Rainwater Systems

Hunter offer a wide range of dependable, easy to install systems for domestic, light industrial, commercial and agricultural applications. Manufactured from PVCu, they are corrosion free and require very little maintenance.

With the changing global climate, we are experiencing periods of increased water fall, so choosing to install the right rainwater system has never been so important.

This guide has been compiled to help you decide which of Hunter's eight rainwater systems meets your installation and aesthetic requirements.



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On site - we know how demanding your job can be, and the last thing you need is costly call backs. New build home surveys have always identified guttering problems as topping the 'snagging' list.

Hunter Surefit $^{\otimes}$ rainwater systems have been designed to ensure you get the job done right, first time, with:

- Integral pivoted clips which allow fast
 thumb 'clip lock' assembly
- Fixing wings allow fast fixing for hand and power tools
- Compatible with most existing metal or plastic systems
- Recessed, pre-lubricated seals are robust and watertight
- British Standard tested and approved.

Check Page 103 for our easy guide to installation.









PVCu Material

PVCu is through coloured and will not support combustion. It is also tough, corrosion resistant, light in weight and virtually maintenance free. Where the co-extrusion process is used, performance is enhanced.



Recessed jointing seals

Integral computer-designed jointing seals held captive in a moulded recess forms a robust, watertight seal which accommodates thermal movement.



Angle

Angles with fixing wings are quicker to fit, improve stability, reduce the need for additional brackets and prevent unsightly corner sag.

Tips & Hints

Drains, taking rainwater from roofs of buildings and paved areas around the building are required to be watertight and accessible for cleaning.

Half Round		112mm or 76mm up to 2.6 l/s ● ● ○ ●	
Squareflo	Size: Flow Rate: Available in:	114mm up to 3.8 I/s ● ○ ●	
125		nm up to 4.9 I/s ● ● ● ○ ●	
Regency	Size: Flow Rate: Available in:	up to 4.7 I/s	
Ovation		125mm up to 3.9 I/s	
Ogee	Size: Flow Rate: Available in:	up to 3.0 I/s	
Highflo	Size: Flow Rate: Available in:	170mm up to 6.0 l/s	Surefit
Stormflo	Size: 200m Flow Rate: Available in:	up to 14.0 I/s	6



The most popular rainwater system, particularly for domestic projects and refurbishments by contractors large and small.

Half Round is available in two sizes:

76mm, ideal for porches, small smoking huts and garden sheds.

112mm, ideal for standard houses, garages, conservatories, larger smoking huts and garden sheds.

- Suitable for new and refurbishment projects
- Economical alternative to cast iron gutters
- Compatible with most existing metal or plastic systems.



Profile Dimensions (mm)

E

A STOPEND OUTLET - R12 Surefit fixing clips for fast installation. Designed to accept fascia bracket

Α

B

- B JOINT BRACKET R8 Surefit fixing clips and wings for fast installation
- C RUNNING OUTLET R11 Surefit fixing wings for secure anchorage
- D GUTTER R511/512 Longitudinal ribs improve flow characteristics and reduce the risk of blockage through debris
- E 90° ANGLE R5 Surefit fixing clips for fast installation. 120° and 135° angles also available
- F SNAP-FIT SINGLE SCREW PIPE CLIP - R19 'Snap-lock' design, ideal for restricted access fixing
- G EXTERNAL STOPEND R13 Surefit fixing clips for fast installation
- H ADJUSTABLE OFFSET R24 80mm standard offset to 22mm standard fascia width
- Full range of drain adaptors available



Adjustable Offset

2-piece moulding adjusts from 80mm to 22mm. Avoids the need to swivel offsets, enables outlet to be easily aligned with drain. Overcomes unsightly slanted or miss-aligned pipe work.



When rainwater discharge connects directly to a drain, an access point must be provided at the base of the rainwater pipe. The simple to install push fit access pipe has an 'O' ring seal for a reliable water tight seal, yet opens with a simple ¼ turn. Provides a large diameter access point for easy rodding and maintenance.



Pipe Bracket

There are two types of bracket to meet your installation needs;

R19 for single concealed fixing

R46 2 fixing bracket with visible fixings, ideal for refurbishment projects.

Gutter System		Product Code	Product Code
		76mm	112mm
	Gutter		
///	2m length	R513	R511
	4m length		R512
	5m length (roofline length)		R552
a f	Joint Bracket		
		R37 S	R8
ŵ	Support Bracket		
	> 1 Screw fixing	R36	R10
E.	2 Screw fixing		R25
	Angle		
I.S.	90° (shown)	R29 S	R5
	120°	S	R6
•	135°	R31	R7
A	Running Outlet		
		R32	R11
	Stopend Outlet		
WY		R33	R12



Gutter System		Product Code	Product Code
		76mm	112mm
N	Stopend External		
		R34 🔇	R13
~Î~	Union		
Carton		9	R398
m R .	Connection to Half Round/Cast	Iron Gutter	
			R459
^	Connection to Cast Iron/Ogee (Gutter	
AT LA	RH		R461
	LH		R462





Half Round Pipes and Fittings

Fipes and Fittings		Code	Code
		50mm	68mm
	Pipe - Plain ended		
	2m length	R522	R518
1	2.5m length		R519
Ψ.	4m length		R520
	5.5m length		R521
\bigcirc	Connector		
\square		R38	R17
-	Bracket		
9	1 Screw fixing	R39	R19
	2 Screw fixing		R46
9	Bend		
	92 ¹ /2°		R577
Y	112 ¹ /2° Offset	R40	R20
9	Branch		
	112 ¹ /2°		R22
9	Shoe		
\bigtriangledown		R41	R21

Product Product

Half Round Pipes and Fittings

i ipc.	Code	Code
	50mm	68mm
	Adjustable Offset	
	Min: 22mm, Max: 80mm	R24
0	Access Pipe	
		R1
	Adaptor	
Y	Square/Round	R397
	Drain Connector	
Ĵ	Flexible for 50, 65, 68mm External Use Only	DS24
	Reducer	
	68mm Spigot to 50mm Spigot R666	
	110mm Spigot x 50mm Socket S264	
	68mm Socket x 110mm Spigot	R768
	82mm Spigot to 68mm Socket	R4
	110mm Socket to 68mm Socket	R3
ھھ	Hopper Head	
	D1/+D666	D14



R14+R666 R14

Product

Product

Half Round

Tips & Hints

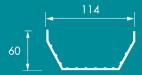
Surefit system, unique to Hunter gutter fittings, allows gutters to be simply and quickly fitted. The Surefit integral pivoted clips allow simple, 'snap lock' assembly of gutter.



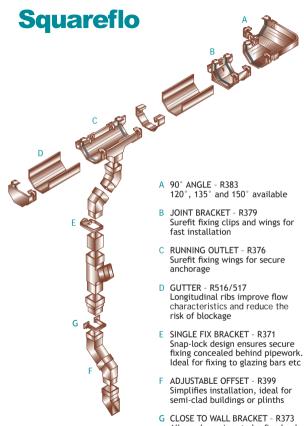




Its clean angular profile has been designed to compliment uPVC windows and conservatories, its 114mm profile offers a greater flow rate that makes this system ideal for domestic housing and conservatory applications.



Profile Dimensions (mm)



G CLOSE TO WALL BRACKET - R373 Allows downpipes to be fixed only 2mm from wall. Reduces risk of vandalism

Squareflo



Adjustable Offset

2-Piece moulding adjusts from 80mm to 22mm. Ideal to offset over brick corbels and enables outlet to be easily aligned with drain.

Overcomes unsightly slanted or misaligned pipe work.





Access Pipe

Used when connecting directly to a drain, installed at the base of pipe. Provides large diameter access for cleaning and maintenance.



Uni-Fit Outlet

The Uni-Fit outlet is designed to enable a single or additional outlet to be located anywhere in the gutter run. Suitable for use with flat bottom gutters and can be used with gutters in a variety of different materials.

Squareflo Gutter System

Gutter	r System	Product Code
		114mm
	Gutter	
	2m length	R516
	4m length	R517
	5m length (roofline length)	R557
	Joint Bracket	
	9	R379
Ē.	Support Bracket	
V.F	1 Screw fixing	R378
ę.	2 Screw fixing	R395
4	Angle	
	90° S	R383
	120° S	R374
	135° 🔊	R375
	150°	R370



Running Outlet



R376

9



Squarefio
Codet Product
Code 114mm 114mm Stopend Outlet ® R394 Stopend External ® R380 Stopend Internal ® R380 Stopend Internal ® R381

Connection to Half Round/Cast Iron



R387



Tips & Hints

Rainwater systems should always be fixed to the fascia using 25mm (1") x No 10 sheradised round head screws. Screws should be located through the moulded lugs. Where moulded lugs are not pierced, fittings may be drilled (running outlets must always be fixed with two screws).

Note: Use 38mm $(1^{1}/2^{"})$ x No 12 sheradised round head screws for Stormflo

Squareflo

Squareflo Pipes and Fittings

	3	Code
		65mm
	Pipe - Plain Ended	
	2.5m length	R525
	4m length	R526
V	5.5m length	R320
	Bracket	
	Stand Off	R388
	Close to Wall	R373
	Single fixing	R371
	Connector	
		R389
_	Bend	
	92 ¹ /2°	R393
B	112 ¹ /2° Offset	R390
~	Adjustable Offset	



Min: 25mm, Max: 65mm

mm R399

Product

Squareflo Pipes and Fittings

	j	Code
		65mm
Ĥ	Branch	
	112 ¹ /2°	R392
	Shoe	
		R391
رهـــهـ	Hopper Head	
		R14
	Access Pipe	
	Fabricated	R301
Ŕ	Adaptor	
	Square/Round	R397
	Swivel	R396

Product



Squareflo

Squareflo

Tips & Hints

When using a string line to level the gutter fittings, do not use too long a length, as the line may sag. Securing the line to a two-screw bracket ensures that it will not twist and distort the level.







The deeper semi elliptical profile of the 125 system offers a superior flow rate for domestic/light commercial applications. The 125 system's fast flow outlets allow a connection to both 68mm and 82mm downpipes, for greater installation flexibility.

Downpipe options

68mm or 82mm downpipe options available, providing a choice, depending on the water flow and construction needs.

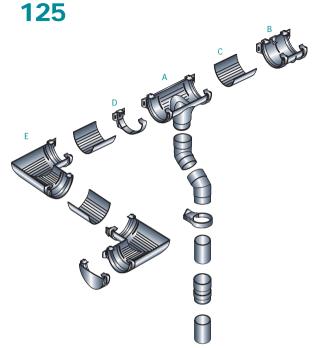
Improved fixing

Slotted fixing wings on each of the angles designed to support the gutter on exposed corners. Ideal for areas that are prone to heavy water fall or snow loading.



Profile Dimensions (mm)

125



- A RUNNING OUTLET R611 (68mm) R682 (82mm)
- **B** JOINT BRACKET R608
- C GUTTER R640
- D SUPPORT BRACKET R610 Features slotted fixing wings
- E 90° ANGLE INTERNAL/ EXTERNAL - R605/R615



R682 Running Outlet

Designed for use with 68mm downpipe, and also for heavier rainfall areas 125 has an 82mm downpipe option without the need for an additional adaptor.



R600 Adaptor Seal

125 Adaptor Seal allows connection with most other deep profile PVC gutter systems.

Simply remove the current seals on the 125 system and replace with the R600.



R602 Internal Stop End

The 125 Internal Stop End is a cost efficient fitting that will convert a running outlet into a stopend outlet, with no need to cut a small piece of gutter.

12!		
Gutte	er System	Product Code
		125mm
	Gutter	
	4m length	R640
ATT.	Joint Bracket	
		R608
R.	Support Bracket	9
\mathbf{S}		R610
0	Angle Bracket	
	90° External	R 605
	90° Internal	S R615
	135° External	9 R607
	135° Internal	R 617

Tips & Hints

Try placing a bracket around the pipe or gutter when cutting to length, this acts as a guide for the saw and ensures a straight cut. Always remove swarf afterwards. To avoid damaging rubber seals, run a file or rasp across the pipe end to obtain a chamfer.



125 Gutte) r System	Product Code
		125mm
র	Running Outlet	
	68mm 🔇	R611
	82mm S	R682
ġ	Stopend	
	External S	R613
	Internal	R602



Adaptor Seal

Replaces standard seal allowing connection of other deep profile gutter systems R600



Need even more capacity? Replace your 68mm downpipe with 82mm (using the R682) to drain bigger roofs with fewer outlets.



25

125 Pipes	and Fittings	Product Code	Product Code
		68mm	82mm
	Pipe - Plain Ended		
	2m length	R518	
	2.5m length	R519	
	4m length	R520	R700
	5.5m length	R521	
	Bracket		
	1 Screw fixing	R19	
æ	2 Screw fixing	R46	S612
	Connector		
	Ріре	R17	R717
	Drain (Flexible)	DS24	DS24
	Bend		
	92 ¹ /2°	R577	
	$112^{1/2}^{\circ}$ offset	R20	R720
20	Branch		
	112 ¹ /2°		R722
R	Shoe		
		R21	R721

125 Pipes and Fittings

Pipes a	and Fittings	Product Code	Product Code
		68mm	82mm
	Reducer		
	82mm Spigot to 68mm Socket	R4	
\bigcirc	110mm Socket to 68mm Socket	R3	



On properties without fascia boards, Hunter side or top rafter brackets are used. These are suitable for use with all Hunter rainwater systems except 170mm Half Round and 200mm Stormflo. See Page 48 for our complete range of brackets. 125



Tips & Hints

To ease installtion and reduce thermal movement noise after installation, lubricate the seals in joint brackets, outlets and angles with Hunter Liquid Lubricant or silicone spray.





Even the so called 'quick and simple' jobs end up having their challenges, so with this in mind, we have worked along side plumbers to develop innovative solutions to age old plumbing problems.

If these pages don't hold the answer to your problem, we have a fabrication and technical team who can advise on 020 8855 9851.

Unifit Outlet

The Uni-Fit outlet is designed to enable a single or additional outlet to be located anywhere in the gutter run and can solve capacity problems by preventing 'localised' gutter over-spill. It is suitable for use with flat bottom gutters, in a variety of different materials with a thickness of between 1mm - 15mm. Ideal for converting Squareflo and Regency angles into corner outlets.



The Uni-Fit domestic outlet is particularly useful when installed on a conservatory where a normal gutter outlet may obstruct a window opening, or fall below the fascia sight-line.



sections screw together to form a secure watertight joint. No need for messy mastics, sealants or rivets.

Compact Rainwater Gully

The Hunter Rainwater Gully is an ideal solution where there is an increased risk of roof debris being flushed into the underground drainage system. This is particularly important when connecting to a soak-away, where roof and gutter debris will cause blockage, making a soak-away or stormwater collection ineffective.



Sold complete with unique adaptor for Square, Round and Regency downpipes.

- Tough polypropylene material
- Fully accessible for cleaning removable trap baffle for ease of maintenance
- Compact design for installation flexibility and simple matching to paved areas
- 110mm outlet (spigot) for direct underground connection
- No additional adaptors required

FOR SURFACE WATER ONLY should not be used for foul water applications.

Tips & Hints

Paved areas around houses should be designed so that they are able to adequately drain any water away from the building. Where it is not possible for surfaces to be free draining, the paving should be used with gullies or channels discharging to a drainage system.

Rainwater Innovations

Product Code

Adaptors



Swivel Adaptor

Allows Square Offset Bends to 'swivel' in any direction, ideal for misaligned drainage point R396

125 Adaptor Seal



For adapting to other deep R600 profiled systems, simply remove the current seal on fitting and replace with the adaptor seal

82mm Reducer

\leq	
F	-1
-	_

Adapts a 82mm socket to R3 68mm spigot pipe. Ensure the 82mm socket is supported with a R607 socket bracket



110mm Reducer

Adapts a 110mm spigot to 68mm spigot pipe. Can be rotated to accomodate pipe clipping distance R3

Rainwater Innovations

Innovations		Product Code
	Regency Long Stop End	
	Flat ended to allow discrete close to wall installations. Can be converted to a stop end outlet using an R400	R914
	Ovation Cutting Tool	
	Designed as a cutting template for both the Ovation gutter and the Squoval downpipe	R441
0 0	Hopper	
	Reminicent of old iron styling the rainwater hopper adapts to Round, Square and Regency pipes	R14
	Hopper - Ovation	
	Unique fitting doubles as both a hopper head and a Squoval downpipe branch	R414

Rainwater Innovations

Innovations		Code	Code
		68mm	110mm
	Unifit Outlet		
	For use with Squareflo or Regency gutter. Suits 68mm round, Squareflo and Regency downpipes	R400	
8	110mm Spigot for use with flat bottom gutters of all materia		R410

Draduat

Draduat

Gutter Leaf Guard



5 metre pack 10 x 500mm Suitable for 112mm Half Round R500



Designed to help prevent the build up of leaves and debris in the gutter system. Available in 5 Metre Packs that can be cut to suit. Installation is easy with a simple clip together fixing, no screws or glue required. Manufactured from recycled polypropylene.

Rainwater

Innovations		Product Code	Product Code
		68mm	110mm
	Drain Leaf Guard		
	Accepts rainwater pipes up to 110mm diameter. To cover up to 300mm wide	drains	DS500
	Compact Rainwate	r Gully	
	110mm Inlet/Outle Adapts to accept Regency, Squareflo 68mm and 82mm pi Surface Water only Not for foul water	ipes.	DS42
	Reducer		
	68mm x 110mm Ad Use also with DS42	•	R768
	Regency, Squareflo and 82mm Socket 110mm Spigot 68m Socket to 110mm S	to Im	R767
	68mm round Squar 110mm Spigot	eflo	MKRAB

Additional Brackets

Domestic Gutter Systems

Product Code

Rise and Fall Bracket -230mm stake



230mm stake	
Squareflo	R377
Regency	R909
Ogee	R818
Half Round 112mm	R18
125	R601

Rise and Fall Bracket - 300mm stake

Half Round 112mm

R9



Tips & Hints

For buildings without fascias, galvanised rise and fall brackets are an alternative to top or side fixing rafter brackets. These may be built in to the brickwork as work proceeds, or driven in after construction. When installing, all gutter unions and ends of gutters should be supported by a bracket, with intermediate brackets at not greater than 1 metre centres (800mm for Ogee or 600mm for heavy snow loading areas).



Additional Brackets

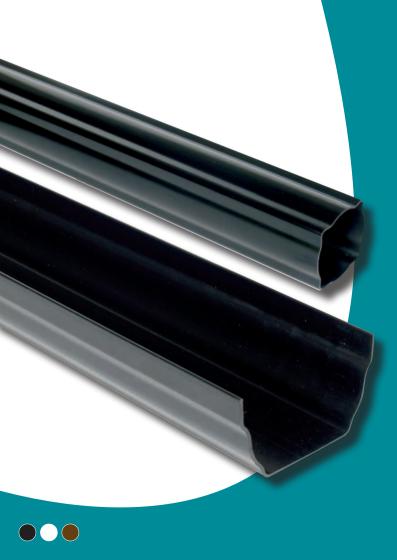
Domestic Gutter Systems

Product Code

		Code	
	Variable Rise and Fall Bracket		
	230mm	R26	
NQ.	300mm	R27	
	Including galvanised stake, order gutter bracket separately. Supplied with fixing nuts and bolts.		
	Galvanised Stake		
	300mm	R9A	
Þ	230mm	R18A	
A	Top Rafter Bracket		
le l	Supplied with wing nut and bolt. Not for use with 170mm or 200mm gutter	R15	
Ø	Side Rafter Bracket		
All G	Supplied with wing nut and bolt. Not for use with 170mm or 200mm gutter	R16	
(B)	Wedge Spacer		
677	22 ¹ /2° Pitch	R2	
E C	For use on dwellings with angled fascias, typically 1950-1960's original construction		

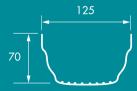
Tips & Hints

Rainwater drainage may only connect to a foul sewer if a soak-away or a watercourse cannot be used and a separate surface water sewer is not available. DS42 is not for foul water applications.



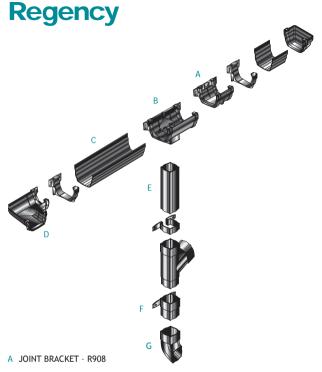


Regency offers a classic elegance that is suitable for use on modern or period style buildings. The Regency system has a unique profiled 74mm downpipe. Regency has a large flow capacity, therefore reducing the need for downpipes. It can be used with square and round downpipe for greater style and pricing flexibility.



Profile Dimensions (mm)

Regency



- **B** RUNNING OUTLET R911
- C GUTTER R896
- D 90° ANGLE INTERNAL/ EXTERNAL - R935/945
- E DOWNPIPE R891/893/894
- F PIPE CONNECTOR R917
- G RAINWATER SHOE R921

Regency



Running Outlet

With Delta flow diverters, flowing rainwater is deflected straight into the downpipe, so you can save on the amount of downpipes required. The outlet nozzle position at the back of the gutter allows the downpipe to be fixed to the fascia for a secure installation.



Regency Profiled Pipe

The 74mm downpipe makes Regency one of the most attractive systems available today - the downpipe becomes a feature in itself.



Long Stopend

Designed with a plain flat face, for use directly when fitting up to a wall, long enough to convert to an outlet using Uni-Fit for both left and right handed installations.

Note: When this fitting is used as an outlet, we recommend that a downpipe bracket be used on the pipe directly under the outlet to provide additional support.



Product Code

		code
		130mm
	Gutter	
	4m length	R896
	Joint Bracket	
	9	R908
1	Support Bracket	
	2 Screw fixing	R910
	Angle Bracket	
	90° External	R935
S	90° Internal 🛛 🔊	R945
I	135° External	R937
	135° Internal	R947



Regency Gutter System

Gutter System		Product Code
		130mm
	Running Outlet	
	Use Squareflo or Regency Rainwater Pipes S	R911
•	Stopend External	
	9	R913
	Long Stopend (must be supported)	R914
E N	Stopend Internal	
		R902
25	Uni-Fit Outlet	
	For use with Squareflo or Regency Gutter Suits 68mm round, Squareflo and Regency downpipes and gutters made from other materials between 1mm - 15mm thick	R400

Regency

Regency			
Pipes	and Fittings	Product Code	
		74mm	
	Pipe - Plain Ended		
	2.5 m length	R891	
	4 m length	R893	
	5.5 m length	R894	
	Bracket		
	2 Screw fixing	R919	
	Bracket Spacer		
019	5mm	R927	
	Connector		
		R917	
	Bend		
	112 ¹ /2°	R920	
	Branch		
		R922	

		Product Code
		74mm
É	Shoe	
E		R921
	Adaptor	
	Regency to 68mm	R924
	Hopper Head	
		R14



Regency

For ultimate pricing flexibility, Regency offers a choice of profiled or square downpipes.



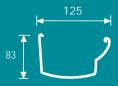




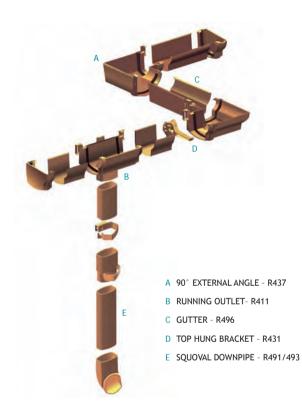




Hunter's newest Rainwater system with a 'modern feel'. Co-extruded for greater weatherability. Ovation is a top hung system, combined with the unique squoval downpipe, Ovation offers a practical streamlined look ensuring it remains close to the wall. Combined with an exclusive range of colours including Copper and Sand. Who thought a new rainwater system could be so stylish?



Profile Dimensions (mm)



Tips & Hints

Ovation Rainwater System is top hung, and as a result has slightly different installation procedure than a surefit system for further handy hints and tips log on to hunterplastics.co.uk





Squoval Profile Pipe

Squoval pipe (a combination of square and oval) is stronger than conventional round pipe and more attractive than square.



Top - Hung Gutter

- Clean profile with no visible support brackets
- Easier to clean and maintain fascia
- Simple to install and dismantle.



Unique Hopper/branch

Compact in design, this fitting doubles as both a hopper head and branch, allowing connection to Ovation's unique Squoval downpipe.

Ovation

	tion	
Gutter	System	Product Code
		130mm
	Gutter	
	4m length	R496
	Joint Bracket	
		R408
	Support Bracket	
	3 Screw fixing	R410
	Running Outlet	
	Use Ovation pipe	R411
	Stopend External	
	LH (Shown)	R413
	RH	R423
Æ	Angle Bracket	
Farter	90° External	R435
	90° Internal	R445
	135° External	R437
	135° Internal	R447
	Cutting Tool	
		R441

Ovation Pipes and Fittings

Pipes and Fittings		Code
		68mm
	Pipe - Plain Ended	
	4m length	R493
	2.75m length	R491
	Connector	
		R417
	Bracket	
	1 Screw fixing	R419
	Bend	
	92 ¹ /2° Offset	R425
	112 ¹ /2° Offset	R420
	90° Horizontal	R426
	112 ¹ /2° Horizontal	R418
	Shoe	
		R421
	Adaptor	
	Squoval to 68mm round	R424
	Hopper / Branch	
		R414

Product

Ovation

67

Ovation

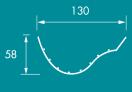






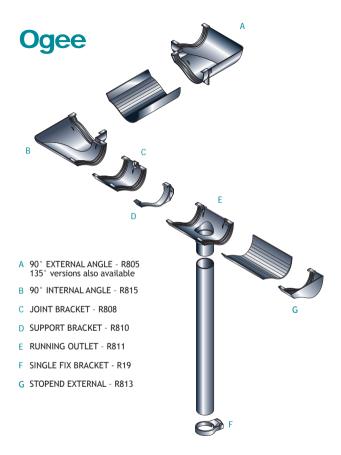
The traditional shape of Ogee blends perfectly with 'Victorian' style properties, or listed buildings up to grade 2. It retains character, a lightweight alternative to traditional materials and therefore an ideal replacement for cast iron.

- Wider top opening provides better catchment area for a variety of roof tiles and pitch.
- Elliptical shape at base provides excellent self-cleaning properties.



Profile Dimensions (mm)

Ogee



Tips & Hints

This classic Ogee profile can be easily connected to Cast Iron Ogee using a simple adaptor.

Ogee



3 Fixing Fascia Bracket

Provides improved load bearing qualities for installations in areas prone to heavy snow loading. (Fixing centres reduced to 500mm).



Adjustable Offset

2-Piece moulding adjusts from 80mm to 22mm avoids the need to swivel offsets, enables outlet to be easily aligned with drain.

Overcomes unsightly slanted or misaligned pipe work.



Adaptors

Allow simple connection to aluminium or cast iron gutters. Left or right hand adaptors available.

Oge	e	
	System	Product Code
		130mm
	Gutter	
	4m length	R876
AT	Joint Bracket	
i sono		R808
(J	Support Bracket	
	2 Screw fixing (with optional 3rd fixing point)	R810
AR	Running Outlet	
	Use 68mm pipe	R811
A	Stopend Outlet	
	Use 68mm pipe	
	LH	R822
0	RH	R812
R	Stopend External	
	LH (Shown)	R823
	RH	R813





Ogee

Oge		
Pipes	and Fittings	Product Code
		68mm
	Pipe - Plain Ended	
	2m length	R518
	2.5m length	R519
	4m length	R520
	5.5m length	R521
17 V	Connector	
		R17
	Bracket	
0	1 Screw fixing	R19
	2 Screw fixing	R46
0	Bend	
SA	92 ¹ /2°	R577
	112 ¹ /2° Offset	R20
Q	Branch	
40	112 ¹ /2°	R22
9	Shoe	
\mathcal{S}		R21



Pipes	and Fittings	Product Code
		68mm
一	Adjustable Offset	
	Min: 22mm Max: 80mm	R24
	Access Pipe	
	Ĥ	R1
	Drain Connector	
\bigcirc	Flexible for 50, 65, 68mm External Use only	DS24
	Reducer	
	110mm Socket to 68mm Socket	R3
<u></u>	Hopper Head	
		R14



Tips & Hints

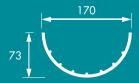
The pipe from the eaves gutter outlet to the face of the wall should be offset using 2 no. 112 degree bends. Smaller offsets, between 22 - 82mm (R24) and 25 - 65mm (R399), are made with the Surefit Half Round or Squareflo 'Adjustable Offset'.





Designed for commercial and industrial uses, Highflo offers superior drainage for larger roof areas. Extra strong support brackets help to withstand heavy snow-loading and wind updrafts likely on exposed or remote buildings.

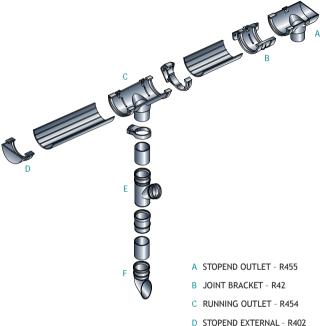
Hunters high capacity systems have been designed to cope with removing huge volumes of rainwater from the largest of roof areas.



Profile Dimensions (mm)

Highflo





- E BRANCH S336
- F SHOE S266

Tips & Hints

When rainwater discharge connects directly to a drain, an access point must be provided at the base of the rainwater pipe.

Highflo



Access Pipe

With an 'O' ring seal for a reliable, water tight seal. Provides a large diameter access point for easy rodding and maintenance. Supplied complete with an internal plug for a smooth through bore, preventing build up of debris. Features two closed boss connections. Ideal for connection to water butt overflow pipe.



Connector

The Universal Connector is finned, for simple push fit installation, connects to most materials, ideal for when pipe is broken or partially recessed. Provides 110mm socket connection, a real get you out of trouble fitting!

Highflo Gutter System

Product Code

	-	Code
		170mm
	Gutter	
	4m length	R515
	Joint Bracket	
		R42
e P	Support Bracket	
Ke	2/3 Screw fixing	R452
	Angle	
	90°	R451
STE		
A	Running Outlet	
R.	110mm	R454
	No adaptor required.	
	Stopend Outlet	
LC -	Fits 110mm pipe	R455
Â	Stopend External	
		R402
	Hopper Head	
J.		R465

Highflo Pipes and Fittings

Pipes and Fittings		Product Code
		110mm
	Ріре	
	Plain Ended, 3m length	S505
	Plain Ended, 4m length	S506
	Single Socket, 3m length	\$508
	Connector	
	Pipe - Single Socket	S208
	Drain	S121
\square	Bracket	
\sim	Pipe, 1 screw fixing	S217
h^{ρ}	Pipe, 2 screw fixing	S219
	Socket	S220
L	Pipe/socket - galvanised steel	\$570
	Bend	
	92 ¹ / ₂ ° Bend	S322
	112 ¹ /2° Offset Top	S270
	112 ¹ /2° Offset Bottom	S271
	135°	S331
0	Branch	
	112 ¹ /2°	S336
<u>v</u>	92 ¹ / ₂ °	S334
	Shoe	
∇		S266
	Access Pipe	
((=)]		\$309

Highflo

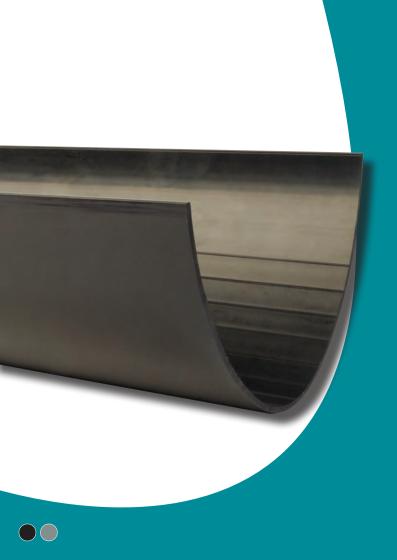
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Highflo

Tips & Hints

Always ensure that gutters are installed to the 'insert to here' lines, this will ensure gutters do not pull apart when expanding and contracting. When installing high capacity gutters, always lubricate the gutter seals.

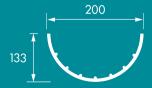






For large commercial and industrial applications, Stormflo offers one of the largest capacity rainwater systems available in the UK. 160mm downpipe ensures efficient rainwater drainage from even the largest roof areas.

Extra fixing points provided to withstand heavy snow loading and wind updrafts likely on exposed or remote buildings.



Profile Dimensions (mm)

Stormflo

Stormflo

D

F

G

Н

Е

В

- A STOPEND EXTERNAL R713
- **B** JOINT BRACKET R708
- C SUPPORT BRACKET R710
- D RUNNING OUTLET R711
- E GUTTER R740

61

- F OUTLET ADAPTOR R716
- G BRANCH S427
- H SHOE \$436





Bottom Fixing

Stormflo fittings have been designed to ensure strength and stability.

even in the most adverse weather conditions. The toughened bottom.

fixing point offers increased protection from the snow loading and wind.

updrafts found on remote and exposed buildings.



Angles

90° + 135° Angles available no on site fabrications required - unusual angles required? Dial our fabrication hotline on 020 8855 9851.

Tips & Hints

Always use the bottom screw fixing on all Stormflo fittings, these protect against wind uplift and snow loading on guttering.

Stormflo Gutter System Product Code 200mm Gutter 4m length R740 Joint Bracket R708 S Support Bracket 2/3 Screw fixing R710 S **Running Outlet** R711 Fits 160mm Pipe S Stopend External R713 Angle 5 90° R705 135° R707 **Outlet Adaptor** For 110mm downpipes R716 Connector Pipe - single socket S406 Drain DS438



Stormflo Pipes and Fittings

Pipes and Fittings		Product Code
		160mm
	Pipe - Plain Ended	
	3m length	S534
	4m length	S535
\mathbf{V}	Single Socket, 3m length	\$533
r	Bracket	
	Pipe - 1 Screw fixing	S412
Ω _	Pipe/socket - glavanised steel	S571
	Bend	
	92 ¹ /2° bend	S403
	112 ¹ /2° Offset Top	S424
	112 ¹ /2°Offset Bottom	S425
	135°	S404
0	Branch	
	92 ¹ /2°	S427
Ĩ	Shoe	
		\$436
	Access Pipe	
	92 ¹ /2°	S472
	Reducer	
	160mm x 110mm	S420

Stormflo

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Stormflo

Tips & Hints

Using the correct type and size of screw (38mm), fix the outlet to the section of fascia board at the appropriate height for level gutter or gutter with falls. Screws should be located through the moulded lugs or fixing wings provided. Where applicable, two screws should always be used for secure fitment.





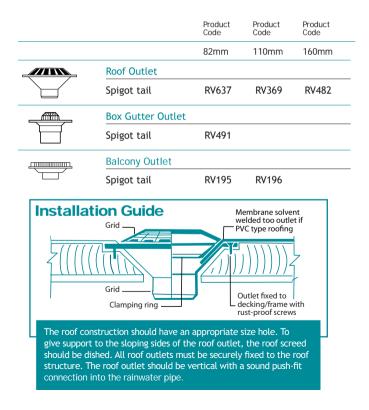
Flat Roof Drainage

Compatible with most flat roofing materials, including bituminous felt and PVCu roof membranes. unique pre-drilled flange for secure anchorage. Comprehensive range of sizes available for water tight jointing to 82,110 or 160mm PVCu pipe work. Non corrosive Hi-filter grille design offers efficient filtering and can be easily removed for periodic cleaning and maintenance. Ideal for industrial, commercial and domestic applications.

- Integral ribbed clamping for ring for complete retention
 of roofing felt or membrane
- Unique pre-drilled anchorage points, stops product from lifting during assembly of pipework
- Compatible with most flat roofing materials
- Quick and easy to install, choice of socket or spigot tails available
- Fully compatible with 110mm PVC pipework, no adaptor required
- Cost effective alternative to complicated and expensive metal outlets and pipework systems.

Flat Roof Drainage

Hunter roof outlets are three-piece components manufactured in PVCu and consist of a funnel shaped body, clamping ring and grille. Flat roof outlets are a natural choice when considering roof drainange in commercial, domestic and industrial applications: they are easy to install and compatible with most types of roofing material.



Installation Procedures

Hot Asphalt

- Remove grating and clamping ring. Hot asphalt is then applied to the roof in layers.
- The first layer should not be allowed to flow into the roof outlet.
- The clamping ring is now secured by the brass wing nuts down onto the hot asphalt.
- Although the outlet flange will soften from the effect of the hot asphalt, there will be no distortion providing the correct support is given fix the grating with the bolts.

Bituminous Felt Roofing

- Set the flange on the roof outlet into a recess in the roof boarding to give a level finish
- When applying the liquid bitumen to the roof, allow it to cover the outlet flange and the sloping part of the outlet
- Then, when bonding the felt onto the roof with the liquid bitumen, the felt should be taken over the outlet top flange
- Cut the section of felt over the hole of the outlet
- Using a blow lamp, form the felt down onto the sloping edge and retain with the clamping ring and wing nuts, fit the grating

PVC Roofing

- Apply recommended adhesive to flange and sloping part of the outlet
- · Lay plastic material into flange and dress into outlet
- · Retain with clamping ring and wing nuts
- Fix grating into position with bolts.

Tips & Hints

It may be necessary to provide a working overflow pipe on flat roof drain installations to indicate blockages in internal rainwater systems.

Flat Roof Drainage

Outlet and pipe size	82mm	110mm	160mm
Max depth of flow at edge of outlet	m ²	m ²	<u> </u>
35mm	310	380	515
32mm	210	330	440
25mm	145	230	310
19mm	115	150	200
13mm	80	85	95
Maximum roof area that can be drained by	one outlet (w	ith or witho	ut hox

Maximum roof area that can be drained by one outlet (with or without box gutter)

Note: These values are based upon; Rainfall intensity of 75mm per hour and absence of abutting vertical walls rising above roof level NB. Reduce the above figures by 20% when using balcony outlets.

Good practice guide It's Simple with Hunter Surefit ...

On face value, guttering installation is a piece of cake, but it is amazing how many installers get it wrong. In fact in a survey by one of the UK's largest warranty providers, nearly a quarter of the owners of new build homes reported guttering problems that subsequently had to be rectified.

Installers need to give some careful consideration to a number of factors if they are to avoid those dreaded call backs. That means thinking about not just the profile and colour, but more importantly if the system is not to fail, size. Fitting a profile that's too small could cause you problems with call-backs when it fails to cope with the water flowing off a large roof. If you are working on a larger project - a school, sports hall, apartment block or even a larger house - then using an ordinary domestic system means that you will need to fit more downpipes and that not only costs more but also may not fit in with your customer's aesthetic requirements.

To make sure you get it right and avoid call backs, this is Hunter Plastics essential guide to fitting Surefit guttering.

Before starting work, identify position of the drain, run a plumb-line and fix gutter outlet.

Check fascia is level and determine fall. (if required)

Fix support bracket at furthest end and run a string-line to the outlet.

From the outlet, fix support brackets at a maximum of one metre centres. Insert gutter into the first fitting, ensuring the gutter is level with the 'insert to here line' marked inside. At the other end of the gutter mark the position of the next fitting on the fascia.

Remove gutter and fix next fitting using your mark line. Ensuring fittings are level by using the stringline.

Fit length of gutter and stopend, with support bracket at furthest end.













Fit top offset bend to outlet, then using bottom offset determine length of pipe required.

Fit a pipe clip below the bottom offset, then at a maximum of two metres apart.

Check water tightness by blocking off any outlets and performing a static water test.









Good Practice Guide

Good practice guide

THERMAL MOVEMENT

PVCu material is subject to thermal movement. Hunter gutter joints have been designed to accommodate thermal movement without affecting efficiency. Particular care must be taken to ensure that gutters are assembled to the engraved 'insert to here' lines inside each fitting.

LUBRICANT

The use of silicone lubricant will assist gutter assembly and prevent expansion noise caused by gutters moving across dry jointing seals. Washing-up liquid should never be used as a lubricant as this will damage the seals.

TIMBER PRESERVATIVES

Timber fascias treated with creosote must be left to dry for at least 48 hours prior to fitting gutter brackets.

COMPATIBILITY CHART

Hunter Half Round, Squareflo and 125 PVCu Rainwater systems are compatible with many other manufacturers' systems and with cast iron and aluminium profiles. The table below indicates compatibility with the most commonly found manufacturers.

For further information, contact Hunter Technical Department.

MANUFACTURER	HALF ROUND	SQUAREFLO	125*
HEPWORTH	Yes	Yes	Yes
MARLEY	Yes	No	Yes
OSMA	Yes	No	Yes
POLYPIPE	Yes	Yes	Yes
TERRAIN	No	No	No
BRETT	Yes	No	Yes

* using adaptor seal

The Work at Height (Amendment) Regulations 2007

These regulations have been written to help prevent the deaths and injuries caused each year by falls at work.

- Remember a ladder is not a safe work platform
- Always assess the job before any work at height is carried out - avoid if possible
- Never attempt to the job alone, although PVC gutter is light - it can catch the wind
- There is no height threshold, as a rule of thumb, if you could fall and injure yourself then you must adhere to the regulations irrespective if the job is at or below ground level.

- When working at height, select the most appropriate equipment for the task and site such as working platforms and or mobile elevating towers
- Ensure all operators are properly trained and are familiar with this item of equipment
- Equipment checks must be made to ensure that it is suitable and is in good repair
- Ensure adequate fall restraints/arrest/ protection is used

The Health and Safety Executive (HSE) has documents that will provide further information and guidance can be accessed on line at www.hse.gov.uk. Be safe on site - Don't take risks

Note All products in this brochure must be correctly installed in accordance with BS6367:1983 'Code of Practice for drainage of roofs and paved areas'. Reference to BS EN12056 (Drainage of Building) is also recommended.

Why don't you have a look at some other great products by Hunter?



To have a copy of either book sent out to you please contact us today!



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