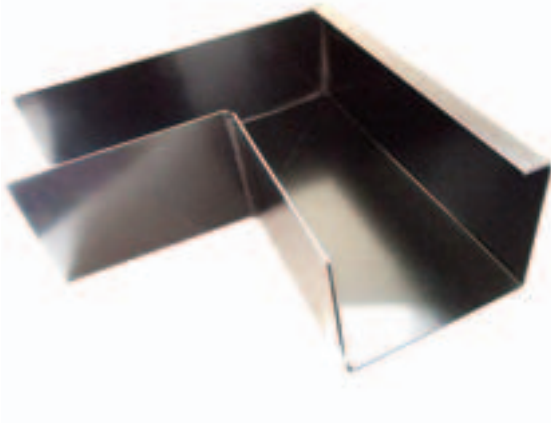
Length	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
3.0m	BG43/1	BG54/1	BG64/1	BG66/1	BG86/1
2.5m	BG43/2	BG54/2	BG64/2	BG66/2	BG86/2
2.0m	BG43/3	BG54/3	BG64/3	BG66/3	BG86/3
1.0m	BG43/4	BG54/4	BG64/4	BG66/4	BG86/4
0.5m	BG43/5	BG54/5	BG64/5	BG66/5	BG86/5

RUNNING OUTLETS



Outlet	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
63mm	BG43/11	BG54/11	BG64/11	BG66/11	BG86/11
76mm	BG43/12	BG54/12	BG64/12	BG66/12	BG86/12
100mm	N/A	BG54/13	BG64/13	BG66/13	BG86/13
76x76mm SQ	BG43/14	BG54/14	BG64/14	BG66/14	BG86/14
102x76mm RT	BG43/15	BG54/15	BG64/15	BG66/15	BG86/15
102x102mm SQ	N/A	BG54/16	BG64/16	BG66/16	BG86/16

ANGLES



Angle	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
External 90°	BG43/6	BG54/6	BG64/6	BG66/6	BG86/6
Internal 90°	BG43/7	BG54/7	BG64/7	BG66/7	BG86/7
External 135°	BG43/8	BG54/8	BG64/8	BG66/8	BG86/8
Internal 135°	BG43/9	BG54/9	BG64/9	BG66/9	BG86/9
Non Standard	BG43/10	BG54/10	BG64/10	BG66/10	BG86/10

STOP ENDS



End	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
Left Hand	BG43/17l	BG54/17l	BG64/17l	BG66/17l	BG86/17l
Right Hand	BG43/17r	BG54/17r	BG64/17r	BG66/17r	BG86/17r

Eclipse Box Gutters

FASCIA BRACKETS



Bracket	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
	BG43/18	BG54/18	BG64/18	BG66/18	BG86/18

RISE & FALL BRACKETS



Bracket	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
	BG43/21	BG54/21	BG64/21	BG66/21	BG86/21

RAFTER BRACKETS



Please specify roof pitch when ordering.

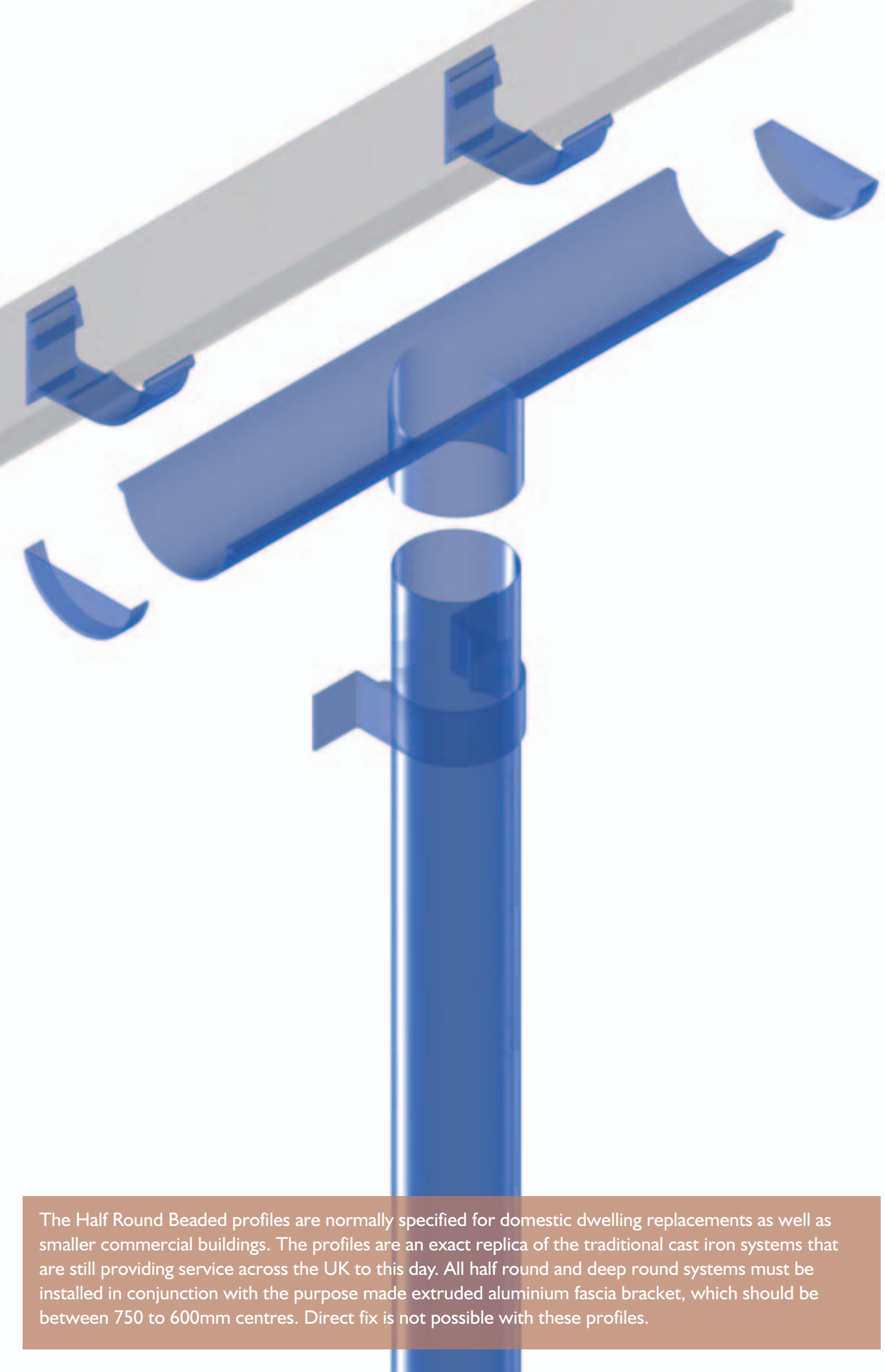
Bracket	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
Top fix	BG43/19	BG54/19	BG64/19	BG66/19	BG86/19
Side Fix	BG43/20	BG54/20	BG64/20	BG66/20	BG86/20

JOINTING CLIP



Internal Joints

Bracket	100x76mm	125x100mm	150x100mm	150x150mm	200x150mm
Universal	BG43/22	BG54/22	BG64/22	BG66/22	BG86/22



The Half Round Beaded profiles are normally specified for domestic dwelling replacements as well as smaller commercial buildings. The profiles are an exact replica of the traditional cast iron systems that are still providing service across the UK to this day. All half round and deep round systems must be installed in conjunction with the purpose made extruded aluminium fascia bracket, which should be between 750 to 600mm centres. Direct fix is not possible with these profiles.

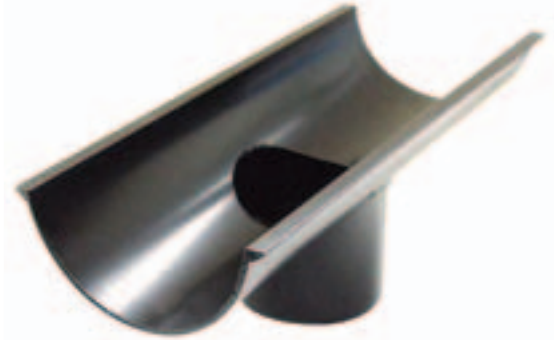
Eclipse Beaded Half Round Fast-Fit Gutters

GUTTER LENGTHS



Length	112mm	125mm	150mm	125x100mm
3.0m	BHR4/1	BHR5/1	BHR6/1	BDR/1
2.5m	BHR4/2	BHR5/2	BHR6/2	BDR/2
2.0m	BHR4/3	BHR5/3	BHR6/3	BDR/3
1.0m	BHR4/4	BHR5/4	BHR6/4	BDR/4
0.5m	BHR4/5	BHR5/5	BHR6/5	BDR/5

RUNNING OUTLETS



Outlet	112mm	125mm	150mm	125x100mm
63mm	BHR4/11	BHR5/11	BHR6/11	BDR/11
76mm	BHR4/12	BHR5/12	BHR6/12	BDR/12
102mm	N/A	BHR5/13	BHR6/13	BDR/13
76x76mm SQ	BHR4/14	BHR5/14	BHR6/14	BDR/14
102x76mm RT	BHR4/15	BHR5/15	BHR6/15	BDR/15
102x102mm	N/A	BHR5/16	BHR6/16	BDR/16

ANGLES



Angle	112mm	125mm	150mm	125x100mm
External 90°	BHR4/6	BHR5/6	BHR6/6	BDR/6
Internal 90°	BHR4/7	BHR5/7	BHR6/7	BDR/7
External 135°	BHR4/8	BHR5/8	BHR6/8	BDR/8
Internal 135°	BHR4/9	BHR5/9	BHR6/9	BDR/9
Non Standard	BHR4/10	BHR5/10	BHR6/10	BDR/10

STOP ENDS UNIVERSAL



End	112mm	125mm	150mm	125x100mm
Universal	BHR4/17	BHR5/17	BHR6/17	BDR/17

Eclipse Beaded Half Round Fast-Fit Gutters

FASCIA BRACKETS



Bracket	112mm	125mm	150mm	125x100mm
	BHR4/18	BHR5/18	BHR5/18	BDR/18

RISE & FALL BRACKETS



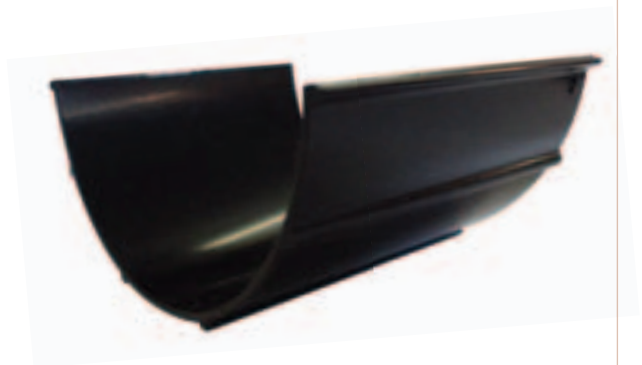
Bracket	112mm	125mm	150mm	125x100mm
	BHR4/21	BHR5/21	BHR6/21	N/A

RAFTER BRACKETS

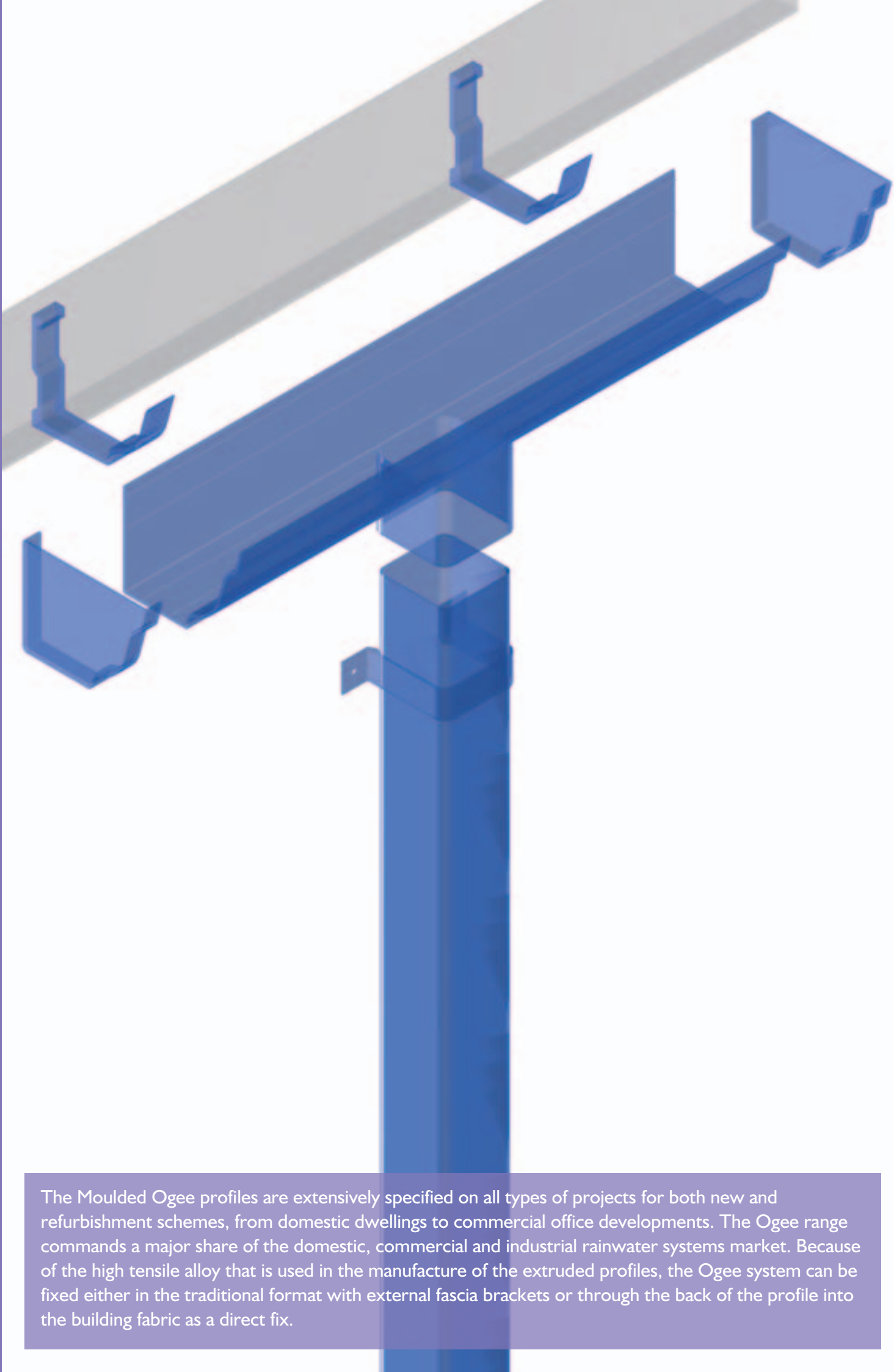


Bracket	112mm	125mm	150mm	125x100mm
Top fix	BHR4/19	BHR5/19	BHR6/19	BDR/19
Side Fix	BHR4/20	BHR5/20	BHR6/20	BDR/20

JOINTING CLIP



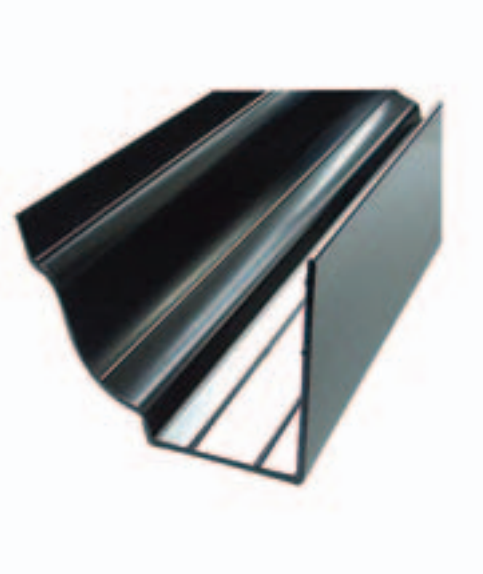
Bracket	112mm	125mm	150mm	125x150mm
Universal	BHR4/22	BHR5/22	BHR6/22	BDR/22



The Moulded Ogee profiles are extensively specified on all types of projects for both new and refurbishment schemes, from domestic dwellings to commercial office developments. The Ogee range commands a major share of the domestic, commercial and industrial rainwater systems market. Because of the high tensile alloy that is used in the manufacture of the extruded profiles, the Ogee system can be fixed either in the traditional format with external fascia brackets or through the back of the profile into the building fabric as a direct fix.

Eclipse Moulded Ogee Fast-Fit Gutters

GUTTER LENGTHS



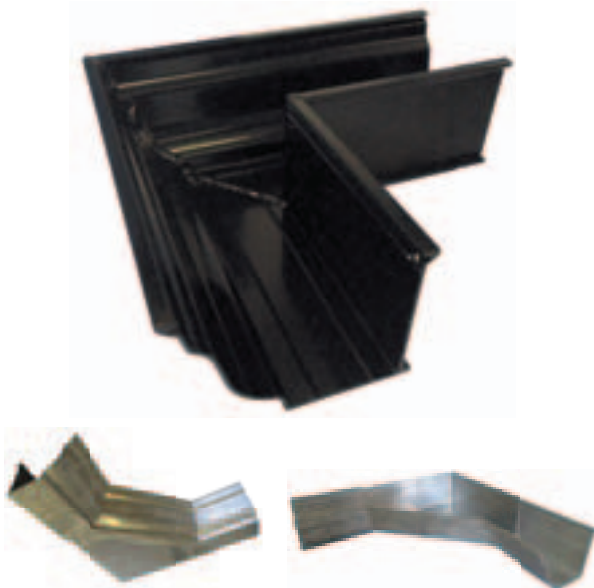
Length	100x76mm	125x100mm	150x100mm	200x150mm
3.0m	MO43/1	MO54/1	MO64/1	MO86/1
2.5m	MO43/2	MO54/2	MO64/2	MO86/2
2.0m	MO43/3	MO54/3	MO64/3	MO86/3
1.0m	MO43/4	MO54/4	MO64/4	MO86/4
0.5m	MO43/5	MO54/5	MO64/5	MO86/5

RUNNING OUTLETS



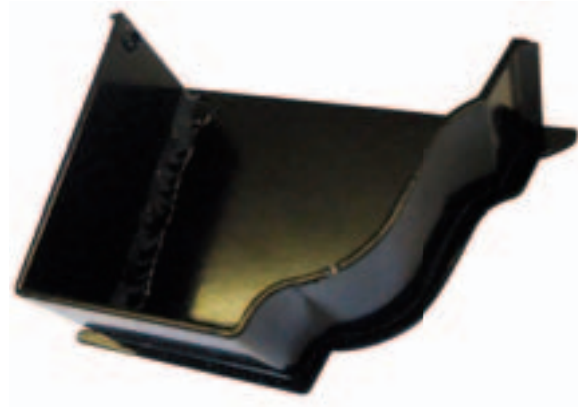
Outlet	100x76mm	125x100mm	150x100mm	200x150mm
63mm	MO43/11	MO54/11	MO64/11	MO86/11
76mm	MO43/12	MO54/12	MO64/12	MO86/12
100mm	N/A	MO54/13	MO64/13	MO86/13
76x76mm SQ	MO43/14	MO54/14	MO64/14	MO86/14
102x76mm RT	MO43/15	MO54/15	MO64/15	MO86/15
102x102mm SQ	N/A	MO54/16	MO64/16	MO86/16

ANGLES



Angle	100x76mm	125x100mm	150x100mm	200x150mm
External 90°	MO43/6	MO54/6	MO64/6	MO86/6
Internal 90°	MO43/7	MO54/7	MO64/7	MO86/7
External 135°	MO43/8	MO54/8	MO64/8	MO86/8
Internal 135°	MO43/9	MO54/9	MO64/9	MO86/9
Non Standard	MO43/10	MO54/10	MO64/10	MO86/10

STOP ENDS



End	100x76mm	125x100mm	150x100mm	200x150mm
Left Hand	MO43/17l	MO54/17l	MO64/17l	MO86/17l
Right Hand	MO43/17r	MO54/17r	MO64/17r	MO86/17r

Eclipse Moulded Ogee Fast-Fit Gutters

JOINTING CLIP



Bracket	100x76mm	125x100mm	150x100mm	200x150mm
	MO43/22	MO54/22	MO64/22	MO86/22

FASCIA BRACKETS



Bracket	100x76mm	125x100mm	150x100mm	200x150mm
	MO43/18	MO54/18	MO64/18	MO86/18

RAFTER BRACKETS



Bracket	100x76mm	125x100mm	150x100mm	200x150mm
Top fix	MO43/19	MO54/19	MO64/19	MO86/19
Side Fix	MO43/20	MO54/20	MO64/20	MO86/20

RISE & FALL BRACKETS



Bracket	100x76mm	125x100mm	150x100mm	200x150mm
	MO43/21	MO54/21	MO64/21	MO86/21

Cast Aluminium Gutters

HALF ROUND BEADED



Length	100mm	112mm	125mm
1.83m (6ft)	CBR4/I	CBR45/I	CBR5/I

HALF ROUND NON-BEADED



Length	100mm	112mm	125mm	150mm
1.83m (6ft)	CHR4/I	CHR45/I	CHR5/I	CHR6/I

OGEE CAST GUTTER



Length	100x75mm	112x100mm	150x100mm
1.83m (6ft)	MOC43/I	MOC54/I	MOC64/I

DEEP FLOW CAST



Length	Deep Flow
1.83m (6ft)	CDR/I

Cast Aluminium Hoppers

STANDARD HOPPERS



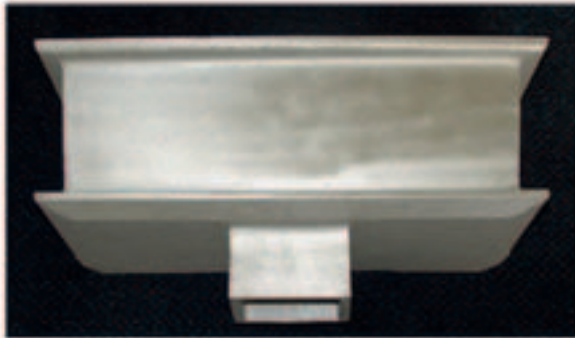
Belle Vue
HOP1

Castleford
HOP5

Trent
HOP16

Bowden
HOP4

Stockford
HOP3



Cheltenham
HOP9



Belle Vue Corner
HOP12



Erigmore Corner
HOP1

DECORATIVE EMBLEMS

Decorative features such as Dates and Emblems, can be incorporated on the front face. Here are a few examples.



Northampton Roses
EMB1



Yorkshire Roses
EMB/3



Lion Head
EMB/3



Tudor Roses EMB/9



Acorn Weld-on Lug
EMB/8



Fleur de Lys
EMB/7










Feathers
EMB/6



Britannia Roses
EMB/4

Sundries

Item	Code	
Patch Outlets	SUN1	
Bobbins/Spacers	SUN26	
Nuts, Bolts, Washers (pack of 100)	SUN27	
Pipe Bolts / Nails	SUN36-40	
Sealant	SUN25	
Sealant Gun	SUN29	
Touch-up Paint	SUN21	

Bespoke formed hoppers available on request



Wall Capping Systems

Wall Capping provides two beneficial services to both existing and new parapet and perimeter walls. Wall Capping is now recognised as the most cost effective means of protecting and weatherproofing existing structures. Wall Capping also provides a very attractive, cosmetic improvement to the line of any building. When considering new structures, wall capping is often specified as part of the building programme to minimise any future maintenance. The capping can be supplied in a range of polyester powder coated colours that can merge and become part of the overall colour scheme of the project. For long term, virtually maintenance free, protection we would recommend considering 'Eclipse' wall capping systems.

Technical Specification

The 'Eclipse' wall capping range is manufactured from aluminium alloy 14 gauge (2.0mm) to BS EN 485/515/573. Note: Ventilation is provided by the continuous aperture between the sides of the wall and the capping system.

Sizes

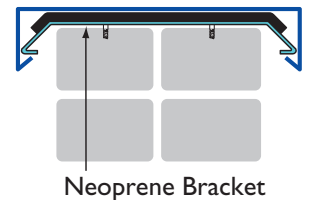
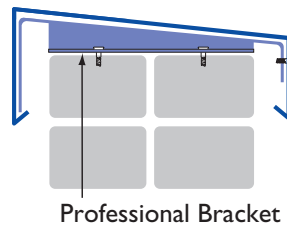
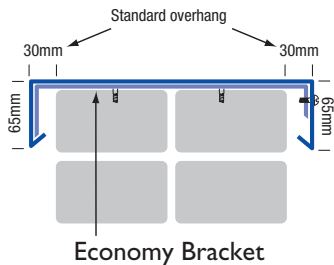
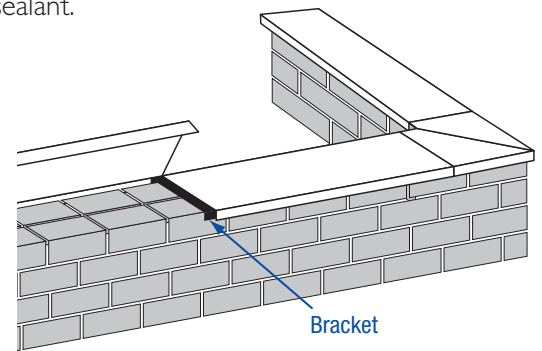
The capping systems are manufactured to suit each individual wall. The dimensions of the girth of the wall must include any previous rendering etc. Standard length of wall capping is 3.0m.

Accessories and Fittings

All 90° and non-standard angles are fabricated and welded in house. There is a wide range of stop-ends and 'T' sections individually manufactured to suit each application.

Fixings

The capping system is fixed in position by clipping both edges of the capping under the holding down bracket. The system ensures minimal visibility of fixings from ground level. The brackets are fixed to the top of the wall at the prescribed intervals using HPS 6/5 hammer screws or stainless fixings. It is recommended that two strips of low modulus sealant are applied to each holding down bracket. The sealant will allow thermal movement without the possibility of leakage. Neoprene tape can be used as an alternative to silicone sealant.



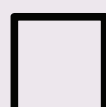
Wall Cappings are available in folds shown below, in any girth from 50mm - 1500mm



0 Folds



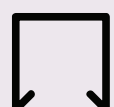
1 Folds



2 Folds



3 Folds

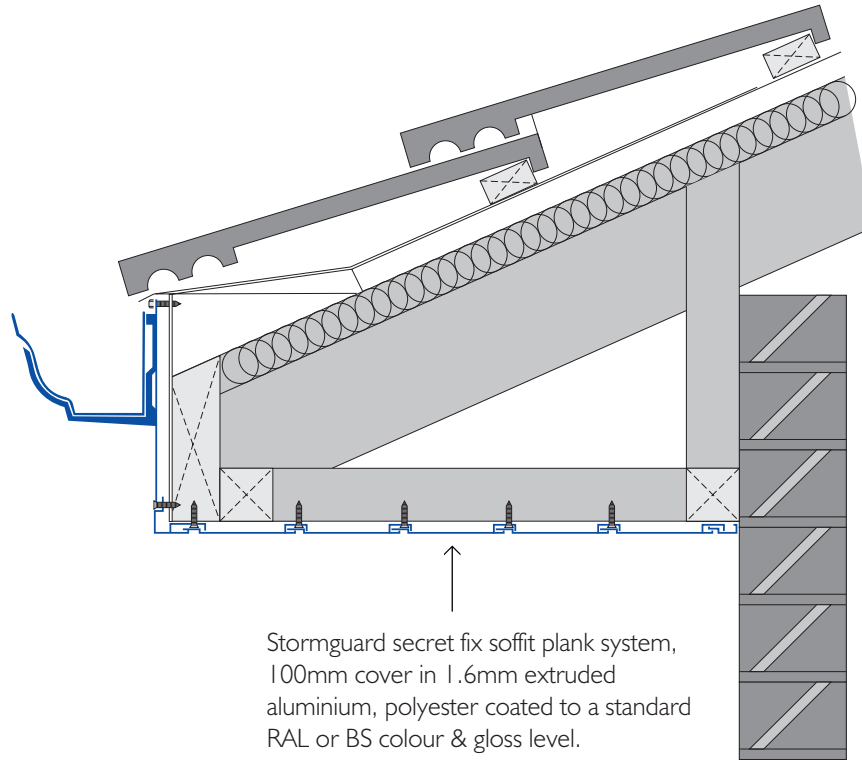


4 Folds

Fascia/Soffit Systems

'Eclipse' Fascia and Soffit systems are designed to incorporate a professionally finished, aesthetic appearance with very low maintenance and high vandal resistant features. This is achieved by a combination of secret fixings, heavy gauge aluminium extrusions and

pressings, polyester powder coated to BS EN12206-1:2004. Added to the inherent architectural features is the suitability for exposed situations where high wind loadings can be encountered, e.g. airports, coastal areas and high buildings.



The above example shows an exposed gutter; in instances where the gutter is not required as a feature, the soffit can be extended to allow the fascia to enclose the gutter.

Fascia/Soffit Systems

'Eclipse' Soffit systems are suitable for both internal and external applications with two standard widths giving three effective widths of 90mm, 100mm and 125mm. The 125mm wide plank is designed to give a tongue and groove effect whilst the 100mm wide plank can give

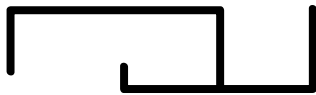
either a butt joint finish at 90mm wide or a delicate shadowline at 10mm wide. There is also a full range of trims and sections available to suit almost any application, some of which are detailed below.



100 mm wide

The above 100mm wide extrusion combined with trims illustrated below act as ideal architectural features in vertical/sloping conditions both internally and externally.

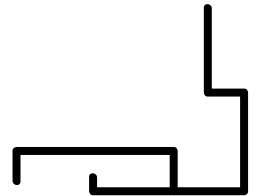
As an additional feature the eaves and cladding systems are available in the full range of anodised colours including gold, silver and bronze.



Starter Trim



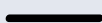
Closing Trim



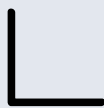
Corner Section



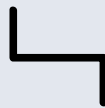
Facia/Soffits are available in folds shown below, in any girth from 50mm - 1500mm



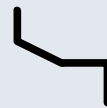
0 Folds



1 Folds



2 Folds



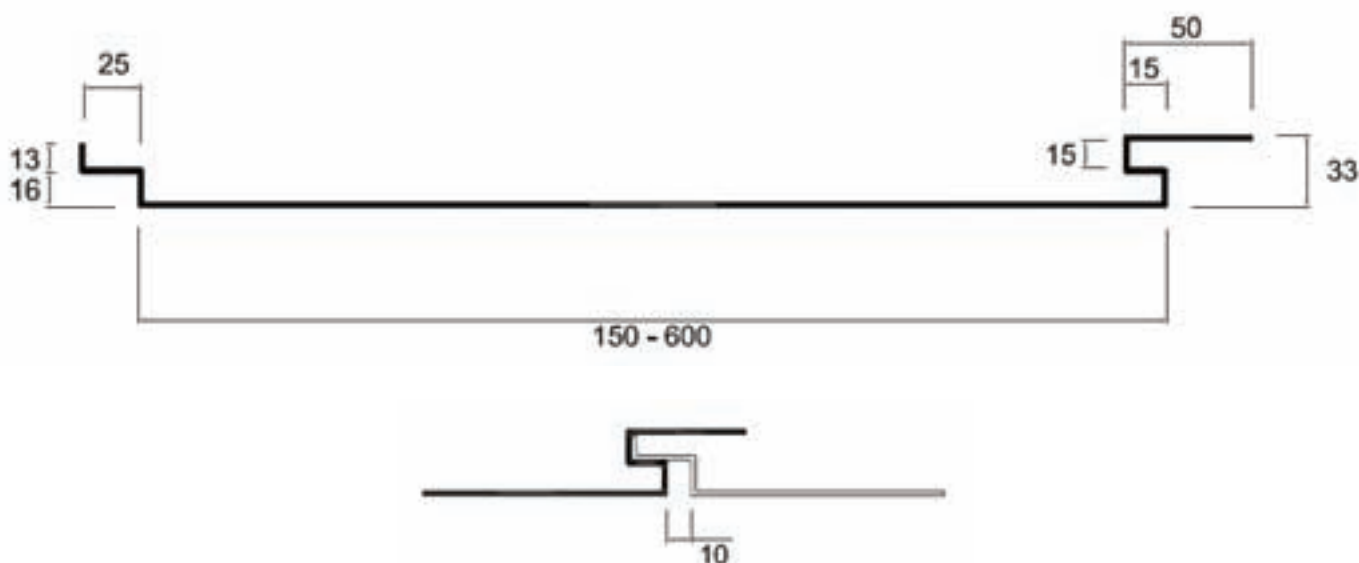
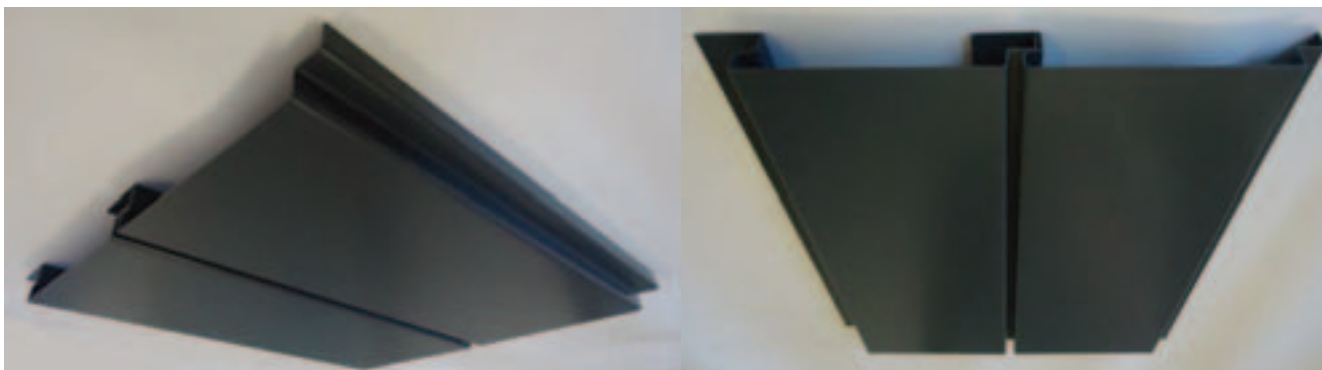
3 Folds



4 Folds

Eclipse Panel Soffit System

The Eclipse Panel Soffit System is a secret fix system designed to work on overhanging soffits and canopies or as an integral part of a combined Fascia and Soffit System.



Eclipse Panel Soffit Features:

- Available in variable widths from 150mm - 600mm
- Individual plank lengths up to 3 metres
- Simple and quick to install
- Extensive range of colours and finishes
- Hidden fixings
- Low maintenance
- Lightweight, strong and corrosion resistant
- Guarantees available
- Material thickness provides excellent rigidity
- Aluminium is 100% recyclable
- Architectural grade Polyester Powder Coating as standard



Gutter Fitting Recommendations

Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing 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-u 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.

Gutter position and bracket fixing

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.

Position the gutter support brackets at approximately 750mm centres around the building. Take care with the new clip fit system that a bracket is fixed central of every joint in the gutters, outlets and corners to achieve a concealed joint. A 3mm gap is

recommended at all joints to allow for expansion.

Royalty range guttering would require a decision to be made with regards to bracket type sequencing. We recommend a King bracket at every joint and another central on 3000mm lengths of gutter with Queen support brackets in between each King bracket. However, other combinations such as only Queen brackets without King brackets or vice versa, are also an option.

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.

Jointing

Joint sealing must not be carried out in wet weather or in temperatures below 5°C or above 40°C. Joint surfaces must be perfectly clean and dry. Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint.

With clip fit guttering, place 3 lines of silicone at each joint, one in the 3mm

gap and one either side to receive the clip fit jointer. Press the jointing clip into the silicone prepared joint, ensuring that the centre of the jointer lines up with the 3mm gap. **The jointer must clip into both sides of the gutter on both sides of the joint - listen for the click.**

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 stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed.

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.

We recommend that a 3mm spacer be used to give a 3mm expansion joint between each section of gutter and each outlet and corner.

The spacer is removed and a line of low modulus silicone is used to fill the 3mm gap in-between the guttering.

An internal clip fix gutter joiner is then used to join the gutters. Apply silicone sealant between the clip and gutter, we recommend that the silicone sealant be applied to both ends of the clip.

Pictures below show this sequence using Half-round Clip-fit guttering. The procedure is the same with other profiles.

- 1 Use a spacer to ensure a 3mm expansion gap.



- 2 Apply silicone sealant to clip.



- 3 Locate clip ensuring that the clip MUST clip into both sides of the gutters.



- 4 The clip in position will look like this.



- 5 Make sure that any gaps between the clip and the gutter are sealed with silicone on ends.



- 6 Clean off any excess silicone.



Fixing & Installation Advice

Fixing Advice

When installing our high capacity gutters there is no requirement (with the exception of the small half rounds) to fix to falls. The majority of rainwater systems are fixed nominally level. All half round systems must be installed by external fascia brackets.

External/Internal Support Brackets

Half round gutters: brackets at 750mm centres; extra fixing brackets on either side of all fittings.

Moulded Ogee gutters: brackets at 750mm centres; extra fixing brackets on either side of all fittings.

Box gutters: brackets at 750mm centres; extra fixing brackets on either side of all fittings.

Non-standard gutters: bracket centres dependant on girth and profile. Consult Stormguard Technical Services Department.

Snow Loading

In locations where there is a probability of excessive snow loading, both external and internal support brackets should be installed. Bracket spacing should also be reduced to 600mm.

Wind exposure

In locations where there is a possibility of exposure to high winds we recommend the gutter be secured to the brackets to prevent the risk of wind lift.

Gutter Jointing

Clean, then dry all jointing areas with a low alkaline degreasing agent. Apply a generous bead of low modulus translucent silicone sealant, to BS EN ISO 11600:2003 + A1:2011 or similar approved, to the internal base and sides of the gutter profile. Place the connecting collar in position.

The silicone will be compressed between the gutter and the connecting collar. Clean away excess silicone and repeat the same procedure on all joints and fittings.

Pipe Jointing

All rainwater pipe sockets are of a light drive fit, apply a light bead of silicone to the internal aperture inside the socket prior to connection. This will provide a permanent flexible seal and prevent any leakage from capillary action.

Fixings and Fasteners

Use only aluminium and stainless steel fasteners for the installation of the following:

Gutters: Direct and bracket fix use 12x40mm round head screws and washers.

Pipe fixings: For fixing of eared pipe sockets and pipe brackets use either a 6mm expanding bolt or a 12x50mm round head screw and plug.

Fascia/soffit fixings: Use 12x40 or 12x50mm round head screws and 6mm mushroom head bolts, nuts and washers, length to suit application. All fixings, fasteners, sealant and touch-up paint are available from Stormguard.

Security Pipe fixings not supplied due to varying wall types.















Flow Chart

The standard rainwater system covers a comprehensive range of profiles in different styles and sizes.

The chart below indicates the profiles, sizes and capacities in order that the correct product may be selected for each refurbishment and new development.

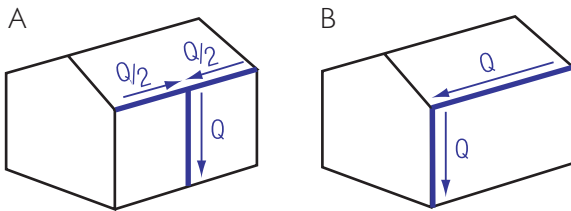
Should any assistance be required to select a system applicable to your design, please contact our Technical Services Department with regard to the most cost effective system. If what you require is not shown then please contact us. We will always endeavour to meet your needs.

Gutter Profile	Size (mm)	Outlet Size						
		Round Pipes				Square & Rectangular Pipes		
		63mmø	76mmø	102mmø	150mmø	76x76	76x102	102x102
	112x55	1.12	1.33	1.77	-	1.66	1.94	2.22
	125x59	1.15	1.37	1.82	-	1.71	2.00	2.28
	125x100	2.58	3.68	5.96	-	4.50	5.70	6.76
	100x75	1.16	1.90	-	-	1.80	2.41	-
	125x100	1.28	2.19	3.51	-	2.66	3.10	-
	150x100	1.31	2.22	3.56	-	2.70	3.14	4.87
	200x150	2.41	3.10	6.07	13.66	4.27	5.69	7.59
	100x75	1.62	2.29	4.08	-	2.87	3.35	4.82
	125x100	1.87	2.65	4.71	-	3.31	4.42	5.89
	150x100	1.87	2.65	4.71	7.07	3.31	4.42	5.89
	150x150	2.29	3.24	5.77	12.99	4.60	5.41	7.21
	200x150	2.29	3.24	5.77	12.99	4.06	5.41	7.21

Flow Calculations

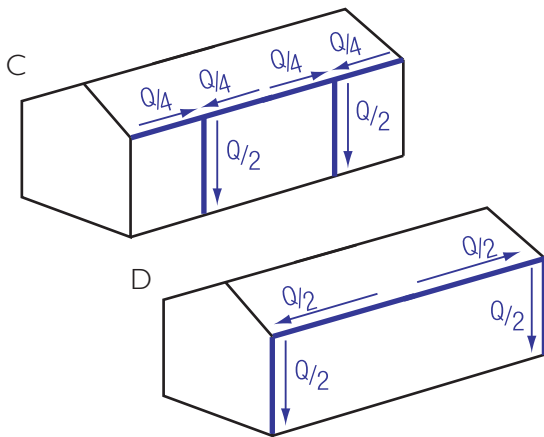
1. Design capacities calculated in accordance with BS 6367.
2. Distance between stop end and outlet should not exceed 50 x depth of gutter, and distance between outlets should not exceed 100 x depth of gutter.
3. Attention is drawn to para 8.3.2 and Fig.3 of the above BS Code of Practise: i.e. careful placing of outlets enables smallest practicable gutter sizes to be used.

For the same total flow (Q), the gutter in Fig.A requires half the capacity of the gutter in Fig.B. Outlet capacities remain the same.



Similarly:

For the same total flow (Q), the gutter in Fig.C requires half the capacity of the gutter in Fig.D. Outlet capacities remain the same.



4. Where the length (Lg) of an eaves gutter is more than 50 times its overall depth (d) the following reduction factors should be applied.

Lg/d	Reduction Factor
50	1.0
100	0.93
150	0.86
200	0.80

Lg = either the distance between stop end and outlet, or half of the distance between two outlets.

5. Where a corner is near to an outlet, a further reduction factor should be applied.

Less than 2m from outlet:

reduction factor = 0.8

Between 2m and 4m from outlet:

reduction factor = 0.9

6. Apparent anomalies can occur in the capacities chart as discharge characteristics change from 'weir' to 'orifice' type.

Fixing Advice:

Designs are based on rainfall rate of 79mm/hr.

Therefore: RUN-OFF RATE (l/s)

=EFFECTIVE AREA m² x 0.022

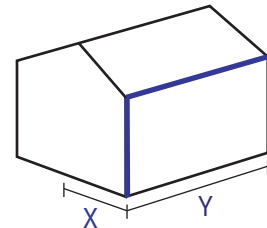
Effective roof areas can be calculated as follows (from Building Regulations):

Type of Surface	Design area (m ²)
Flat Roof	Plan Area of Relevant Proportion
30° Pitch Roof	Plan Area of Relevant Proportion x 1.29
45° Pitch Roof	Plan Area of Relevant Proportion x 1.50
60° Pitch Roof	Plan Area of Relevant Proportion x 1.87

Simple Example

X = 5m, Y = 10m

Angle of roof 30°



System required:

Moulded Ogee with round pipe.

Design Area ('Effective Area') = 5x10 x 1.29 = 64.5m²

Run Off = 64.5m² x 0.022 l/s per m² = 1.41 l/s

From chart (page 38), 125 x 100 gutter with 76 Ø downpipe appears suitable, but check:

$$\frac{Lg}{d} = \frac{10}{0.1} = 100 \text{ therefore reduction factor} = 0.93$$

Gutter capacity x reduction factor = 2.84 x 0.93 = 2.64l/s, therefore the proposed system is suitable.

Architects Information

Aluminium Standards

Stormguard's products meet the highest European standards in the European market for its aluminium, meeting all the necessary standards for extruded, sheet and cast aluminium products. Aluminium rainwater profiles are extruded from aluminium alloy 6063 T4 T5 T6 to BSEN ISO 7759:2010. Aluminium sheet is manufactured from aluminium alloy SIC H4 to BS 485- 1:2008. The pressed components are produced from aluminium sheet manufactured from SIC H4 BS EN 485- 1:2008. Aluminium castings are produced from aluminium alloy to BS EN 1706:2010.

Conservation & Specification

Many of the UK's conservation areas are decidedly stringent on the type of products that they allow to be used on heritage and protected buildings. Stormguard's aluminium gutters are used and specified extensively throughout the UK and Ireland on numerous listed buildings within heritage and conservation areas due to the high quality and suitability of the products. Numerous architects, councils, surveyors and institutions both in the

private and public sectors also specify Stormguard Rainwater Systems comprehensively throughout the UK and Ireland for their guttering, fascia and soffit systems.

Installation & Maintenance

The time taken to fit gutters, and the cost of maintaining them are increasingly becoming more demanding, as projects require lower prices with minimal maintenance requirements to reduce costs. Aluminium by nature meets the modern requirements, as its installation is very simple and cost effective due to its low weight and high strength. The clear benefits from this is the minimal time required to fit the products - making it commercially economic, and the minimal weight on roofline fascias and soffits, causing less stress on the building – therefore reducing the overall maintenance requirements and costs in the long term. An interesting derivative from using an aluminium rainwater system is the fact that on average, aluminium is in constant price appreciation, and over a period of time will theoretically pay for itself and its maintenance!



Environmental Information

Recycling

30% of the UK's regulated waste comes from construction. Some of this is generated at fabrication stage, some on site during building, and a good proportion during demolition. The UK government is keen to reduce waste throughout industry in general, and to reduce or abolish the use of toxic or environmentally damaging materials and potentially hazardous waste. Because aluminium is 100% recyclable and non-toxic, the metal has a valuable part to play in improving the environmental performance of the construction industry.

Safety

Aluminium is non-toxic, safe to handle and there are no health problems related to its use. Aluminium's natural oxide does not affect the acidity of water falling upon it, therefore water run-off from aluminium roofs and claddings is a non-toxic substance that will not harm animal or plant life. The process used in Stormguard's powder coating is not solvent based, and the final run-off has been fully tested and approved as clean.

Sustainability

Aluminium is one of the world's most abundant elements, it is almost infinitely recyclable and rightly

considered amongst the most sustainable of the world's resources. Extraction is carried out in an environmentally considerate manner with old mining sites being restored. Smelting is generally carried out using renewable hydroelectric power. The amount of embodied CO₂ is low compared to other construction materials, and unlike many other materials where the energy used to create the material is lost, the energy used to smelt aluminium is effectively invested and 95% of it will be reused when recycling.

Whole life costing

Increasingly the costing of a project demands that costs be considered for the whole life of a building. Aluminium's physical properties mean that once installed it will last longer and require less maintenance than steel, timber or plastic alternatives, resulting in genuine whole life cost savings.

Carbon footprint

As a direct result of aluminium's non-toxic, long lasting and recyclable attributes, it has a positive effect on an individual or commercial carbon footprint, bringing the use of aluminium gutters directly into the 21st Century.



Powder Coating

Stormguard supply Rainwater Systems in plain Mill finish or the full colour range of polyester powder coating process is applied in accordance with BS EN I 2206-1:2004 the specification for powder organic coating and stoving to aluminium alloy extrusions, sheet and preformed sections for external architectural purposes. Products coated to this specification are virtually maintenance free for a period in excess of 25 years if periodic cleaning is carried out.

The polyester powder is electrostatically applied in a controlled even layer after a rigorous multi stage pre-treatment process of degreasing and priming,

before being oven baked for a pre-determined time at a constant pressure determined by the dimensions and density of the product.

All the BS4800 and RAL colours are available. Lead time for any of these colours is 10-14 days from order. Syntha Pulvin polyester powder coating and anodised products can be supplied to specifier's requirements.

Our extensive range enables us to plan our production to suit you, the customer.

All powder-coated items are powder coated on the outside as standard; most gutters can be powder coated on the inside at an extra cost.



Product Guarantees

Lifetime Guarantee

Our aluminium rainwater systems are guaranteed for 25 years if fitted and maintained according to Stormguard manufacturing specification. The alternatives of cast iron, timber, steel and plastic cannot offer a lifetime guarantee, because by the nature of the materials, even if they were kept perfectly, would soil, crack, shrink, dry out, sag, bend, corrode or rust substantially before any sign of corrosion or wear would appear on aluminium.

Welded seams

Aluminium gutters necessitate numerous parts that require a weld at the seam. A 25 year guarantee is in place on all welded seams.

Installation

Stormguard rainwater systems do not offer a dedicated installation service, but as an alternative, give details of approved installers throughout the UK and Ireland. All Stormguard's products installed privately according to the Stormguard specification and guidelines, carry a 25 year guarantee.

We do not offer any guarantees with mill-finish products.



What is your colour?

Please refer to a RAL or B.S. chart for a reference number.



Rainmen Limited Rainwater Systems offer a fully comprehensive range of extruded, pressed and cast aluminium rainwater systems, Including bespoke, for every type of domestic, commercial or Industrial building.

The company provides a range of complimentary products and systems ranging from wall cappings, flashings and general requirements of both a standard and customer designed nature, in the full range of available polyester powder coated colours.

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